The Training Officer: A cost-effective role in a Science Research Organisation?

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University of Surrey
Department of Educational Studies
This research was undertaken as a collaborative venture between the Institute of Oceanographic Sciences, Wormley, Surrey and the University of Surrey.
The cost-effectiveness of Training Officers is discussed in terms of the roles and tasks which they undertake. Key roles of the Training Officer at a Science Research Institute, which forms the basis for this case study, are described and compared with those listed from previous research including that of the American Society for Training and Development. A total of ninety two tasks which are linked to seventeen key roles are listed and examples given of the practicalities of undertaking them. It is suggested that a further role which is needed in the fast-growing field of Training and Development during the 1990s is that of Communicator particularly with regard to non-routine events. The role of Assessor of Competencies for competency-based training may become important in the future. The cost-effectiveness of the Staff-Development function at the Research Institute is evaluated in terms of organisational and staff development. It is concluded that it is cost-effective and that factors which contribute to the success of the programme include the expertise and support of staff, line-managers and Management Teams. Training Officers also have the potential to contribute substantially to the success of staff development functions within organisations in that they are required to perform a wide range of roles and tasks. They need to acquire professional qualifications to help them to achieve excellence. An overview of the dissertation is provided and further potential areas of research are outlined.
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<td>AFRC</td>
<td>Agriculture and Food Research Council</td>
</tr>
<tr>
<td>AO</td>
<td>Administration Officer</td>
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<tr>
<td>ASO</td>
<td>Assistant Scientific Officer</td>
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<tr>
<td>ASTD</td>
<td>American Society for Training and Development</td>
</tr>
<tr>
<td>AST. L</td>
<td>Assistant Librarian</td>
</tr>
<tr>
<td>BAS</td>
<td>British Antarctic Survey</td>
</tr>
<tr>
<td>BOFS</td>
<td>Ocean Flux Study</td>
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<tr>
<td>CAD</td>
<td>Computer Assisted Design</td>
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<tr>
<td>CAL</td>
<td>Computer Assisted Learning</td>
</tr>
<tr>
<td>CEDEFOP</td>
<td>European Centre for the Development of Vocational Training</td>
</tr>
<tr>
<td>CO</td>
<td>Countersigning Officer</td>
</tr>
<tr>
<td>DOS</td>
<td>Computer Operating System</td>
</tr>
<tr>
<td>EDAP</td>
<td>Employee Development and Assistance Programme</td>
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<tr>
<td>E-MAIL</td>
<td>Electronic Mail</td>
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<tr>
<td>ESRC</td>
<td>Economic and Social Science Research Council</td>
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<tr>
<td>ET</td>
<td>Education and Training</td>
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<td>FE</td>
<td>Further Education</td>
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<td>FEU</td>
<td>Further Education Unit</td>
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<tr>
<td>G &amp; G</td>
<td>Geology and Geophysics</td>
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<td>GR6, GR7</td>
<td>Grade 6, Grade 7</td>
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<tr>
<td>H&amp;S</td>
<td>Health and Safety</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>HE</td>
<td>Higher Education</td>
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<tr>
<td>HEO</td>
<td>Higher Executive Officer</td>
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<td>HMSO</td>
<td>Her Majesty’s Stationery Office</td>
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<tr>
<td>HOD</td>
<td>Head of Department</td>
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<td>HPTO</td>
<td>Higher Professional and Technical Officer</td>
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<tr>
<td>HRD</td>
<td>Human Resource Development</td>
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<tr>
<td>HSO</td>
<td>Higher Scientific Officer</td>
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<td>IOS</td>
<td>Institute of Oceanographic Sciences</td>
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<tr>
<td>IRP</td>
<td>Individual Research Project</td>
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<tr>
<td>JRC</td>
<td>James Rennell Centre, Southampton</td>
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<td>JTS</td>
<td>Joint Training Service</td>
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<td>LOIS</td>
<td>Land/Ocean Interaction Project</td>
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<td>LRP</td>
<td>Laboratory Research Project</td>
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<tr>
<td>MbO</td>
<td>Management by Objectives</td>
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<tr>
<td>MLC</td>
<td>Management Learning Contract</td>
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<tr>
<td>MPD</td>
<td>Marine Physics Department</td>
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<tr>
<td>MSC</td>
<td>Manpower Services Commission</td>
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<td>NAO</td>
<td>National Audit Office</td>
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<td>NERC</td>
<td>Natural Environment Research Council</td>
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<td>NCS</td>
<td>Natural Environment Research Council Computing Service</td>
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<tr>
<td>NVQ</td>
<td>National Vocational Qualifications</td>
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<tr>
<td>NCVQ</td>
<td>National Council for Vocational Qualifications</td>
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<tr>
<td>OCCAM</td>
<td>Ocean Circulation and Climate project</td>
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</table>
OD  Organisational Development
OU  Open University
PR  Public Relations
PS  Personal Secretary
PTO  Professional and Technical Officer
R & D  Research and Development
RO  Reporting Officer (appraisal)
RVS  Research Vessel Base
SERC  Science and Engineering Research Council
SO  Scientific Officer
SOC  Southampton Oceanography Centre
SSO  Senior Scientific Officer
TA  Training Agency
TAC  Training Advisory Committee
TDLB  Training and Development Lead Body
TEC  Training and Enterprise Council
TQM  Total Quality Management
WLF  Well-Found Laboratory
WOCE  World ocean Circulation Experiment
W/S  Workshop
£K  £ (Thousands)
PART I

INTRODUCTION AND BACKGROUND TO THE STUDY
PART I  INTRODUCTION AND BACKGROUND TO THE STUDY

CH1
INTRODUCTION
AND OUTLINE
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CHAPTER 1

INTRODUCTION
AND
OUTLINE OF THE THESIS
1 INTRODUCTION AND OUTLINE OF THE THESIS

1.1 INTRODUCTION

The following account is concerned with staff development at the Institute of Oceanographic Sciences (IOS), a typical scientific research organisation, which employs professional, semi-skilled and unskilled staff, each one of whom acts either in a team or individually.

While the major emphasis has been on the study of the various roles which I undertook as Training Officer at IOS, I have also examined the potential contribution of the training officer to the cost-effectiveness of the staff-development function. The objectives of the study have also encompassed the following:-

a. The role of the Training Officer at other Research Council establishments.

b. An evaluation of the cost-effectiveness of the training and development function at IOS

c. The roles of management and staff in promoting the staff development function at IOS.

d. A discussion about staff attitudes to staff development

e. The benefits of staff development at the Institute of Oceanographic Sciences and recommendations for the direction of future staff development initiatives there.

In the first part of this Chapter, I introduce the background to the education and training function and its importance to organisations in general. Moreover I describe my position as training officer and researcher within a research organisation. I then put forward current ideas about the concept of education versus that of training. Latterly I discuss the concepts of role and role enactment. Finally I describe the structure of this thesis.

1.2 STAFF DEVELOPMENT IN ORGANISATIONS

Organisations may range from small businesses with only several employees to vast multinational commercial companies. During the past decade there has been an increasing awareness that education and training play a large part not only in the development of individuals but also in the growth of organisations (see Rothwell and Kazanas 1989:152-154)

In addition to formal opportunities for learning a wide range of academic and non-
academic subjects, informal ways of learning now abound. There exist increasing opportunities for relatively inexpensive travel abroad. Films, videos, books, magazines, newspapers, radio and television also play a part in imparting knowledge and ideology to developed and developing countries world-wide (Stonier 1979:33-4). These various media serve mainly to entertain and to educate, in one way or other, not only the large populations found in our modern cities but also inhabitants of the more remote areas of the world.

Recently many employers have come to realise that there are great benefits in providing the opportunities to enhance personal development as well as providing the means for updating vocational skills. In a work situation, skills such as leadership and interpersonal effectiveness, the ability to communicate and to work in teams are now seen to be at least as important as the acquisition of basic work skills to ensure the smooth-running of any organisation - large or small, (see Boak 1991:148).

With increased emphasis on various aspects of education and training the human resource developer must meet new challenges. At present there is emphasis on improving productivity and quality of products not only by organisations within the U.K. but also by those within partner economic communities. It is widely accepted that one of the key issues lies in investing more capital into the human resource development (HRD) function i.e. education, training and development of staff. Within the United Kingdom, a vast amount of government and commercial literature extolling the methods and virtues of various vocational and personal development courses is produced during each year and is routinely sent to employers.

A European Centre for the Development of Vocational Training (CEDEFOP), set up during the mid-1970s in response to perceived demands of the European Community, has produced an action plan of activities to :-


Research bodies such as the American Society of Training and Development (ASTD) have also taken the initiative on vocational training strategy, producing excellent and widely distributed accounts of how the training function should improve human potential and how it should be implemented.

During the past three years I have been employed as Training Officer for fifty percent of my time at the Institute of Oceanographic Sciences, a government research institute within the United Kingdom which employs approximately 180 staff and also up to 10 or more casual students at any one time. Thus I have had opportunity to study the role of Training Officer at first hand. The other fifty percent of my time was spent as a research biologist.
I began this study with the research question 'What is the role of the Training Officer within a research organisation and to what extent may s/he contribute to the cost-effectiveness of staff development programmes?'. As I progressed, other more subsidiary questions followed as I will discuss in this thesis. Initially I shall put forward my view of the 'Training Officer' as:-

'A person within an organisation who is responsible for activities related to the provision of staff education, development and training and who plans and implements those activities on a daily basis'.

However there are problems in this definition for several reasons. This definition does not distinguish 'Training Officer' from 'Training Manager' nor these from 'Human Resource Practitioner'. These issues will be discussed further in Chapter 5 when I discuss the 'theoretical role' of the Training Officer as derived from a literature search. The American Society for Training and Development (ASTD) (McLagan, 1983:21) has made the point that 'roles' must be distinguished from job titles whose meanings may vary across organisations.

From June 1991 until December 1993 I have kept a diary of my activities as Training Officer and maintained records of many of the comments and documents either sent or received by myself in the course of my work. Many have been mundane and repetitive, others have proved to be of great value in enabling me to identify problem areas in training provision and hopefully to improve the situation for staff and management.

As I worked as Training Officer, enacting the various roles and undertaking the tasks inherent in the job, many other questions arose, including some pertaining to the various roles which I undertook, others to organisational culture, and cost-effectiveness of staff development initiatives. I do not pretend that I can answer any of these questions in full but as a result of my research I hope I am able to provide some insight into the roles of training officers and into the intricacies of the training process and its cost-effectiveness. Before describing the research Institute which served as a case study for this work, I shall discuss two concepts which are basic to this study. First that of 'education and training', and secondly, the concept of 'role'.

1.3 THE EDUCATION AND TRAINING DEBATE

Almost everyone in the developed world has some experience of education, the history of which can be traced to early Greeks and Romans (Sredl and Rothwell, 1987:21). At least it offers culture (beliefs, ideas, values, practices), knowledge and skills - sometimes basic literacy and numeracy. At best it offers wider knowledge, expertise and an ability for the human population to widen its perceived horizons and to gain knowledge, skills and understanding.
In the middle ages education became more formalised than previously, though, in an agrarian society, relatively few people achieved literacy. With the development of an industrialised society in the late 17th-18th century there came the increasing realisation that human work skills were an important asset to government, commerce and industry. Training schemes were set up to cover a wide range of work skills varying from typing to engineering, mostly sponsored by employers or societies.

Up until the middle of this century training had been viewed by many as being different from education. Education was thought of as a broad-based activity bestowed on the relatively young, mainly by family at home and teachers at school or, in some instances, by philanthropic institutions, associations and societies. Participants were taught a variety of academic and/or practical subjects so that personal development and academic knowledge would be enhanced and skills learned so as to prepare them for adult life on leaving school or college. Training was viewed as a narrow-based activity undertaken by societies, employers or teachers of technical subjects which involved teaching staff or young potential employees, cognitive and practical skills. The main aim was to enable them to perform a job to a standard dictated by the employer - often nothing more and nothing less. The personal development of the staff as individuals was a secondary aim (see Pace et al 1991:24-26).

During the latter part of this century great changes have occurred in that adult-education for work or leisure, while not considered essential, has become the norm. During the last decade change has continued to occur both within the field of adult continuing education in terms of both training and staff development and shows every indication of accelerating.

There is still considerable confusion in the United Kingdom between the definitions and terms of 'Education', 'Staff development' or 'Training', though some attempt has been made to arrive at clear concepts of these. The debate centres on whether these terms are synonymous or whether each should be thought of as a distinct area.

The term 'Education' can be used in the context of post-compulsory educational opportunities for learning, termed 'Lifelong education', 'Continuing education' or 'Recurrent education'(see Jarvis, 1983:1-109). Dave (1976), cited by Jarvis (1983:15), defined 'Lifelong education' as a process of accomplishing personal, social and professional development throughout an individual’s lifespan in order to enhance the quality of individuals and their 'collectivities'. Thus this term is applicable during all stages of an individual’s life. Jarvis (1983) reformulated this definition on the grounds that it is somewhat unwieldy and suggests that 'Lifelong education' could better be described as :-

'the provision of any planned series of incidents throughout the lifespan of individuals which have a common humanistic basis, and are directed towards learning and understanding. (p.15)
Several authors including Houle (1980:84), Dennis (1980:187-191) agree that 'Lifelong education' is applicable to professional education and learning. The term is sometimes used synonymously with that of 'Continuing education'. For example the Advisory Council for Adult and Continuing Education (1979:7) equates the term 'Continuing education' with the terms 'Lifelong learning' and 'Recurrent education'. The Open University considers that 'Continuing Education' includes all learning opportunities which are taken up after full-time compulsory education has ceased, (see Jarvis, 1983:18). Thus in this context 'Continuing education' may be a component of 'Lifelong education'.

Jarvis (1983:20-281) pointed out that there were tremendous changes in the way in which adult continuing education was becoming structured and emphasised the continuing emergence of a specific role of 'educator of adults' within that field. He linked it with the concept of training, suggesting that encodement of role-specific knowledge, itself linked to new developments in training, is but 'one step in the process of professionalization' (The concept of professionalisation is discussed later, in Chapter 4).

With regard to the evolution of 'Training', Pace, et al (1991:24-26) point out that historically there are certain events or 'benchmarks' which are the major precursors of present education and training activities (which they discuss under the umbrella term of HRD). They suggest that these four areas, can be summarised as:- a. Employee skilfullness [sic]; b. Employee efficiency; c. Employee satisfaction; d. Employee enhancement.

They suggest that, until about the beginning of the 19th century, employee skilfullness was developed by informal methods with employees viewed as family members and producers rather than efficient members of a workforce. Later, during the next two decades until about the 1920s employees were looked upon primarily as producers with the result that employers focused their attention on improving that efficiency, often with little concern for the individual.

Gradually, until the mid-twentieth century, emphasis on employee satisfaction increased with the result that employee efficiency continued to improve, this gradually being superseded by employee enhancement which continues to the present era. Thus at the present time the approach to education and training is holistic; development of the individual as a person is considered to be important, not only for his/her own sake but also for reasons of national economy.

Within the latter part of this century, various authors have recognised trends to emphasise worker training as opposed to job training. However, the debate as to whether the terms 'Education' and 'Training' are synonymous continues to this day. Glaser (1965:4) distinguishes between the two terms pointing out that training may minimize differences between individuals whereas education tends to maximise them. Nadler (1979:38-42) suggests that the terms 'Training' and 'Education' are distinctive. He argues that the purpose of training is either to change an existing behaviour or to
introduce a new one while, in contrast, in an educational situation, 'a releasing experience is provided' which enables the learner to produce more behaviours, specific or general, than previously.

With regard to definitions of the term training, Nadler (1979) defines it as:-

'Those activities which are designed to improve human performance on the job the employee is presently doing or is hired to do. It can be extended to include the necessary activities to enable the employee to move to an immediate higher level position in the organisation but still within the same basic area of activity'. (p.40)

Here the emphasis is on improvement of performance on-the-job.

Goldstein (1980:230) defines training as:-

'The acquisition of skills, concepts or attitudes that result in the improved performance in an on-the-job environment'

Here the emphasis is on the trainee to acquire skills and on improvement on-the-job.

In the United Kingdom Department of Employment glossary of terms (1971) training is defined as:-

'The systematic development of the attitude / knowledge / skill / behaviour pattern required by an individual to perform adequately a given task or job' (p.29)

Here the emphasis is on planning and control and on the individual rather than team effort. The criterion for success is the adequate completion of a given task or job.

Hinrichs (1976:832) defines training as:-

'Any organisationally initiated procedures which are intended to foster learning among organisational members in a direction contributing to organisational effectiveness'

Here the emphasis is on the organisation, organisational effectiveness and on learning. Robinson (1988:12) also supports this view in describing the process of training as seeking by instruction or experiential means, to develop a person's behaviour pattern in the areas of knowledge, skill or attitude in order to achieve a desired standard or level of performance.
Laird (1978:9) too distinguishes 'Training' which he defines as:-

'. an experience, a discipline, or a regimen which causes people to acquire new, predetermined behaviours'.

He emphasises that whenever employees need new behaviours then a training department is needed.

In summary the above definitions of 'Training' collectively seem to suggest that:-

a. It is the responsibility of organisations to foster learning and for individuals to acquire it.

b. Training is an organised process which aims to bring about changes in skills, concepts, behaviour and attitudes linked precisely to a desired standard of job performance or predetermined behaviours which may lead to organisational or individual effectiveness.

In terms of work-related situations Nadler (1979:60) defines 'Education' as those human resource development activities which:-

're are designed to improve the overall competence of the employee in a specific direction and beyond the job now held'.

He suggests that in terms of HRD, education is not merely a random approach to helping an individual develop his/her potential. The aim is to develop the individual for growth within the organization towards a clearly defined level or position and for upward mobility towards specific job placement within the organization - somewhat of a 'human capital' approach which is discussed in Chapter 3.

Laird (1978:10) also suggests that some 'leadership' and 'personal development' programmes are 'educational activities' in that previously identified capabilities are used as a basis for expanding the skills of an individual so the latter can make larger contributions to the organisation in the next positions.

Pepper (1984:9-13) goes some way in distinguishing 'staff development' and 'training' emphasising that the latter occurs within a process of well-defined phases. He emphasises the term 'job training':-

'Training is that organised process concerned with the acquisition of capability or the maintenance of existing capability ... it is a process with well defined phases of decision-making and action... Job training is that training
needed to enable a person to do his present job satisfactorily' (p.9.)

He suggests that background training is that which supplements the job by giving information which illuminates and gives meaning to the work undertaken. Moreover he points out that the words 'Training' and 'Development' are often used side by side where the objective is to acquire a set of capabilities which will equip a person to do a job some time in the predictable future e.g. the apprentice on a 4 year programme who learns about management, individuals taking responsibility and learning to possess integrity as well as learning academic subjects broadly connected with the job; e.g. the apprentice learning job skills, management skills and social skills which lead to character development. He cites other examples including management training programmes which may help individuals to acquire a mix of job, academic and social skills.

Pepper points out that the above instances, based on the 'capability acquisition in the longer-term' of planned work or study are all of 'personnel development'. He contrasts this to career development which, he suggests, is also similar to 'personnel development' in that it may enhance an employee's ability and experience but which often entails the planning and execution of work changes or moves over a period of years. (Career development is discussed in Chapter 4).

Thus in this context the term 'Development' seems to lie somewhere along the continuum of education and training. It is to some extent synonymous with education in that both are relatively long-term activities designed to develop an individual's skill, attitudes or knowledge in a planned way but not always for a specific job and with an outcome which cannot be wholly predetermined. On the other hand personal development may arise partly as a result of training for a specific job, e.g. interpersonal skills.

Nadler (1979:88) defines 'Development' as preparing employees to 'move with the organisation as it develops, changes and grows'. Laird (1978:10;14) suggests that 'Development activity' is used to develop people and entire organisations for 'undefined and undefinable' futures. He emphasises that new executives may acquire new horizons, new technologies, new viewpoints so that they can lead the organisation towards new goals and new environments. In contrast an organisation not primarily concerned with manufacturing a product may have less overall separation of the training and development function.

Peterson (1992:199 ), while emphasising that the concepts of 'Education' and 'Training' overlap, provides a very useful summary of some distinctions between the two though she stresses that the points of contrast are not 'hard and fast' (Table 1.1 ). Moreover she notes that life experience, education and training all lead to learning and that they 'blend' with no sharp divisions. She suggests that in any one day one might learn something from life, from an educational setting and a training session. She illustrates this by providing a diagram as shown in Figure 1.1 (Peterson, 1992:82).
Work Activity

Training

Education

Life experience

Figure 1.1 The human learning pyramid (From Peterson, 1992: P.82, Figure 5.3) The arrows stress the interactive perspective and 'blending at the borders'

Table 1.1 Some points of interest between 'Education' and 'Training' (Peterson 1992: P.83) She emphasises that they are not 'hard and fast'

<table>
<thead>
<tr>
<th>Education</th>
<th>Training</th>
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<tbody>
<tr>
<td>* formal process</td>
<td>* generally informal</td>
</tr>
<tr>
<td>* institutional setting</td>
<td>* non-institutional setting</td>
</tr>
<tr>
<td>* outcomes usually specified in</td>
<td>* outcomes can be specified as</td>
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<tr>
<td>more generalised objectives</td>
<td>behavioural objectives</td>
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<tr>
<td>* generalized design</td>
<td>* applied design</td>
</tr>
<tr>
<td>* long-term process</td>
<td>* short-term process</td>
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<tr>
<td>* oriented to the person</td>
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</tr>
<tr>
<td>* tends to be an organic form of</td>
<td>* tends to be a mechanistic form</td>
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<tr>
<td>learning</td>
<td>of learning</td>
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<tr>
<td>* theoretical and conceptual</td>
<td>* little emphasis on the theoretical or</td>
</tr>
<tr>
<td>work often emphasized</td>
<td>conceptual</td>
</tr>
<tr>
<td>* open to a wide range of people</td>
<td>* sharply-delineated target</td>
</tr>
<tr>
<td>* provides foundation for various</td>
<td>* population, usually working in</td>
</tr>
<tr>
<td>unspecified behaviours</td>
<td>learning area concerned</td>
</tr>
<tr>
<td>* professionally-accredited</td>
<td>* specific behaviours set as</td>
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<tr>
<td>instructors</td>
<td>outcomes</td>
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<tr>
<td>* may or may not involve some</td>
<td>* mostly non-professional</td>
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<td>direct application 'some day'</td>
<td>instructors</td>
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<td></td>
<td>* intended for direct application</td>
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<td>immediately or relatively soon</td>
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Kenny and Reid (1986:9) suggest that Education and Training "Should be seen as complementary parts of the same process". Whatever their merits, the variety of viewpoints described above fail to clarify the concepts of education or training as completely separate entities, and produce little evidence about the connection between each of these processes and qualifications for jobs. Furthermore, approaches which separate the concepts of education and training seem to fail to take into account the integrity of the individual. Often the individual employee is working for an organisation as part of a team. Not only has s/he to possess technical skills for actually doing the job, s/he also has to possess interpersonal skills which enable him/her to work with others.

It seems that these once-separate concepts are evolving towards each other, Education, training and staff-development appear to form a continuum within the process of lifelong learning. Employers and educational institutions may come to view these concepts as one and the same differing only in degree. Yet the debate continues.

No longer are education and training based solely on formal learning opportunities being provided by employers, academic institutions, associations and societies, as discussed above, numerous informal methods abound and are available to all who are reasonably literate. However there still remains the thorny question of whether staff invariably benefit personally from training sponsored by organisations or whether the training offered is such that personal development either does not occur or is chanelled in a given direction, depending upon the culture of the organisation or on requirements of the professions.

For example, various authors including Goodlad (1984:9-10) and Jarvis (1983:27-134) in discussing and defining education in terms of professionalism suggest that it should not involve indoctrination. As Goodlad points out:-

'.. education for the professions must involve some conscious attention not only to the technical components of the professionals’ service .. but also to the fundamentally moral issue of who is controlling what knowledge for whose benefit' (p.9.)

It is clear that the above moral issue of control is applicable to all staff whatever their work-related status. There is no doubt that many excellent commercial and research organisations offer valuable opportunities for staff development. However there is little information available on the attitudes of staff to training expectations of employers or to the curriculum offered.
Gleeson and Mardle (1980:4) point out that confusion with regard to the practical application of the terms 'Education' and 'Training' has consequences for the development of a curriculum and for the shape of further education in general. It seems that different concepts of 'Education' and 'Training' each arise partly as a consequence of the differing interests found between educational institutions and commercially-orientated institutions, the former having interest in the educational/technical role and the latter pursuing a commercially-based training role. Education and training activities should be viewed jointly as opportunities for individuals of any age or sex or employment status to maximise their potential as part of a lifelong learning process, (see Jarvis 1988:32-40), and work-based and non-work based learning should complement each other.

As the subject of role is a fundamental constituent of this thesis, before embarking further into the realms of the education and training function within organisations, it seems appropriate to provide some summary information on the concept of role because of the fact that the Training Officer performs an occupational role within the organisation.

1.4 THE CONCEPT OF 'ROLE'

Role theory, has been viewed as a refinement of conformity theory, i.e. 'conformity to perceived expectations' (see Turner 1962:31). Various authors have put forward ideas on the concept of role much of which has been summarised by Turner (1962:20) who describes Mead's (1935) explanation of role-taking as 'taking the role of the other [person]' but with emphasis on the perspective or vantage point of the 'relevant-other' [person]. This approach sees role-taking as somewhat rigidly prescriptive. In contrast Linton (1936:113-131) relates the concept of role mainly to variability within culture but views role-taking to be an enactment of the role prescribed for the self. Kingsley Davis (1948:89-91) viewed role as 'the actual behaviour of the occupant of a status' thus linking it with a position.

In some instances role theory has been disregarded altogether on the grounds that it represents a process of cultural determinism (Allport 1955:81-82), or that it is too generalised. Some critics even suggest that role-theory is redundant in that it represents a substitute for social norms and culture and that the concept of 'role' does not involve any new dynamic interaction. Furthermore, there exists criticism of the various uses of the term 'role' on the grounds that the whole concept is so heterogeneous that study of it is difficult. Other critics suggest that 'roles' are superficial in that the process of role-taking or acting out of roles is simplistic and only transitional and does not fundamentally change the 'actors' personality' (see Kluckhohn et al 1953:53-67). However Turner (1962:35) believes that role-theory represents more than an extension of normative or cultural deterministic theory.

The selection of roles which an actor enacts, comprises his/her role-set (Merton, 1957:106-120); as well as enacting one role there may be others which an individual
may enact at a given time, ('other-roles' as described by Turner 1962:22-23). Recent investigations of role have centred on role-set, role-taking, role-making, role-strain and role-conflict. With regard to role-taking, Turner (1962) emphasises that it:-

'... suggests a process whereby, actors attempt to organize their interaction so that the behavior (sic) of each can be viewed as the expression of a consistent orientation which takes its meaning (or consistency) from its character as a way of coping with one or more other actors enacting similarly consistent orientations' (p.37-38)

Thus role-taking is seen as a process by which the 'actors' cope with a given situation in which other 'actors' ('relevant-others' as cited by Turner 1962) are involved.

Role-making is thought to be a Gestalt associated process in that a 'new' or relevant other-role is conceived in response to a situation where the potential 'actor' perceives a 'gap' in a series of possible roles which could be applied to a given situation.

Turner (1962) suggests that in studying 'role', distinction should be made between taking as the starting point in role theory':-

'the existence of distinct and identifiable roles (p.21)

and postulating

'a tendency [by role-takers] to create and modify conceptions of self- and other roles as the orienting process in interactive behaviour' (p.21-22)

This latter approach, while emphasising that creation and modification of roles may occur, recognizes the basic tendency for actors (i.e. the persons enacting a perceived role) to perceive in a given role, some imaginary constraining influence as defined by her/his interpretation of that role. Indeed Turner suggests that roles "exist" in varying degrees of concreteness and consistency, while the individuals confidently frame their behaviour as if they had 'unequivocal existence and clarity'. Thus in attempting to make aspects of the roles explicit enactors create and modify roles as well as merely enacting them. Thus the process is not only role-taking but role-making.

Another consequential aspect of role theory is the effect of the framework in which role-taking or role-making may operate. A role cannot exist without relevant other-role(s) with which it may interact. For example a training officer undertaking the role of 'Counsellor' interacts with another person who takes the role of the person being counselled, thus a type of role reciprocity exists. Turner puts forward the suggestion that the concept of role-taking moves the emphasis away from a simple process of playing a prescribed role to the rather different concept of playing a non-prescribed role.
role in which the actors base their performance on what they perceive in terms of the role required of them.

The various roles which an individual assumes while occupying a position is termed a 'role set'. Several different roles may typically interact with others so providing a series of overt behaviours which are interpretable by 'relevant-others' and observers. However isolated role-taking or role-making actions are often interpreted by others as part of a more complex structure. For example, identical behaviours enacted by role-takers may be viewed differently within different contexts. Sets of enacted behaviours will make sense to both the actor and to others only if each set is interpretable within a context which is familiar to an observer or relevant-other. Moreover the interpretation and behaviours presented in the enactment of a given role by one actor may be very different from that of a different actor.

Role-Conflict is a useful concept of value in the study of role. Turner 1962:21) suggests that role-conflict theory should be grounded in a 'conception of normal role-playing and role-taking as a process. He suggests that role conflict exists where 'there is no immediately apparent way of simultaneously coping effectively with different relevant-other roles', whether the process of coping is effected by conformity to expectation or by some other type of response. Role conflict may occur in a variety of situations. For example a role-taker may be involved simultaneously within several roles. The training officer within an organisation may have to simultaneously act as trainer on the one hand but also as a colleague of the individual member of staff involved on the other. In other instances roles may conflict in that the requirements of the role-enactor may be different. For example, in times of redundancy, the training officer may need to counsel staff who are to be retired early but on the other hand s/he must remain loyal to the Management Team within the organisation. Thus a pattern of behaviour must be devised so that s/he will be able to satisfy both demands. If it is impossible to undertake this a compromise may be reached and so a third form of behaviour may arise. As Turner (1962) points out:-

'There is an apparent paradox in saying on the one hand that a fixed set of roles does not exist and on the other hand that people make judgments on the basis of their success in bringing a succession of actions into the sphere of a single role.' (p.26)

If the view is accepted that role-taking is but one aspect of conformity, then it follows that role conflict should be seen in the light of attempts to establish a working relationship with the roles of 'relevant-others'. Further aspects of role in relation to organisations will be discussed in Chapter 3.

Having discussed some of the major concepts which form a background to this thesis. I shall follow with the outline plan of the thesis itself.
1.5 OUTLINE OF THESIS

This thesis is about the training and development of staff within a research organisation. As discussed above, I use the term 'Training' synonymously with 'Education', both encased within the term 'HRD' in the sense that each offers staff opportunities for personal and vocational development. The reasons for embarking on this project are numerous. Basically there is little information available on the precise role and tasks of Training Officers in research or in commercial organisations. Although there is a large amount of literature in America describing HRD, (e.g. Rothwell and Kazanas, 1989; McLagan, 1983, 1989; Carnevale et al. 1990), comparatively little research has been done in the United Kingdom into events occurring as part of the routine day-to-day training activities of training officers.

Furthermore there are few data available which inform employers or trainers about staff attitudes to training either at managerial level or at lower levels within British research or commercial organisations. It is not known to what extent socialization of the individual or culture in the research organisation may colour these attitudes to training. For example staff may or may not wish to learn something new. They may or may not wish to learn formally. Line managers may or may not wish their staff to learn new skills or perceive the need for them to do so. Furthermore managers' perceptions of learning methods may be different from that of their staff or their trainers. (For a full discussion about the effect of culture and socialisation on organisational practices see Argyris (1982) and Handy (1985). Their views are outlined in Chapter 3).

Skill Development in any organisation may include formal (e.g. seminars, lectures), non-formal discussion groups, distance/open learning packages, computer-assisted learning disks, video-based packages or casual peer-teaching. Courses run by external organisations off-site may also be offered. Little is known about which type of training is preferred by staff or their managers. Other evaluative measures are also important including that of cost-effectiveness in terms of the amount of learning that has occurred (see Metcalf, 1985). One can ask whether the information gained was useful, if it was appropriate at all to the needs of the individual or the organisation and what it cost in terms of capital outlay and staff time.

Assuming that appropriate skills have been learned it may be difficult to discover whether acquired skills and knowledge have been transferred to the workbench/office either fully or in part. Recently The Rutherford Appleton Laboratory (RAL), a government-sponsored research organisation within the Science Research Council undertook a training review, comparing its training procedures and outcomes with those of several major employers within the U.K. including British Rail, IBM, National Physical Laboratory, (Wroe, 1990). This review although not covering a complete cost-benefit analyses, concluded that the level of staff training should be enhanced and that more staff should be encouraged to take management courses. However it gave little information on staff attitudes encountered in day-to-day training activities.
When investigating the cost-effectiveness of courses it is relatively simple to estimate the amount of capital costs for formal or informal courses in terms of outlay for accommodation, (on-site or off-site) for travel, for salaries of trainers and administrators and, not least, for the salaries of the course participants. On-the-bench/desk casual teaching by peers is much more difficult to assess in terms of cost-effectiveness. There is little evidence as to how much training in the U.K. occurs informally among colleagues. Furthermore the training offered may be excellent or inefficient for whatever reason. Staff may be reluctant to record time spent on it - perceiving it as trivial. Managers may not take any interest in it, may not take it seriously or disagree with it.

In this thesis the terms 'Education', 'Development' or 'Training' are used to describe and discuss educational, staff or organisational development, or training activities undertaken by the training officer. My basic premise is that they form a continuum, development arising as a result of education and training. In some instances it is acknowledged that where basic skills are required for a particular job, then this activity may fall towards the 'training' end of the continuum whereas others may be more educational e.g. managerial or health-related initiatives.

Having provided the reader with some background information, I shall describe the structure of the thesis.

Chapter 2 introduces the research project, giving history, management structure and cultural climate of the research organisation in which the procedures and processes of training are the subject of my main discussion.

Chapter 3 describes organisations, their goals and the need to implement training programs which are designed to improve social, practical and cognitive skills so as to enhance the personal and professional effectiveness of its staff. The role of the human resource practitioner is discussed in relation to attitudes of managerial staff. The need for cultural changes within organisations and the adoption of 'double-loop' methods for problem-solving as advocated by Argyris (1982) is also presented as a factor which is important in influencing organisational development. Current theory suggests that, in turn, investment in HRD will help to ensure success in the fast changing world of research and commerce.

In Chapter 4 the effect of education, training and learning on individuals, employed within the organisation, is considered in terms of updating the workforce. The role of the training Officer within organisations is discussed further. The response of individuals to the changing world of work is elaborated with emphasis on the need to adapt to new culture and new technology.

In Chapter 5, I present the results of a literature search on the theoretical educational, managerial and social role of the training officer as perceived within Britain and in America, a view of the latter having been recorded in the excellent work of the ASTD (McLagan 1983; 1989) and Pinto and Walker (1978:1-8). This is useful in that it
provides a theoretical basis against which my research findings are discussed.

In Chapter 6, I discuss research methodology. Here I give reasons for adopting an ethnographic approach coupled with minor elements of scientific approach and action research.

Part II, the results section, is divided into nine Chapters (7-15) and Chapters 16-30 (Part IIB). Chapter 7 provides an overview of the various roles undertaken by myself as Training Officer. Chapters 8-14 contain the main research findings of the thesis pertaining to role, these seven chapters describing a different aspect of the role of Training Officer. General observations on the training function and some answers to the questions outlined in Chapter 2 are embedded within these six chapters. Chapter 8 provides an outline of the role of strategist and includes a description of the major factors affecting training provision e.g changes in European Community legislation. In Chapter 9, I discuss the role of analyst of training needs. Chapter 10 is concerned with the role of manager of the training development process including the development of the core curriculum. Points discussed include the recruitment and role of external agencies. Chapter 11 is concerned mainly with roles of programme designer and administrator, facilitator and trainer.

In Chapter 12, the role of training officer as evaluator is outlined.

In Chapter 13 I discuss the role of statistician. Chapter 14 is concerned with the role of training officer as communicator particularly with regard to non-routine communication with the various interest groups concerned with the staff development function. In this chapter, I also discuss the roles of marketer, consultant and counsellor. While ensuring anonymity, I describe attitudes of staff to various types of provision. The importance of updating of knowledge and personal development of training officers is discussed in Chapter 15.

In Part IIB (Chapters 16-30) I present an evaluation of staff development at IOS which has enabled me to assess its overall cost-effectiveness as well as my contribution as training officer to the function as a whole.

In Part III of the thesis, (Chapters 31-35) I discuss various aspects of the role of training officers particularly those employed by Research Councils. I include boundary management, role enactment, role conflict, overload and fragmentation. Moreover I discuss the benefits of education and training within organisations and factors which contribute to the cost-effectiveness of a staff-development programme including roles of training officers, line managers and staff (Chapters 31-32). In Chapter 34 I present some aspects of staff development which may be subject to change in the future. In Chapter 35, I present conclusions.

In the next chapter I introduce the research project, giving history, management structure and cultural climate of the Institute of Oceanographic sciences, the organisation on which my research is based.
1.6 SUMMARY OF CHAPTER 1

1.6.1 During the past decade there has been an increasing awareness that education and training play a large part in the development of individuals and organisations.

1.6.2 At present there is emphasis on improving productivity and quality of products not only by employing organisations within the United Kingdom but also by those within partner economic communities.

1.6.3 The education and training debate centres on the different concepts of the terms 'Education', 'Training' or 'Development'. These three concepts are discussed in detail.

1.6.4 It is concluded that life-experience, education and training and staff development initiatives represent a continuum which lead to learning and that these concepts 'blend' with no sharp divisions.

1.6.5 Approaches which separate the concepts of education and training seem to fail to take into account the integrity of the individual.

1.6.6 No longer are education and training initiatives based solely on formal learning opportunities being provided by employers, academic institutions, associations and societies, as discussed above, numerous informal methods abound and are available to all.

1.6.7 Role theory has been viewed as a refinement of conformity theory. It may be viewed as taking the part of another person or in the different perspective of an enactment prescribed for the self.

1.6.8 Various aspects of the concept of 'role' are discussed. Critics of role theory suggest that it may be too simplistic, too generalised or that it represents a process of cultural determinism. Others suggest that 'roles' are superficial in that the process of role-taking or acting out of roles is simplistic and transitionary. The selection of roles which an actor enacts comprises his role-set.

1.6.9 Role-taking is seen as a process by which the 'actors' cope with a given situation in which other 'actors' (relevant-others) are involved. Recent investigations of role have centred on role-set, role-taking, role-making, role-strain and role-conflict.

1.6.10 An outline of the Thesis is presented.
CHAPTER 2

INTRODUCTION TO THE RESEARCH PROJECT
INTRODUCTION TO THE RESEARCH PROJECT

2.1 INTRODUCTION

As a career scientist in a Natural Environment Research Council component Institute for two decades, I have had the opportunity to see at first hand how important it is for staff to develop fully their personal and career potential by being given opportunities for learning by means of staff development programmes. It is often the case that an employing organisation is also able to capitalise on staff development so that it too increases growth, development and output. Thus over several years I have developed a special interest in the training and staff development function.

In March 1990 I was fortunate to be offered the job of Training Officer at the Institute of Oceanographic Sciences (IOS) at Wormley, Surrey, the job to be undertaken on a half-time basis. One half of my time was spent in managing the whole of the training/development function for all staff and the other half in undertaking research into biological oceanography. I have undertaken sole charge of training activities at the Institute up to and including the present time, and am answerable to the Institute Director who has provided a mainly strategic role in terms of all Institute activities including staff development.

During the first half of 1991, I decided to embark on research into the training and development function at IOS, thus my research commenced in February 1991 and continued until June 1994. In undertaking the initial research during 1991, I found that relatively little was known about the work of training professionals within employing organisations in the United Kingdom. More specifically, less was known about the roles undertaken by training officers, the effort expended in their various roles in the work-place or the cost-effectiveness of employing them. Moreover, hardly anything was known about the cost-effectiveness of various training initiatives at government-run research institutes.

2.2 RESEARCH QUESTIONS

In this thesis, I seek to answer two questions which require complex, in-depth answers.

The first question is broad-based: -

'What is the role of the training officer within a research organisation and to what extent may s/he contribute to the cost-effectiveness of staff development programmes?'.
The second question is related to the first:

'How cost effective are staff development activities at the Institute of Oceanographic Sciences?'.

The methodology I have employed in undertaking the research is discussed fully in the Chapter 6. Basically I adopted an ethnographic approach to the study in that I kept a diary of events and observations, collected historical data and current documents of interest and evaluated most of the staff development initiatives by means of questionnaires sent to staff at IOS and by recording their verbal comments.

I was in somewhat of a unique position to research this field as I could implement training activities both from the point of view of scientist and training professional and hopefully could provide some answers to the above questions from information compiled from my daily activities. Furthermore I had the full support of the Director and Institute management team in undertaking the project.

Before enlarging on these questions and the methodology I employed to research them, I feel it is appropriate to present a description of the Institute of Oceanographic Sciences (IOS), the Research Institute on which this study is based. This will serve to provide the reader with a concept of the background against which the results can be viewed. I describe the type of staff employed, the procedures for annual appraisal of staff, a summary of the history of the training function over the last decade and the staff development strategy which was planned to take effect between 1988 and 1993.

2.3 THE INSTITUTE OF OCEANOGRAPHIC SCIENCES (IOS)

The Institute was set up by the Natural Environment Research Council (NERC) in 1973 and is one of several component marine research institutions for which it provides funding. Prior to this it was called the 'National Institute of Oceanography' which had been incorporated by Royal Charter in 1950 and initially funded from a variety of sources including the Royal Navy. After 1995 the Institute will be renamed and, although still sponsored by the Natural Environment Research Council will collaborate with the University of Southampton, to form a component Unit of the Southampton Oceanography Centre. The NERC mission is to advance understanding of the natural environment and the processes of environmental change. During the last few years its strategy for marine science has been implemented at IOS and at other NERC component bodies. Major investments have been made in international community research projects, local laboratory research projects and in individual research projects which capitalise on the skills of a few high performers.

Approximately fifty percent of the budget of IOS is derived from the national 'Science Vote' which is obtained through NERC, the remainder is obtained from commissioned research based on sales of instrumentation, data and information. The research
techniques undertaken by staff involve the collection of plankton samples in the open Atlantic ocean, development of remote controlled marine instrumentation and mathematical modelling of hydrographic systems. Thus in order to make innovative contributions in the scientific world and to achieve the degree of excellence required to compete on a global scale there is a need for staff to have a knowledge of management techniques, to be able to develop innovative ideas and to keep up to date with modern technology and computing techniques. A description of the IOS mission is given in Appendix 2.1. Part of the mission is to carry out applied research under contract for customers in the United Kingdom and overseas, so in each current project there may be some element of contract-based research. Thus there is a need to maintain a multidisciplinary laboratory with all of the benefits and responsibilities that this carries.

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Figure 2.1 Numbers of staff employed at the Institute of Oceanographic Sciences

The Institute employed approximately 180 scientists and support staff between 1988 and 1993. The age distribution of staff for the latter year are shown in Figure 2.1., approximately half are educated to degree standard and one third to Ph.D (Figure 2.2). During 1994 and 1995 a decline in staff numbers is forecast, due to restructuring and relocation. Staff were split between two main sites, one at Wormley (the Deacon Laboratory) and one at Chilworth, Southampton (James Rennell Centre). Most staff
under the age of thirty-five are employed on contracts of 3-5 years, whilst most over thirty-five have permanent contracts. Those at the James Rennell Centre (Southampton) have an average age of 30yrs. Those at the Wormley site have an average age of 43yrs. Most staff in 'OIG' tend to be technologists, those in Geology and Geophysics (G&G), Biology and Chemistry departments tend to be scientists.

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Figure 2.2 Degree qualifications of Scientific and Technical staff

A diagram showing the organisation of departments which existed during the period of the research is given in Figure 2.3. There were eight main departments varying from Computing to Marine Physics. The Computing Department was run by the NERC Computing Service (NCS). Various Laboratory or Individual Research Projects (LRPs or IRPs) were run within each department.
The Ocean Instrumentation Group (OIG) provided technical support but also developed new main instrumentation. The Information and Scientific Services Department provided photographic and library support and was responsible for taking the lead in the marketing of data and information.

Figure 2.3 The Institute of Oceanographic Sciences organisational chart

2.4 HISTORICAL PERSPECTIVES ON TRAINING INITIATIVES

Before discussing the current types of training offered at NERC/iOS I shall diverge a little and look briefly at the history of staff development initiatives, from the late 1960s to the present day, which were set up by NERC for its component Institutes.
Many of the staff development initiatives and procedures, although having undergone minor alterations, still continue to the present.

In 1968 the Fulton Committee of the Civil Service Government Departments, considered that management in the public service was not sufficiently professional and that more attention needed to be given to developing management potential. Recommendations were adopted by the Whitley Committee (a Trade-union initiative) in 1970. These stated that:-

a. A NERC training programme should be flexible and fit in with Civil Service Department Central Training policies.

b. There would be built in processes for evaluation, re-assessment and any necessary changes.

c. All training would be relevant to an officer's individual requirements/needs and to her/his present or potential duties rather than 'blanket-type' training.

The 1970 report of a working group on Management Training recommended that:-

a. For middle-management, training subjects should include attitude, human relations, and management techniques.

In 1974 there followed guidelines for induction courses and for the timing of work-skills and management courses. NERC training provision was reviewed and courses such as 'Development for Junior Grades' was introduced, also courses on finance, welfare and retirement. In 1981, a Training Review Committee recognised that much training was done 'at the desk' by taking up the skills and attitudes of others, though often this form of training or learning was not recognised as a training process by 'teachers' or their staff. In this context, it concluded that a substantial part of training should be devoted to management training which then included (and still includes) attention to personal relationships and attitudes to work.

Increased emphasis on organised training was to be accompanied by positive encouragement from employers/line managers for their staff to obtain further qualifications at local educational institutions, often with the advantage of day-release facilities. A 'Training for change' policy was considered to be of great value in that employees were to be trained to develop a resilience to change and an acceptance of it. It was also considered that training should not be confined to formal courses and that informal on-the-job training should complement them.

2.4.1 Cost of Training

The 1981 Committee was unable to determine the cost of training within NERC, mainly because no Institute was able to provide summaries of costs. Furthermore the
various NERC Institutes had differing perceptions of what constituted 'Training' or 'Education'. Furthermore, Institute training officers rarely had more than nominal training budgets in their own right. It was estimated that the costs of training in the Civil service as a whole, amounted to 3.5% of the salary bill. The 1981 Committee recommended that all institutes should attempt to quantify direct costs of training, although admitting that it was a complex task.

2.4.2 Evaluation of Training

The 1981 Committee acknowledged that it was difficult to measure the effectiveness of training programmes partly because changes in individual performance could be related to other variables. Furthermore recognition of the changes themselves were subjective. It considered that more should be done to assess the benefits of training.

2.4.3 Training and Career Development

Directors and senior managers were invited to forward to the 1981 Committee, their comments on aspects of NERC training arrangements. The outcome was that one-half were in favour of the existing arrangements. The Committee recommended that, in future, training should be linked to career development but that the policy of not assessing staff on courses should continue. However it was recommended that:-

'promotion to management positions should only be given to staff who have participated in the training appropriate to the post'. (Report of NERC Training Review Committee, 1981 p.26.)

2.4.4 Summary of Findings of the 1981 Committee

The 1981 Committee concluded that:-

a. Institute Training Officers should maintain training profiles and inform other institutions of in-house courses.

b. Only qualified tutors should be allowed to use experiential and group methods.

c. Advance training for senior managers should be sought outside of NERC.

d. A wide range of short specific modules should be offered.

e. Communication should feature prominently in all future training.
f. Attendance at conferences and workshops should be viewed as a form of training

g. Evaluation of training should include a report by line managers

h. Performance by individuals on courses should not be assessed.

i. The NERC training programme should be actively supported by senior managers

A full report on historical issues within the staff development field at NERC is given in Chapter 16, Part IIB in which I discuss the results of my evaluation of staff development initiatives at IOS.

2.5 PRESENT ARRANGEMENTS WITHIN THE NATURAL ENVIRONMENT RESEARCH COUNCIL AND ITS COMPONENT INSTITUTES

Most of the initiatives outlined above still apply. The present Joint Training Service (JTS) is responsible for providing a core programme of management training to the following research Councils:- NERC, AFRC, SERC and ESRC, was set up in 1982 and succeeds NERC Central Training Unit, though the NERC Establishments Department has responsibility for it. Its mission statement is shown in Appendix 2.2. NERC Headquarters provides finance and contracts courses for all of its component Institutes, other types of training are provided locally and are listed in Chapter 19.

During 1991 NERC produced a training strategy document in which it outlined the importance of training initiatives and equal opportunities for all staff. Basically the training structure remains as outlined above except that it reiterates the need for management training for most staff. The impact of NERC strategy for increased management training and the linking of training with career development is discussed further in Chapters 8 and 9.

2.6 STAFF APPRAISAL AND CAREER DEVELOPMENT

As previously discussed the concept of careers is variously associated with the idea of 'upward mobility' (see Williams, 1981). As an equal opportunity employer, NERC still emphasises that promotion assessment should be related to the likely performance of the individual in the next grade and should not reflect other circumstances such as family responsibilities, lack of mobility or part-time working. Annual appraisals on all staff are routinely undertaken by Reporting Officers (usually line managers) and included written assessments of the following:-

Quality of work; Output of work; Planning of work; Management of staff; Communication (oral and written); Relationships with other staff; Professional and
Technical knowledge; Numerical ability; Personal Qualities. The final overall marking can range between grade 1 (outstanding) and 5 (unsatisfactory). Completion of the form included a written assessment of promotability.

It followed therefore that staff development initiatives could help staff to achieve increasingly high grades and the increased likelihood of promotion. The implementation of performance related pay followed in 1994. Annual Staff Reports - Notes for Guidance (January 1990) are shown in Appendix 2.3.

As Training Officer I routinely received the 'training record/ requirements' section of each completed appraisal report. Previously this had been perused and summary comments made by a Countersigning Officer (usually senior to the initial Reporting Officer) who also gave appraisal interviews if staff required them.

Thus it was also important for all staff and myself to understand that the training function was closely linked to appraisal and career development. Indeed the last page of the Annual Staff Report carried a section on training needs and provision to be completed by staff and their reporting officers. This aspect of my work is discussed further in Chapter 9.

2.7 RECENT STAFF DEVELOPMENT PROGRAMMES

Although NERC had implemented some training initiatives since about 1968, the prevalent culture at IOSDL during the 1980s had not supported a high-profile training scheme. Colin Summerhayes took over the Directorship of IOS in 1988 and recognized the importance of staff development to enable people to reach their full potential. The aim was to link staff development with organisational development (OD). This is in keeping with the view that if staff improve performance and had similar objectives to that of the organisation then theoretically OD would be enhanced (Argyris et al. 1985).

In 1989 NERC developed a draft document on staff development/ training strategy which, when published, was to inform staff of their opportunities with regard to staff development and of its link with the appraisal/promotion system. Such was the position when I commenced the job of Training Officer in 1990.

Under Dr Summerhayes’ leadership, IOS launched a pro-active staff development and training programme. The goals of which were:-

(i) To help staff improve performance in terms of quality and quantity of output while maintaining its reputation as a centre for excellence.

(ii) To develop people in various ways, e.g. by teaching them how to manage themselves and others better)
(iii) To change the culture, adapting to change where necessary e.g. to become scientist-marketers) and to improve communication channels throughout the Institute.

(iv) To improve Health and Safety

(v) To broaden and strengthen its customer base by improving marketing, thus increasing income

2.7.1 A Centre of excellence

Achievement of excellence in science and technology and improvement in output by IOS staff was promoted partly by setting challenging targets with individual staff. The latter were encouraged to improve their standards and publication rates in top quality refereed journals or specialist volumes.

As a deliberate policy IOS encouraged scientists and technologists to present top-quality papers at conferences, to demonstrate to them the importance of communicating their work. This part of their training was to be augmented with on-site courses in 'Presentation skills', 'Technical Writing' and on-the-job coaching by line managers. Training in up-to-date computing methods was also thought to be necessary to enable staff to increase their output.

2.7.2 Increasing Income

The IOS objective was to improve its approach to marketing so as to broaden and strengthen its customer base. It continued to develop a marketing strategy based on the principle that effective marketing is about finding, creating and satisfying customers' needs. This meant targeting certain customers and spending time with them, finding out what their real needs were, and letting them know that IOS could help them achieve their goals. All staff were given some greater or lesser responsibility for searching for new opportunities to market their skills, products and services. Those staff designated as special 'science marketers' were to be given several types of course in finance and marketing.

2.7.3 Communication

One long-term objective of the IOS Director was to change the culture of the Institute not only by encouraging staff to become market-oriented but also by encouraging staff, line managers and group leaders to communicate across departments, projects and the then-perceived hierarchical boundaries. Prior to 1990 communication between hierarchical levels of staff had been poor. This was ascribed by the Director as due to the 'Classic middle-management filter effect'. It was thought that information from
the top Management Team often did not reach less experienced or more junior staff i.e. those on the 'shop floor'.

The view held was that although there was a potential for information to flow between widely separated staff, (in terms of location or grade), there tended to be a decrease in communication upwards and downwards at middle-management level so that information was lost. The Director aimed to overcome this problem by holding regular meetings within and between departments and between project managers. Other strategies for improving communication (1988-1993) were as follows:-

a. To publish news in newsletters and update noteboards regularly.

b. For the Director and Managers to continue to adopt an 'Open Door' Policy, the former also making regular informal visits to departments.

c. To implement an 'open' reporting system for staff appraisal.

From April 1991, a system of open reporting was to be implemented whereby staff were to see the whole of their annual appraisal report rather than just the final marking as in previous years. Moreover from April 1992, a 'Management by Objectives' (MBO) scheme was to be introduced whereby staff were to complete a 'Forward Job Plan', listing the main duties of the job, their specific objectives for the reporting year and giving some indication of changes planned and resources needed. This meant that there would be a need for 'Reporting' Officers and 'Countersigning' Officers to receive regular courses to update them and their staff on appraisal techniques and the implications.

2.7.4 Health and Safety

IOS had always sought to address the subject of 'Health and Fitness' for its staff by providing various courses for volunteers in 'First Aid' and 'Firefighting'. By 1990, it became clear that a more proactive approach was needed in communicating to staff 'Health and Safety Awareness'. This view was later confirmed by new European Community/Union legislation (1992-1993) which required organisations to provide staff with literature and/or specialised training-awareness lectures on selected health and safety topics.

2.8 MY ROLE AS TRAINING OFFICER

In my role as Training Officer at IOS I sought to remain pro-active in implementing the staff development programme so that IOS and its staff could develop in several directions. In accordance with the top Management Team's policy of promoting organisational and staff development, I worked to motivate managers and their staff to participate in a very wide range of NERC/JTS/IOS sponsored staff-development
activities so as to improve the communication and working relationships, not only between peer-groups within IOS but also between line-managers and their staff. For example one such initiative for staff was to attend training-awareness videos on management techniques which I set up.

In this Chapter I hope to have conveyed to the reader, the background to my work as Training Officer at IOS. Prior to discussing the theoretical roles of the training officer, based on a literature search (chapter 5), and the methodology I applied while undertaking the research (Chapter 6), I shall explore the role of human resource development (HRD) within organisations, the theory of "human capital" and the impact of education and training on individuals in the next two Chapters (3 and 4).

The results of my research in terms of the roles I undertook and descriptions of the jobs involved will be given in Chapters 7 to 15. Information on cost-effectiveness at IOS is given in Part II B of the 'Results' section of this thesis. It is discussed in terms of evaluation of the staff development initiatives, capital costs, cost of courses, costs of staff time and costs of employing a training officer.

The benefits to the Institute of Oceanographic Sciences are elaborated in Chapter 29.

2.9 SUMMARY OF CHAPTER 2

2.9.1 In this chapter I have outlined my position as Training Officer and researcher at the Institute of Oceanographic Sciences which is a component Institute of the Natural Environment Research Council.

2.9.2 The work of the Institute and the numbers of staff employed there were described together with the range of skills necessary for staff to achieve scientific, technical and managerial excellence.

2.9.3 The history of NERC provision for staff training from 1968 up to the present time was discussed and the importance placed on staff development was emphasised.

2.9.4 The role of the Research Council’s Joint Training Service was outlined and arrangements for career development were summarised.
CHAPTER 3

ORGANISATIONS

THEIR ROLE IN
HUMAN RESOURCE
DEVELOPMENT
3 ORGANISATIONS - THEIR ROLE IN HUMAN RESOURCE DEVELOPMENT

3.1 INTRODUCTION

As far back as 1961, the Common Market (1961) proposals on occupational training (summarized by Wellens, 1963:75-91), formally adopted in 1963, called for a common policy to ensure that training should be made available to the entire labour force within the European Economic Community (now the European Union) to cope with demographic change and the need for technological development. More recently there have been numerous instances where employers and teachers have emphasised the importance of work-based training. For example Metcalf (1985:1-5) emphasises the importance of continuing education in promoting economic development within the U.K. In 1986 Sir Geoffrey Holland, Director of the then U.K. Manpower Services Commission (MSC) made a speech, describing MSC’s objectives as, giving people in the U.K. access to vocational education and training, which would continue throughout working life (Holland, 1986).

Implicit in the concept of continuing work-based education and training (ET) is the understanding that this will usually be sponsored either by the individuals or government as a preparation for employment, or, once individuals are within employment, employers or professional societies and associations. Thus ultimately the standard of training enjoyed by staff will depend on the efficiency of commercial, research or educational organisations or of professional bodies in employing top quality managers of human resource development (HRD).

Before moving into discussions about the role of strategic HRD and the process of organisational development (OD) embedded within it, I shall first review the background against which strategic HRD operates i.e. to look at the structure of organisations and the processes which occur within them.

3.2 ORGANISATIONS

The term 'Organisation' may include an entire group of companies, one company or one particular establishment. The training officer has an important role in determining the training and development needs of the organisation as well as those of the individuals within it.

Organisations perform two main functions. Firstly, if successful, they usually contribute to economic growth, both within the company and at national level; secondly, whether wholly successful or not, they act as mechanisms serving to coordinate actions of individuals so as to produce an identifiable end-product.

There exist various models which have been devised to explain the managerial structure of organisations. I do not intend to go into each one in detail but will explain
briefly the types of model as described by Handy (1976:301-3). An example of a matrix structure is shown in Appendix 3.1. Here are shown three basic types of management structure. Examples given include:

a. the informal and entrepreneurial matrix type of organisation;

b. the formal functional organisation with separate groups arranged by job function and with a chief executive or leader at the top;

c. the formal decentralised organisation where separate groups are arranged depending on other parameters and also incorporating a leader. In the latter example, groups can be arranged by types of product, by areas or as in the instance of many research and development (R&D) organisations by disciplines. Indeed Allen (1977:211-213) suggests that goals of an R&D organisation are well served by structure organised around disciplines or specialities, with group leaders in charge of each. He suggests that in R&D organisations there are two conflicting goals to be met by structure:-

a. Activities of the various disciplines must be co-ordinated in such a way that multidisciplinary projects can be completed efficiently and effectively;

b. project managers must be provided with up-to-date information on new developments and technology within the field of operation.

In the latter instance the HRD function is of obvious importance in the provision of channels for communication, e.g. seminars and for general updating. What is not clear from recent literature is how professional staff, scientists or otherwise, view the existing channels of communication provided in the process of the HRD function.

3.2.1 The evolution of organisations

The models of organisations presented above, each forming either a hierarchy or a matrix of component groups, emphasise structure, position and role. Plant (1987:88-99) summarizing the work of Blake, Avis and Mouton (1966) and Greiner (1972) suggests that each organisation evolves and passes through successive phases. Blake, Avis and Mouton identified six phases in this evolutionary process, the phases ranging from the simplest situation which is analogous to a basic family through commercialization of economic life to the vast modern dynamic corporations which we see today.

The fortunes of organisations will wax and wane. There will inevitably be growth or rationalisation. Clearly the more complex the structure the more the need for dissemination of resources into groups or divisions each with its share of responsibilities for output of data, information or products. The fortunes of these
components too will vary from time to time, each department or group expecting to
have a share of success, disappointment, conflict and turmoil. To a great extent this
will depend on the expectations of management and staff and the share of available
resources including the skills and integrity of its manpower.

Eventually organisational and group leaders will emerge and followers will decide on
their affiliations but, as London (1988:71) points out, the structure of departments can
influence exercise of power and authority in leaders and line managers. Power may
be ascribed to people or groups while the authority provides legitimised rights to act
in given ways. Briault (1981:172) suggests that there is probably no leadership without
power and that a leader must have power in order to exercise his leadership.

Greiner (1972:37) also describes the growth of an organisation as akin to a natural
evolutionary process. He views successful management of turmoil as the key to
effective management of change. Various authors have attempted to explain the
complex process in the evolution of organisational structure with regard to the
positions that staff hold. Burnham (1969:72-3) points out that an organisation will
experience a changing need for certain tasks to be performed and that these are
delegated to certain groups whose staff are organised into positions. The positions are
collections of rights and duties designated by title and are ordered hierarchically in
terms of status. Associated with each position within the organisation is a set of
expectations for a person occupying the position, the set of behaviours comprising the
role associated with the given position. Burnham explains the concept by suggesting
that a person may perform a role but occupy a position. Coulson, (1972:109-110)
suggests that individuals are expected to perform roles which society itself has
created. However as discussed in Chapter 1, the role-occupant may bring to the
position his/her own values, perceptions and experience which will interact with
'relevant-others' to determine the way in which each role is played. The part played
by training officers in implementing their task and playing their role will be discussed
further in Chapter 5.

The culture of the organisation is seen as important in its development and in its day-
to-day activities. Handy (1985:292-3) describes cultures in organisations as either
'task', 'power', 'person' or 'role' oriented but points out that there are many other
definitions. He suggests that staff can only be truly integrated in the workplace if their
cultural orientation matches that of the organisation. He quotes examples of
individuals with 'power' or 'task' orientation as likely to experience frustrations in
organisations where 'role' culture predominates. In contrast 'role' orientated staff will
feel inadequate within in a 'power' culture. Other authors including Argyris (1982)
and French and Bell (1984:17) also emphasise the importance of culture and team or
group interaction suggesting that organisational development is more than long-term
growth of an organisation and the people within it.

It is not clear from the literature on staff attitudes, whether cultural orientation of the
various staff within research institutes, professional as well as unskilled, has an effect
on their attitudes to training opportunities and whether the values held are influenced
by the educational opportunities offered external to the organisation in which they work i.e. those offered by the media. Furthermore it is not known whether these individual attitudes can be altered in part by training professionals.

From time to time, mainly in response to market-led demands, there will be a need for organisations to formulate new business plans and develop new business strategies. In parallel to this they will examine their available technologies or resources in terms of permanent and temporary staff, students and voluntary staff. There may be a need to maximise staff potential, enhance personal/professional capabilities and develop an environment which encourages creativity. This can all be achieved by means of strategic human resource development which I shall discuss in the next section with particular reference to organisational development.

With regard to role-taking and role-making Turner (1962:30-32) suggests that formal organizations may lessen interaction between roles and impose prescriptive role-behaviour on role-enactors, so minimizing their Gestalt-making process. (i.e. reducing the role-enactors perceptions of a role) He describes the prescriptive bureaucratic systems of some organisations, in which individual behaviour is inhibited, restricting the operation of role-making and makes role-boundaries rigid. Turner surmises that if behaviour is completely prescribed, the process of role-taking or role-making becomes inconsequential. He suggests that in a system free of formal constraints, role-perspectives may be altered by the 'actor' so that role boundaries may be re-defined.

With regard to role enactment within organisations, the role-occupant is said to have a distinct role for each type of 'relevant other' with whom he interacts, for example a difference in levels of seniority between the actor and 'relevant others' may influence behaviours during enactment of a role.

Within organisations conformity to perceived expectations is but one special way in which an actor's role-playing may be related to the role of relevant others. From this viewpoint, role behaviour in formal organizations becomes a working compromise between the formalized role prescriptions and the more flexible operation of the role-taking process. Role conflict is the attempt to devise an orientation from which the actor can cope effectively with multiple other-roles which apparently cannot be dealt with in a more consistent way.

3.2.2 Education and training within organisations

The importance of education and training strategies to organisations cannot be over-emphasised. Education and training are an integral part of business strategy. This strategy for human resource development (HRD) supports the long-term business plans of an organisation in that it seeks to update the attitudes and skills of its staff (Rothwell and Kazanas (1989:152-4). A relationship between HRD and the Training and Development function is shown in Figure 3.1
Successful HRD strategy will not only enable staff to operate efficiently in a competitive environment, it may also provide a communication channel to inform top management about the skills of its specialist staff. This knowledge can be taken into account in business planning and in the process of marketing.

Training officers need to be aware that the provision of education and training has important implications not only in terms of organisational development but also in terms of benefits to individuals. Somehow they have to balance the needs of the organisation with the personal and vocational needs of individuals.
3.2.3 Human Resource Development (HRD)

HRD contributes greatly to the success of an organisation. As London (1988:71) suggests organisational success or failure is linked to investment in resources in the form of materials, information and people. Many professional educators in America see HRD as a major factor in increasing the value of people in the workplace (see Marsick and Watkins (1990:205). The European community also takes the provision of education and training very seriously. In 1991 Hywel Ceri Jones Director, Task Force for Human Resources, Education Training and Youth Commission of European communities stated:

‘..Training of adults is being recognised as a priority at Community Level [EC] with contributions of COMETT and EUROTECNET to stimulate technology training. While the LINGUA programme addresses the problem of improving communication between Europeans’

There are numerous reasons why HRD should remain a continuing process in the workplace. Even where a stable environment exists it is clear that job content may change because of the development of new priorities or services, (Mumford 1988:19-20). A change in an organisation’s attitude to quality may also mean that staff may have to change attitudes to their job not only in terms of how they perform their particular tasks but how they interact with other members of a team.

The importance of implementing strategic HRD cannot be over-emphasised. It seeks to integrate short- and long-term learning plans at all levels within the organisation so as to enhance the personal and work-related skills of its staff. In turn it uses those skills to achieve its objectives and takes them into account when reformulating business plans. Rothwell and Kazanas (1989:152) describe organisational strategy for HRD as:

‘resembling strategic choice in business planning..the decision to select from alternative grand strategies the one best suited to meet the enterprise’s objectives..’

They emphasise that HRD strategy must support strategic business plans, also the work of groups/units within the organisation and individual job plans. It is seen as a mechanism for prioritizing activities within the HRD department and of encouraging managers to link long-term business plans with moderate- and short-term training decisions.

The evidence from organisations which get the best returns from training is that the main ingredient in their success has been the commitment of the chief executive and directors to training and development (Webb, 1989:2). But the importance of cooperation between line-managers and HRD professionals is also stressed. In discussing strategy for HRD, Rothwell and Kazanas (1989:152) suggest that HRD
specialists should work together with line managers to plan departmental HRD functions.

Strategic HRD is divisible into two distinct segments:-

a. organisational development

b. Staff development

3.3 ORGANISATIONAL DEVELOPMENT (OD)

Organisational development is variously described in the literature. French and Bell (1984:17) define it as:-

'top-management-supported, long-range effort to improve an organisation's problem-solving and renewal processes particularly through a more effective and collaborating diagnosis and management of organisation culture - with special emphasis on formal team, temporary team and inter-group culture - with the assistance of a consultant facilitator and the use of the theory and technology of applied behavioral science, including action research.'

I shall diverge a little to look at two important aspects mentioned above. Firstly the 'consultant facilitator' could refer to a very well qualified and experienced training officer who acts in the role of 'change agent' and facilitator of learning. Secondly the term 'action research' refers to the improvement of individuals' job performance through analyses of their actions within their work situation. Importantly it emphasises regular group interpretation, discussion and action in helping individual members of the group. It will be discussed later in terms of training techniques and methods.

Handy (1985:134;292) describes OD as a way of improving the climate of the organisation so as to ensure that the goals of individuals are compatible with those of the employer. Lievegoed (1973:40) sees OD as involving a change in structure. Rothwell and Kazanas (1989:236) make it clear that OD is regarded essentially as promoting long-term change in culture which is applicable mainly to workgroups/departments, change being brought about under the guidance of HRD professionals by processes of persuasion, coercion and education.

It is clear that, within the organisation, culture plays a vital part in determining the extent and success of OD. The training officer, acting as change agent plays an important role in this process. London (1988) provides a very useful review of the role of change agent. Pace et al., (1991:129-133) also provide a succinct summary of the methods used to implement change that affect interpersonal processes, tasks,
technology and structure of the organisation itself. The three approaches which tend to affect the above processes are:

a. Survey feedback from interviews or questionnaires
b. Team-building and identification of team/group problems; problem solving.
c. Third-Party interventions/conflict management.

Pace et al. (1991), discussing the role of the change agent and the methods which are used to bring about change, emphasise the importance of team building and interpersonal effectiveness in promoting efficiency.

Many authors including Müller and Funnel (1991:176) and Argyris (1982:307-435) also emphasise techniques in improving problem-solving with particular reference to HRD. They stress the importance of creating an environment in which learners can flourish. As discussed previously the structure and culture of the organisation partly determines the level of success in coordination of staff effort. Importantly each individual whatever his/her grade and whether a professional or not contributes to the culture of the organisation, individual cultures each with their inherent values and norms having arisen as a result of socialization in early life. On the other hand there is little evidence to suggest that different grades of staff contribute equally; one would expect the powerful leaders to exert more influence than their followers! Staff may act in certain ways because either they have little choice due to management structure or policies or because their reasoning tells them to adopt a specific stance. As a result an organisational philosophy will emerge, individual cultures tending to interact to a greater or lesser extent with that of top management. Unions too may play a part, sometimes distributing information to the workforce designed to influence decisions which they regard as political.

Raelin (1986;3) points out that there may be a clash of cultures between professional and managerial staff and that strategies should be developed by management to cope with this. (The concept and definition of a professional will be discussed in Chapter 4). It follows that, because cultures of all staff, whatever their grade, contribute to organisational change, development within an organisation can be influenced from the bottom-up as well as top-down.

Stewart (1990:145-147) describes a model of organisational growth and change in which the first stage is 'pioneering' - informal, reactive, undergoing rapid change and with lack of specialization. Gradually as the organisation continues to grow it becomes systems controlled i.e. more bureaucratic towards its staff and their activities. She describes this as a 'systems crisis'. She suggests that a way out is to go into the integrated stage - characterised by decentralisation and shortening lines of authority. She suggests that this encourages innovation which is followed by new leadership. Allen, (1977:122-3) also points out that in R and D organisations, shortened lines of communication increase effectiveness but that communication should be such that
interaction with individuals external to a project can occur. White (1988:63) points out that it is sometimes said that science is a creative pursuit that may be irremediably crippled by designated channels of authority. The source of this belief is a soundly based fear of an atmosphere in which slavish adherence to procedures is more honoured than prompt decisions.

The view exists that large successful organisations need systems and procedures so as to preserve order and efficiency. Stewart (1990:145-147) agrees with this viewpoint but points out that these should be enabling rather than controlling. She gives instances where bureaucracies, disabling to the organisation, need to be broken down so that there is redirection of control and emergence of an open flexible framework which encourages innovation by staff. She points out that managers responsible for turning around organisations are typically young managers rather than the ageing middle managers who press to maintain the status quo. At present there is little information on the extent to which personal or group factors determine the ability to 'turn around' organisations. For example it might depend on the creative ability of an individual or group or on the culture of the organisation or its groups. However there is evidence that successful training strategy within organisations arises mainly from a firm commitment to staff development by top managers, line managers and HRD professionals (Webb 1989:42). The correct approach to the training function may also help to ensure that industrial relations function effectively (Field and Drysdale (1991:56).

Within an organisation, education and training may be centralised i.e. run from a central coordinating point, or it may be decentralised so that decisions about training are made at department, group or unit level. For example managerial training may be arranged centrally but skills training may be arranged wholly by, say, engineering or computing departments mainly for their own staff. Generally centralised training occurs where there is a need to implement change or to address new innovations throughout the workplace while decentralisation occurs to fit purposes of departments or its individuals, (Carnevale et al., 1990:34).

But for organisations to get the best from individuals they need to consider the individual staff’s personal goals. Indeed Pelz and Andrews (1976:8-50) point out that research organisations may recognize that scientists need freedom to choose their paths of research but that this requirement may conflict with their goals which may rely on funding from commissioned projects. Kay, (1990:175) suggests that there is no single best approach to most management problems and in hi-tech organisations organisational culture, based upon values agreed by workstaff, may provide guidance to ways of problem-solving.

Argyris (1982:303-447) also emphasises that in problem-solving there is no organisational development without societal and cultural changes. He argues that, because of faulty ideas and values inherited by individuals in the cultural and socialization process there may be contradictions in terms of management strategy and that because of this individuals within it may experience problems. Thus these values
and procedures may need to be changed. Furthermore Argyris (1982:451-465) agrees that the way organisations control the activities of staff may inhibit a correct approach to learning. He emphasises that many activities which are associated with excellence are very open with partners, officers and managers discussing problems. For example he emphasises that if promises made to staff by management are not honoured then it is the responsibility of staff to highlight this fact rather than distance themselves from it. He stresses the importance of the 'double-loop' process of learning, seeing it as a way to increase the capacity of individuals within the organisation to learn and to solve problems which are caused by the faulty underlying values, policies and practices inherent not only within individuals themselves but also within the organisation.

'Double-loop' procedures (discussed further in Chapter 4 in respect to individuals) are seen as a way of solving not only a first-level problem butremedying the underlying condition(s) which caused it. In contrast the 'single-loop' learning system is seen as much less effective in problem-solving. It may be used to solve an immediate problem (i.e. the symptom) but not its underlying cause and therefore the problem may re-occur. Argyris suggests that in promoting conditions for double-loop learning the human resource professional or 'interventionalist' is likely to be faced with clients who believe that they have the competence to be in control of their everyday lives. He suggests that for double-loop learning to be genuine there needs to be changes made to the organisational learning system that when combined with changes in individual theories-in-use will question features of socializing processes and norms of our culture.

In addition to my main research question 'What is the role of the Training Officer' I have also made observations on cultural climate and staff attitudes at a science research institute. For example staff may or may not wish to acquire middle- or top-management skills or enhance their personal attributes. What I have also attempted to do is to present a background to their responses, actions or attitudes.

In summary I have discussed the definition of OD, and produced ample evidence to emphasise the importance of organisations to foster a culture which will promote creativity and enhance methods for problem-solving among groups in the workplace. This in turn will enhance the corporate image and foster success and growth. London (1988:1-20) summarising the work of professionals in organisations, views leaders and managers, including HRD specialists, as essentially change agents, working together to reformulate goals. He emphasises the new and changing role for personnel departments to plan long-term staff development programmes in conjunction with HRD professionals. But what is not clear is the exact role of the training officer within the OD process. Most of the current literature talks about 'HRD professionals' or HRD consultants' but it is not clear whether the term 'Training Officer' is included in the term 'HRD professional' nor are the qualifications needed for inclusion given. Thus I reiterate the proposals by Marsick and Watkins (1990:226-237) who call for an expanded role definition of HRD professionals from trainer to a professional who enhances the learning capacity of individuals, groups and organisations and who takes a leading role in meeting the changing needs of the workforce. Undoubtedly the
training officer must respond to demands of both the organisation and its staff. This requires clear communication and interpretation of events, also a firm understanding of the culture of the workplace.

In many organisations the responsibilities of the 'Personnel Manager' or 'Training Manager' include an input into the actual recruitment of staff whilst the 'Training Officer/Manager' is expected to be concerned solely with the training function. The American Society for Training and Development (ASTD) has undertaken a comprehensive studies of what HRD practitioners actually do (McLagan, 1983; 1989). A model of strategic HRD is presented which, in contrast to many other past-oriented models, emphasises that the training officer should be proactive rather than reactive. The model emphasises that HRD strategy by top management should incorporate a planned sequence of learning so that training and development are accomplished both for the good of individuals and for that of the organisation. This preferred approach implies that HRD training practitioners should be included in discussions about the total business plan for the organisation though often this is not the case. In some instances they are left to develop an education and training strategy without knowledge of the total business plan.

Having discussed the importance of OD within the strategic HRD function, I shall discuss the second constituent of strategic HRD i.e. staff development, described by Rothwell and Kazanas (1989) as 'Non-employee development (p.259), 'Employee development' (p.302) and 'Employee education' (p.340) in Chapter 4. However before that, I shall diverge a little to discuss 'Human Capital' and its advantages to staff.

3.4 STAFF DEVELOPMENT AND HUMAN CAPITAL THEORY

Implicit in the concept of strategic HRD is the idea that educated and trained people represent a very valuable asset to an organisation and are part of the capital investment, in short, 'Human capital'.

Human Capital is described by Parnes (1986:1) as:-

'the productive capabilities of human beings that are acquired at some cost and that command a price in the labour market because they are useful in producing goods and services'

The theory proposes that education is a major means for increasing the value of people in the workplace and a major means for organizations to increase the net worth of their worker's skills and abilities. Indeed, using econometric modelling, Carnevale (1984) cited by Marsick and Watkins (1990:206) found that workplace learning and formal education accounted for more growth in economic output than employee health.

In the present economic climate within the U.K such a rationale calls for the
systematic training and retraining of the adult population, a task that needs both informal and formal education and training methods. Indeed, in this respect, Marsick and Watkins (1990:205-210) call for enhanced focus on informal and incidental learning in the workplace.

But perhaps the relationship between OD, the national economic situation on the one hand and education and training on the other is not as clear as it might be. The concern for investment in technical education has long constituted a major political issue as pointed out by Gleeson and Mardle (1980:4). They examine a number of arguments drawn from the human capital approach which stress the need for planned investment in education and training as a prerequisite of economic progress. During the past two decades government reports, research papers and academics have emphasised the necessity of synchronising relations between further education initiatives, technical training and occupational structure so as to develop a highly-skilled workforce.

However Gleeson and Mardle review the assumption made within the 'human capital' approach which relates to the widespread belief that skill requirements in industry are now increasing due to changes in technology and that there will be a progressive decline in the need for unskilled labour. They emphasise that education at the cognitive level rather than skills-based training, is a relatively weak mechanism in the link between human development and jobs. They discuss, on the one hand, the view of proponents of human capitalist theory who subscribe to a belief in a meritocratic society in which economic advancement can be equated with equality of opportunity. On the other hand they point to critics of the human capitalist approach who consider that there in little synchronisation between our educational system and the acquisition of occupational skills.

Marsick and Watkins (1990:207-8) in discussing reasons for an apparent discord between education and training, put forward by critics of human capital theory, point out that, in the past, schools may have failed to instil in their students a lifelong capacity to learn and may have emphasised skills which in our fast expanding technological age may have become obsolete. Moreover they suggest that skills taught in school have inadequately prepared students for the realities of the work situation and that there is a disparity in what is taught at school and what is useful outside of it. On the other hand here in the mid-1990s there is increasing emphasis on temporary work-related experience which school, college or university students need to gain in order to complete a long-term course.

But what of the people who are either in full or part-time employment or are looking for jobs? Investment in worker education can be linked to an increase in productivity using cost-benefit analysis. But there are various views as to what extent the employer-led system of training and development can benefit the individual. Marsick and Watkins (1990:206) emphasise that the benefits of employee training is large not only in terms of formal training and staff development initiatives but also in terms of informal and incidental learning which occurs through work experience.
Marsick and Watkins suggest that training opportunities may be discriminatory so far as certain sectors of the population are concerned. For example in some countries women receive disproportionately less company training than men and the economically disadvantaged often receive least of all. Furthermore there may be age-related differences in training opportunities, levels of training in older workers depending on the national economic situation and levels of unemployment. If staff are difficult to recruit it may be advantageous for the employer to train existing staff whatever their age; if there is plenty of new labour available employers may be tempted to take on new staff in preference to training older individuals. Moreover the unemployed or underemployed are likely to lose out on work-based learning. There exist strong critics of human capital theory who suggest that denial of access to training may lead to low moral and lower productivity. The training officer should be aware that this denial may be linked to class, sex or age.

Little is known about actual costs for implementing HRD either in terms of total costs for implementing the process or for costs of actual education and training courses. Rather more is known about the costs of formal training in commercial firms rather than in governmental organisations. In some private companies the cost of formal training in time amounts to 5-6 days per employee per year (Killeen and Bird 1981). Such firms as IBM consider that the very large investments made in training staff, especially salesmen, is essential for success (see National Audit Office Report, 1990). However in many other private and government institutions there is little assessment of total training costs in terms of time and money and less information on whether effective planning reduces costs. Indeed Blaug (1976:199) emphasised that little is known about the economics of training or its costs, a situation which today is still to a great extent unremedied though some assessment of cost-effectiveness of training in organisations is currently being undertaken (R. Plant, Personal communication). Although there occurs a large amount of informal and casual training in the workplace very little is known about the extent to which it occurs let alone its cost.

As part of my research into the role of Training Officer I have attempted to obtain an estimate of the budget required for training within the research institute where I work. These results are presented in detail in Chapter 25 which is concerned with the role of evaluation of training.

To conclude this chapter, it is clear that organisations have goals, the success of which are linked to marketing and to strategic HRD. The culture of organisations are seen as of great importance in fostering an environment of creativity especially in R&D institutions. However little is known about the role of the training Officer in OD or about the effect of socialization and culture in colouring individual or group attitudes to education and training. Furthermore very little is known about costs either for formal or for informal training.
There remains the question of to what extent individuals respond to strategic efforts made on their behalf and how they see themselves within the system. In Chapter 4 I shall discuss training and development as applied to individuals particularly in respect of change within the workplace.

3.5 SUMMARY OF CHAPTER 3

3.5.1 In this Chapter, I have reviewed the background against which strategic HRD operates.

3.5.2 Organisations perform two main functions; they may contribute to economic growth and they tend to act as mechanisms serving to coordinate actions of individuals.

3.5.3 Implicit in the concept of continuing work-based education and training is the understanding that this will be sponsored either by the individuals or government.

3.5.4 I emphasise that the standard of training enjoyed by staff will depend on the efficiency of commercial, research or educational organisations or of professional bodies in employing top quality managers of human resource development (HRD).

3.5.5 The role of organisational culture in helping to create an environment in which learners can flourish is emphasised.

3.5.6 Role behaviour in formal organizations may become a compromise between the formalized prescriptive role-taking process and that which is more flexible. Role conflict may emerge.
CHAPTER 4

COPING WITH CHANGE

THE IMPACT OF EDUCATION AND TRAINING ON INDIVIDUALS
COPING WITH CHANGE - THE IMPACT OF EDUCATION AND TRAINING ON INDIVIDUALS

4.1 INTRODUCTION

An acceptance of a gradually changing work situation has become the norm in many countries world-wide during the 1990s. Education and training is instrumental in helping the labour force to perform well in a wide variety of work situations particularly in highly competitive fast-changing work environments. Rothwell and Kazanas (1989:ix) argue that:-

'we live in a time when nothing in constant except change. People unwilling to change cannot survive for long. Learning in a form of changing. Managers and indeed all employers must learn to anticipate rapid changes in the job careers, work groups, and organisations' (p.ix)

Shils (1981:252) points out that changing technology has raised the general standard of living of populations and that there exists a widespread participation in a central value system through education. Obsolete skills and the need to retrain for new ones are now an integral part of organisational development which may in turn bring about changes in skills needed by administrators for management, clerical and secretarial work. Another factor which organisations and training/safety officers need to take on board is updating of legislation which governs health and safety at work and ensures that staff must receive adequate training for safe working practices.

But there are problems and pitfalls for the human resource professional in managing change. Employers may show some resistance to change especially if they are unaware of its benefits. The workforce, whether individually or in groups, may respond slowly to innovative ideas and may actively prevent their implementation (London 1988:71-77). Stonier (1979:34) argues that the only way to live with change in our modern society is to be educated for it.

Even where a stable environment exists it in clear that job content may change because of the development of new priorities or services (Mumford 1988:19-20). A change in an organisation's attitude to quality may also mean that staff may have to change attitudes to their job not only in terms of how they perform their particular tasks but how they interact with other members of a team.

Changing demographics are also of major-significance not only to organisations but also to people. For example, within the U.K. future demographic trends suggest that within the mid 1990s there may be recruitment of a higher percentage of staff who may need a large amount of training to enable them to cope with technological change.
The Spring 1992 newsletter of the Surrey Training and Enterprise Council succinctly forecasts the impact of demographic change on management and individuals:

'Employers must forecast their human resource and recruitment requirements while individual people must pursue their own training or lifetime learning. Because of the decline in the working population, policies to retrain and employ older workers, women returners and minority groups will also need greater emphasis.'

With increased economic problems there is also evidence that many firms within the UK and Europe are currently having problems in sustaining growth due partly to entrenched recession in many of the major countries in Europe, to increased competition from world competitors and to reduced demand from their traditional clients. Some firms are maintaining profit margins by cutting back on staff, capital and operations costs and by opting for bare-bones training initiatives. It is clear that such organisations need to develop further a labour force with the skills needed for excellence in productivity and marketing. Senge (1990: 4) emphasises general and continuous learning (ability to adapt and/or create) involving continual focusing on primary goals coupled with giving potential learners first-hand experience.

In the 'learning organisation' a high value is placed on individual learning as a means of managing change (see Senge, 1990). So that organisations can compete well in terms of technological and economic advancement, skills are needed in productivity and marketing. Senge (1990: 10) emphasises strong cooperation within teams. He was one of the first to recognise that a source of competitive advantage for organisations is to create an environment where managers and staff share knowledge and use their collective genius to problem solve. He emphasises the five disciplines which need to occur within a 'learning organisation':-

a. Shared vision
b. Personal mastery (commitment to learning)
c. Mental models (which help individuals to move forward)
d. Team learning
e. Systems thinking (seeing systematic patterns which underlie the complexities of an organisation)

All the above possibilities present a challenge to training officers in identifying precise education and training needs in a wide variety of work-related situations. Whatever the problems perceived within the national economy and within organisations themselves, the working population is expected to adapt to changes which are happening both within society and within the working environment. As Stewart (1990:14) points out:-
'If we change, it doesn't necessarily mean that we were wrong - just that yesterday's solutions are different from today's.'

The training officer has to develop programmes which help organisations and individuals to cope with this change.

4.2 EMPLOYEE EDUCATION TRAINING AND DEVELOPMENT

The needs of employees within any given organisation will differ depending partly on their professional status, goals and their aspirations. For example young people may have high expectations of careers or salaries while older staff may be looking forward to early retirement. Others in mid-career may be expecting or expected to update their skills or attitudes. For example staff may express a desire to train in new computer technology; top management may require middle managers to change their attitudes to employing women in certain jobs, recognizing the need to enhance the role of women in the workforce. London (1988:71-74) suggests that staff in mundane or low-skilled jobs may have fewer expectations of education and training than senior managers. This may be true to some extent but with fewer job opportunities available in the current recession of the 1990s there may be an increase in the education and training expectations of lower-skilled staff in mundane jobs. This is because the enhanced personal and vocational skills acquired as a result of education and training could improve their ability to find another job should they be made redundant. Group participation in training schemes is also important. Members of a team need to learn to communicate with each other in a meaningful way and managers need to be aware of factors which affect group interaction.

Müller and Funnel (1991:163-177) put forward a framework for delivering quality in vocational education arguing that there are at least ten issues which contribute in different ways to this process. In their conceptual map they see the learner who is at the centre of the process enveloped by the organisation in which education and training is made available. They emphasise the learners' roles in maintaining quality and creating a product and suggest that:-

'The reputation of the organisation and its credibility in meeting statements of quality is seen as being determined by the way in which learners participate in this process and take ownership of it'. (P. 175)

Although an organisation's Training and Development programme may be widespread and imaginative it may be less than well-planned. This is partly because often there is little effort put into identifying long-term needs of employees and because training programmes are often designed so as to obtain short-term pay-offs rather than long-term excellence. (Rothwell and Kazanas 1989:302). Here too I shall emphasise the role of planning as an important aspect in the role of training officer.
Within the organisation training may take a variety of forms. Carnevale (1986) cited by Watkins and Marsick (1989:50) found that over 80% of the training in Industry was in the form of informal on-the-job training. Other forms of training include formal and informal courses and seminars, distance learning and vocational courses. The latter may be conducted informally or formally on or off the job. Education and training initiatives may also take the form of temporary job exchanges, field trips, e.g. sea-going opportunities, and protegé-mentor pairing.

In a mentoring programme a climate could be created whereby relationships between aspiring employees and their more experienced colleagues would be formally encouraged, the mentors should possess some coaching skills and would provide work assignments interesting to protegés followed by advice and feedback (see Mayo, 1991). Rothwell and Kazanas argue that this programme could be applied to all employees not just to high fliers and that the system is particularly useful to people whose jobs are influential in customer relations.

With regard to identifying training needs within organisations Rothwell and Kazanas (1989:303) suggest that there should be ample clarification of each individual’s work-based activities and responsibilities and amplification of the extent to which s/he is expected to participate in team effort and to the extent the existing situation meets the changing expectations of employers. Indeed Nadler (1979:88) suggests that employee development is concerned with preparing employees so that they can move with the organisation as it develops, changes and grows. The role of training officers in completing needs analyses are discussed in Chapters 5 and 9.

Success or otherwise in training, to some extent depends on individual attitudes because successful people are basically motivated from within. But there are problems with traditional employee development programmes. Rothwell and Kazanas (1989:319) point out that they are rarely planned well and work on an ad hoc basis. Furthermore often no attempt is made to think about the collective skill of each work unit and employees are often exposed to the views of successful past performers rather than to be encouraged to think creatively or radically about new increasingly competitive business strategy. Often employee development may be viewed as a reward for individual behaviour rather than a vehicle for obtaining future knowledge and the skills needed by individuals.

Long or short-term task/job exchanges/transfers or special job assignments also provide a valuable source of learning in the broader sense. Exchanges or transfers may occur within departments or, on a broader scale, between organisations. They are useful in that they can provide cross-training within a work-group and prepare individuals for more responsibility in management/administration or in science and, technology or solely in general learning about how a department functions. However the experience should be structured so that line managers and employees are aware of which activities are implicit in each planned stage. Rothwell and Kazanas (1989:319) point out that job rotation programmes do not have to be elaborate and that they can even be restricted to rotation between jobs in one work-group. Other
special assignments, used to enhance employee potential, may involve researching a problem or issue, developing a solution or taking over a project. These types of project represents a type of independent learning and are useful in that they allow an individual some freedom in deciding on possible action plans and in giving her/him more responsibility.

Little is known about the types of training available to particular grades of staff and whether training received is perceived by the individual and/or line manager(s) as being beneficial to the organisation. Furthermore little is known about whether training is perceived as being beneficial to the individuals themselves or indeed whether the staff development initiatives offered come up to expectations. Staff and line-managers may show some resistance to change especially if the benefits to them are not made clear. The workforce may respond slowly to innovative ideas and may actively prevent their implementation (London 1988:37-38).

The human resource professional is often under pressure when attempting to implement change. S/he must be responsive to the needs of the organisation yet must develop training programmes in which employees are willing to participate. London (1988:70-75) suggests that the characteristics needed for managing change include the ability to produce creative solutions to problems, to make decisions, to negotiate and to see the picture of whole organisation with a view to articulating a vision for the future. What is not clear is the exact role of the training officer within this context. There is an obvious need for her/him to provide support for line managers and to analyse and respond to the training needs of individuals within the workforce so that all receive equitable training/development opportunities. There is also a need for her/him to stay abreast of current developments in the field of training but it is not clear to what extent s/he is expected by the organisation to be proactive, together with other HRD professionals, in deciding on the amount and type of training which should be provided. Decisions also have to be made about the percentage of the total organisational budget to be allocated for training individuals or groups, the type of training offered e.g. safety, vocational, socially-orientated, or the way in which this should be implemented.

4.2.1 The learning process

It is generally accepted that learning may be undertaken with or without conscious intention and involves a process which is followed by an outcome. The latter may be in the form of a change in attitudes, values, or skills and capabilities of the individual who has participated in the process whether or not by conscious intention. Theories of learning are summarised by Shredl and Rothwell (1987:319) in terms of pedagogy, behaviourism, cognitivism and developmentalism (see Appendix 4.1).

It is important to distinguish between individual characteristics or traits which are stable and developmental characteristics which change over time or in response to the perceived environment (see Hunt and Sullivan 1974). This observation is especially
relevant to the world of work where staff are expected to update their skills so that eventually they can operate effectively without being dependent on other staff. What is not clear at present is the extent to which staff seek independently to improve their work-skills. Tough (1979:172) suggests that probably 90% of adults undertake at least one learning project per year, that the average learner spends almost ten hours per week in the learning effort and that 73% of the learning projects are self-planned.

The problems in attuning individual development to that of the organisation may stem from deep-rooted cultural attitudes. Argyris (1982) points out that in early life we are socialised with ideas and skills which are counterproductive to learning and problem-solving. He sees the problem as caused by the fact that humans are bombarded with large amounts of data and information. Because of the difficulty in coping with large amount of complex information, individuals organise it into abstract concepts but often in a way that causes problems even though people are following accepted norms.

The role of culture in learning is of immense importance both at organisational level and for individuals. Jarvis (1983:72) suggests that the latter process and internalize culture and in return externalize culture in their relationships with others. This is in keeping with the views of Argyris (1982:307-435) who suggests that learning by individuals which occurs in the process of socialization within cultures, is a great source of ineffectiveness in communication and problem-solving, found within many organisations.

The role of reflection in the process of individual learning is described by various authors (see Boud et al. 1985). It may be used deliberately and consciously particularly in awareness-raising or problem-solving. However the human resource developer or trainer must be aware that to engage in reflection does not guarantee productive learning or a pleasant experience. If an individual’s self-esteem is damaged by reflection it may take a considerable amount of time to restore his/her self-confidence. Thus it is imperative during training sessions that individuals are not put under undue emotional pressure.

So far, I have discussed various aspects of learning from the point of view of the training officer as a facilitator of learning and in that sense I viewed education and training rather simplistically as delivery systems. In the following discussion I concentrate on informal learning and on the importance of dialogue and critical reflectivity on the part of the learner.

4.2.2 Informal and Incidental Learning

The importance of informal learning in the workplace should not be underestimated. Marsick and Watkins (1990:205-209) argue that it makes a valuable contribution to
human capabilities which in turn command a price in the labour market. Informal learning can be planned and includes learning that is designed or expected. It may also include that which is unexpected (incidental learning). Importantly the control of learning rests mainly with the learner rather than the trainer. On the other hand the trainer often plays a major role in facilitation.

In this context the definition of informal learning as described by Marsick and Watkins (1990:4) is appropriate:-

'... the way in which individuals or groups acquire, interpret, re-organize, change or assimilate a related cluster of information, skills and feelings.'

As the authors point out, the change may take place over a long period of time and in some instances may be difficult to quantify. Methods for promoting learning in individuals and communities include the facilitation of transformative learning in which awareness, reflection, reframing of problems, challenging of norms and 'unfreezing' occurs so that each individual perceives his situation or other events in his/her world in a new light. Marsick and Watkins suggest that informal learning is dependent on the ability of an individual to change his/her perceptions. This contrasts with some types of formal learning where trainers may control an individual’s interpretation of events.

Marsick and Watkins (1990) differentiate their findings on informal learning from the self-directed informal learning described by Tough (1979) who reported on a study of informal adult learning projects outside the classroom.

Two criteria are used for their differentiation:-

a. The 'degree of intentionality'. Tough (1982:20) defined learning as involving 'intentionality' and planning' while Marsick and Watkins (1990) suggest that it can be incidental, occurring as a by-product of another experience. On the other hand both Tough (1982) and Marsick and Watkins (1990) emphasise the importance of experiential learning.

b. Individual learning versus collective learning in communities or organisations. Tough (1982) emphasises learning by the individual whereas Marsick and Watkins (1990) emphasise the importance of both individual and collective learning in communities and organisations. For example when professionals work alongside others to solve problems, the other individuals also learn from his/her successes or failures.

There are several key factors involved in informal learning one of which is dialogue. Another is critical reflectivity on the part of the learner. Ideally there should exist willingness on the part of individuals to identify and challenge their own blind spots that lead to gaps between their concepts (espoused theories) and what actions they
The fundamental argument about incidental learning is that individuals are constrained by the way they learn from experiences partly because they are influenced by culture and shared expectations and values. Complicating this issue further is the problem of an individual's attributions about the meaning and motives of others.

The individual's perception of the experience as important or significant determines whether or not learning takes place. Marsick and Watkins point out that by reflecting on what one learns incidentally and how one learns it, individuals, including trainers, can reduce their tendency to make erroneous assumptions based mainly on their own limited experience. They use the term 'unfreezing' (see Lewin, 1947; Argyris 1982), which is a process whereby individuals realise and believe that they, as individuals, have views or have made assumptions which are incorrect. In the 'unfreezing' process individuals go through a period of anxiety which may create a readiness for examination of beliefs and development of alternative actions. This 'unfreezing' process may occur when individuals discuss other case histories or really listen and discuss what others have to say.

Marsick and Watkins suggest that individuals vary in their reactions to their own mistakes, tending to rationalise any past events so that they themselves appear in a favourable light. They suggest that learners are more effective when they see themselves as agents responsible for their learning, and when they see mistakes and errors as material for new learning rather than sources of embarrassment. They point out that in order to reflect on these experiences, learners must make their reasoning public so that the private meaning that they ascribe to recent events and statements can be examined by others thus producing many different views. According to Argyris (1982), individuals often get trapped in patterns of recurring error because they have to contend with competing values or constraints. 'Double binds' were identified as inconsistencies when individuals said one thing and did another or when their description of events was at variance with that of other individuals.

Incidental learning may also occur at the organisational level but as Marsick and Watkins (1990: 152) point out the process is complicated. There are usually many more individuals involved, new projects are emerging and goals are changing. The result is that, although incidental learning may take place, it is more complicated and diffuse than that occurring at individual level and so may takes place over a much longer period of time. It seems that the training officer may take a role in bringing new issues to the forefront for discussion but without overriding the authority of top management.

4.3 THE PROFESSIONAL WITHIN THE ORGANISATION

As a group professionals are powerful in that individually or as working groups they are primary decision-makers and may be called upon to define the needs of society,
diagnose its ills and problem-solve. At the same time they are expected to maintain their professional and social skills, often they themselves defining the direction in which their professional expertise should lead them (Goodlad, 1984:248; Cervero, 1988:1).

There is no common consensus as to the definition of a professional. Three major approaches may be made:

a. The static approach;
b. The process approach

c. The socio-economic approach.

Briefly, the static approach is related to the maintenance of given standards by professionals which confer the benefits of status. The process approach asks the question 'How professional in an occupation?' (Cervero and Scanlan, 1985:7). Here there are several assumptions. The first in that society needs professionals. Secondly, it assumes that there is no clear boundary between professions and other occupations but rather that a continuum exists. It assumes that non-professional groups may be considered for professional status (see Vollmer and Mills, 1966:2; Houle 1980:27). The socio-economic approach argues that in the USA and the U.K. there is a long history of professionalism whereas in Europe this is not so and that the basis of professionalism in the latter may be based on governmental strategy (Freidson 1986:34).

On the other hand, a view exists that professions are not inherently different from other occupations. It is simply that professionals monopolize their field of knowledge, control entry into their chosen occupation and thus achieve high status and income for members (Cervero, 1988:5). Goodlad (1984:20-21) argues that, within current society, professionalism is an occupational ideal which has become less attainable as more work is 'routinised through technological advances'. He points out that many occupational groups have not succeeded in achieving full professionalization in that they are currently defined as 'quasi-professionals' or 'semi-professionals'. A comprehensive account of professions and professionalism is given in Jarvis (1983) and Goodlad (1984).

In the first quarter of the twentieth century continuing professional education was seen as a mechanism mainly for remedying deficiencies in basic education and to correct deficiencies in knowledge and skills. At that time there was little pressure on professional practitioners to maintain a reasonable level of competence. Since that time rapid technological innovation has caused an increase in the likelihood of professional obsolescence, a situation which can only be remedied by continuing education and training.

Nowadays professionals learn through books, videos, films, discussion, seminars, workshops and conferences. They also undertake continuing education programmes which may include short-term full- or part-time courses either provided by local
educational institutions, universities and colleges, commercial organisations or professional bodies. Scanlan (1990:5) points out that this is somewhat of a disorderly market in that there are wide variations in the objectives, focus, content and methods of training delivery, also the participants in given continuing professional education courses or seminars tend to represent relatively homogeneous groups in their level of formal education and status, e.g. dentists; chartered accountants.

It is essential for the training officer to realise that policies which promote mandatory continuing professional education often assume that there may be beneficiaries other than those who represent the primary target. For example health-related courses may be provided not only for medical practitioners but also for social workers or medical insurance agents. It is the job of the training professional to identify and provide for these secondary targets.

Generally professional bodies are under increasing pressure from the public to provide adequate education and training for their members. Professional acceptance of the need to update has also contributed to education and training programmes which seek to ensure professional competence and in some instances enable qualifying members to retain a license to practise (see Houle, 1980).

Many societies and organisations offer professional conferences each year which include exhibitions of new ideas and products. This presents a forum at which social networking is facilitated and new ideas are discussed. Goodlad (1984:296) suggests that the professions should pay greater heed to educating their leaders and administrators. He calls for greater emphasis by the professions in developing their own training methods and concepts rather than to look toward business concerns for leadership. For example, he calls for an integrated approach and constant updating to theory and practice in the engineering professions and support for on-the-job training from staff employed in these fields (Goodlad (1984:72))

There is also the aspect of personal development of professionals to be considered. One of the most important jobs of the professional is to be able to cope with changing social and economic conditions, the latter of which is likely to impinge on the work situation and may require extensive managerial skills. For example, due to economic constraints a research organisation may need to expand its field of expertise and may need to plan for new departments, recruit new staff and promote team-building. Thus its staff may need to develop entrepreneurial capabilities in addition to those inherent in their chosen profession. Furthermore the professional may need to cope with new responsibilities which may take many forms including responsibilities for staff careers, new legislation, new areas of work-related specialisation.

There may also be a need for personal enhancement not directly connected to the primary profession, e.g. the wish or the need to enhance interpersonal skills or learn a language. Methods for enhancing the personal development of managers are discussed in Chapter 5.
4.4 CAREER DEVELOPMENT AND STAFF APPRAISAL

Schein (1980:249) considers that human resource planning and development must be viewed as a total system involving not only a planning component on the part of the organisation but also a joint negotiation with the individual in his/her career development so that the goals for each are achieved. Williams (1981:1) has summarised the concept of a career as 'getting on via a series of related jobs', however, he emphasises, there are many aspects to the concept of 'career'. Morrison and Hock (1986:238), citing Baltes et al. (1977:208-9) define individual and organisational career development as :-

'a system of behavior (sic) change related to learning at work or in work-related contexts'

The processes which contribute to career development include career management which in turn is influenced partly by the individual and partly by the organisation. As the authors point out, work-related experience and personal development which occurs as staff move from job to job and task to task, constitutes a major factor in the development of a career. Some individuals are happy with a life-long career and specialise in a given subject or within a given organisation. Others, often at a mid-career stage may become dissatisfied and change jobs or adopt alternative life styles.

Schein (1980:249) distinguishes the 'external' perspective as opposed to the internal perspective. The first is defined as observable series of stages through which an individual moves during his/her working life. These are exemplified by Broussine and Guerrier (1983:196) who suggest that what individuals expect from a career may vary with age and with different life stages. For example teenagers may still be evaluating the career options open to them while staff in their twenties are building on their career and more responsibility in existing or new jobs is sought. Financial pressures of a new family too may encourage staff to seek well-paid employment. In contrast older individuals, once having achieved at least the middle-rung of the career ladder may be less competitive and may wish to concentrate on family matters or even choose a different career which perhaps fits more into their ideas of a gradual retirement.

However the internal perspective of a career refers to an individual’s personal experience of his career, his hopes, actions and aspirations (Riches 1987:7). Storey (1979) has attempted to include both concepts in his definition:-

'The sequence of a persons work-related activities and related activities and associated attitudes, values and aspirations ..' (p.4)

Career planning may be strongly tied to existing performance appraisal processes, promotion, training and development, management succession and replacement.
planning (see Walker and Gutteridge (1979:5-20). As employees move through various stages in their career they need to have the opportunity to discuss, confidentially or otherwise, their hopes, fears, problems and aspirations. In this respect managers, including training officers, should be aware of the value of giving people a change of tasks as a means of increasing motivation.

Williams (1981:3) summarizing reports from various companies suggests that individuals are increasingly interested in the quality of their working life and should be involved in their own career development which may include the establishment of self-learning goals and personal planning. He suggests that organisations should set realistic goals and provide learning resources to convey career information to work groups. Factors contributing to pressure on employers to respond to the career needs of their staff include government legislation to prevent any type of discrimination in the workplace e.g. sexual or racial, and also the higher aspirations of employees particularly women (see Payne, 1991).

A model designed for managers to examine the consequences of the mismatch between individual and organisational demands has been developed by Broussine and Guerrier (1983). Essentially outcome depends on both the attitude of the top and middle managers which link their requirements to the labour market and that of the individual whose motivation and aspirations in career development may be determined by social, situational or personal environments as summarised by Riches (1987:10). In summary it is important for managers to recognize staff aspirations and motivation. However, the problems in attuning an individuals' development to that of the organisation may stem from deep-rooted cultural attitudes of individuals.

Career development tends to be linked to formal or informal staff appraisal in many organisations. In the U.K. Civil Service the appraisal scheme includes all staff whatever their grade. Generally most schemes include an assessment of staff potential and promotability and an assessment of their training needs based partially on previous job performance and partially on forward job plans. Generally the person conducting the appraisal is the immediate supervisor and the appraisal is countersigned by a more senior manager. The 'Freedom of Information' act (1974) has meant that the results of the appraisal have to be made known to the appraisee. Careers counselling tends to be undertaken by line managers and/or HRD professionals.

4.5 NON-EMPLOYEE EDUCATION

Rothwell and Kazanas (1989:259-260) suggest that non-employee education is also just as important as employee education and that if a firm is to be successful HRD practitioners bear a responsibility to the learning needs in individuals outside of the firm e.g consumers who do not know how to use a product will not buy it. In just the same way the general public and individuals who represent government and commercial organisations need to be aware of the advantages and disadvantages of particular research initiatives if they are to be persuaded to provide funding to support
projects. Similarly teachers will need to understand environmental issues before they can effectively discuss them with students. Thus there is a requirement that the organisation should look at its strengths and weaknesses in non-employee education.

In this thesis I describe my role as training officer within the above context. I seek to document information concerning not only the expectations of the organisation and its junior and senior staff in my performance of those duties but also describe the contribution of top managers to the success of a training programme. In the next Chapter I shall discuss the roles of training professionals with particular reference to training officers as derived from a literature search. Emphasis will be placed on describing what they actually do.

4.6 SUMMARY OF CHAPTER 4

4.6.1 Education and training is instrumental in helping the labour force to perform well particularly in highly competitive fast-changing work environments.

4.6.2 There exists a widespread participation in a central value system through education.

4.6.3 Legislation ensures that staff must receive adequate training for safe working practices.

4.6.4 Employers may show some resistance to change especially if they are unaware of its benefits. The workforce, whether individually or in groups, may respond slowly to innovative ideas.

4.6.5 Changing demographics are also of major-significance in that redundancy or skills shortages may occur.

4.6.6 The increasing role of women in the workforce assuming positions of responsibility may mean that women require training for the jobs now open to them.

4.6.7 The working population is expected to adapt to changes which are happening both within society and in the workplace.

4.6.8 The needs and expectations of employees may differ depending partly on their professional status, goals and their aspirations.

4.6.9 The human resource professional must be responsive to the needs of the organisation yet must develop training programmes in which employees are willing to participate.

4.6.10 Training officers need to be pro-active in providing support for line managers while also responding to the training needs of individuals.

4.6.11 Within the learning process, there may be problems in attuning an individuals’ development to that of the organisation. The role of culture in this context is crucial.
to successful learning.

4.6.12 The importance of informal learning in the workplace is emphasised.

4.6.13 Professionals are powerful decision-makers. Recent rapid technological innovation has caused an increase in the likelihood of professional obsolescence, Professional bodies may be under pressure to provide adequate education and training for their members.

4.6.14 Human resource planning and development must be viewed as a system in which there is negotiation with individuals in decision making about their careers. In this respect organisations should set realistic goals and recognize staff aspirations and motivation.
CHAPTER 5

SOME ROLES OF THE TRAINING OFFICER BASED ON A LITERATURE SEARCH
5 SOME ROLES OF THE TRAINING OFFICER BASED ON A LITERATURE SEARCH

5.1 INTRODUCTION

As outlined in previous Chapters, the term 'Training Officer' is used generically and may include training manager, specialist or practitioner, adult educator, interventionist etc. as found in the literature. In various readings there are numerous different descriptions of the activities which training officers may undertake.

In Chapter 1, I showed that various authors including Turner (1962) have summarised the concept of role. Some authors suggest that it is central to interactionist social theory, others take the view that it merely represents but one aspect of human culture and does not introducing any novel dynamic principle. Turner (1962:37-38) postulates that people have a tendency not only to enact roles which they perceive but also 'make' or 'modify other roles as part of a gestalt process within interactive behaviour.

5.2 THE ROLES OUTLINED

During 1978, Pinto and Walker pointed out that the training and development profession was in flux and that it was relatively difficult to determine precisely what training professionals did in the course of their work. They were some of the first researchers to study and define the basic skills and other attributes required of professionals for effective performance of training activities. The aim of their study was to describe activities in terms of what training and development professionals actually did. They identified fourteen main areas of training or staff development activities which were found to be related to one another through statistical factor analysis. The fourteen factors derived from the statistical investigation also represented 'roles' which then were used to comprise a model of professional training and staff development activity. For the purposes of their study, Pinto and Walker (1978:9) define role as:-

'a set of activities performed by an individual in fulfilment of the expectations imposed by professional standards of behaviour or employer position requirements'.

Here the term is applied to actual activities, whereas in some accounts, authors may refer to 'role' in a broader context in terms of the part they performed.

Pinto and Walker refer to the fourteen factors or roles as comprising the model of training and development activity. These factors or roles are listed (a-n) in Table 5.1.

A full list of tasks which they assign to the various areas of activity is shown in...
Appendix 5.1. With regard to the background to their study, one particular problem was that as researchers, they found it difficult to find out exactly what training professionals did because the latter did not always have a total picture of their work activities in relation to the organisation as a whole. Pinto and Walker do not list the roles in any order of priority or importance and one suspects that it would have been very difficult for them to have done so as this would have depended on rather subjective individual perceptions. On the other hand their model describes broad events. For example in the model, the training professional begins with the analysis of needs, decides on the training approach and designs and develops programmes having first obtained the necessary resources. Finally s/he implements the programmes.

<table>
<thead>
<tr>
<th>Table 5.1</th>
<th>(Fourteen factors or roles which comprise a model of Training and Development activity (see Pinto and Walker, 1978).</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Needs Analysis and Diagnosis (Factor 12)</td>
<td>Construct questionnaires for needs analysis, conduct interviews for needs analysis, evaluate programs etc.</td>
</tr>
<tr>
<td>b) Determine Appropriate Training Approach (Factor 14)</td>
<td>Evaluate the alternatives of &quot;ready-made&quot; courses or materials, programmed instruction, videotape, and other techniques versus a more process-oriented organization development/team building approach.</td>
</tr>
<tr>
<td>c) Program Design and Development (Factor 1)</td>
<td>Design program content and structure, evaluate and select instructional Methods, develop the materials and tools.</td>
</tr>
<tr>
<td>d) Develop Material Resources (Factor 7)</td>
<td>Prepare scripts, artwork, and instructional materials.</td>
</tr>
<tr>
<td>e) Manage Internal Resources (Factor 10)</td>
<td>Obtain internal instructors/program resource persons and train them, supervise their work, and evaluate their results.</td>
</tr>
<tr>
<td>f) Manage External Resources (Factor 2)</td>
<td>Hire, supervise, and evaluate external instructors and program resource persons; obtain and evaluate external courses and materials; arrange program logistics.</td>
</tr>
<tr>
<td>g) Conduct Training (Factor 13)</td>
<td>Conduct programs, operate audio-visual equipment, lecture, lead discussions, revise materials based on feedback, etc.</td>
</tr>
</tbody>
</table>

Continued...
Pinto and Walker (1978) point out that, in planning this study, it was observed that there was a lack of agreement regarding the precise roles of training experts, and, at that time, there was no single role-model which had gained universal acceptance. Thus they have made no attempt to 'force fit' their findings into any other existing role-model, though the role models developed in previous research were considered.

In 1983 the American Society for Training and Development (ASTD) published a document which they called 'Models for Excellence' (McLagan, 1983). This was compiled as a result of collecting further information and data from experts, by reviewing the literature and also by taking into account Pinto's and Walker's (1978) study. This document describes roles, activities, competencies and behaviours practised by training professionals. The ASTD study was updated (McLagan, 1989)
categorising competencies into four main areas:- Technical, Business, Interpersonal and Intellectual competencies.

ASTD describe fifteen key training and development roles that practitioners in the field of training and development perform but point out that there are others which are subsidiary. The roles, given by ASTD are listed below in alphabetical order. In this context the term role is used to indicate the task the training specialist performed.

Key roles listed by ASTD (1983) are as follows, they are not presented in any special order :-

- EVALUATOR
- GROUP FACILITATOR
- INDIVIDUAL DEVELOPMENT COUNSELLOR
- INSTRUCTIONAL WRITER
- INSTRUCTOR
- MANAGER OF TRAINING AND DEVELOPMENT
- MARKETER
- MEDIA SPECIALIST
- NEEDS ANALYST
- PROGRAM ADMINISTRATOR
- PROGRAM DESIGNER
- STRATEGIST
- TASK ANALYST
- THEORETICIAN
- TRANSFER AGENT

The ASTD report is useful in that it lists 102 'critical outputs' for each of the roles e.g. lectures given by an instructor. Critical output may also describe an end-product such as a report produced by the evaluator which provides some idea of the impact of a programme on individuals. Examples of 'critical outputs' are given in Appendix 5.2.

Further factors which ASTD listed were the 31 competencies (capacities to perform activities or values and attitudes necessary for the effective performance of activities) needed for the performance of the given role. These are given in Appendix 5.3)

Each competency could be further broken down into 'behaviours' which ASTD defined as 'Snapshots of Competency'. (see McLagan 1983:31) Kenny and Reid (1986:46) emphasise the current changing roles of training staff.

There are several other definitions of competencies within the training function as developed during the past decade within the United Kingdom (summarised by Mitchell, 1991). One is that of the Training and Development Lead Body (TDLB) which in 1991 published national occupational standards for the field of Training and Development. These standards, based on role performance, reflect a definition of
competence which is based on the performance required of staff rather than input or personal attributes. There are over one hundred stages within the framework which is used by awarding bodies of National Vocational Qualifications (NVQs) to assess participants' performance. In some instances the Management Charter Initiative (MCI) personal competence model (Management Charter Initiative, 1990) based on key behaviours which promote personal effectiveness, also may be used by awarding bodies to complement the TDLB model. The key areas of the TDLB model are based on key roles undertaken in the training cycle i.e. Identification of needs; Design strategies; Provision; Evaluation; Support of Training and Development. An example of some competencies and stages as related to training and Development NVQ level 4 are shown in Appendix 5.4.

As a starting point when describing the actual roles or tasks undertaken by training officers, I am seeking to present a description of some of the education and training pursuits being currently performed as shown in the following sections.

5.3 DESIGNING AND IMPLEMENTING THE TRAINING PROGRAMME

There may be several interest groups within the process of putting together a training programme. Indeed Roscoe (1992:166-168) suggests the design and planning of training requires input from the organisation, from the designer and from potential participants. Other interest groups may include trade unions, management teams, resource-providers, funders, line-managers and computer staff. Thus it is essential for training officers to coordinate the whole process and negotiate aspects of funding, accommodation, time-scales, numbers of trainers, numbers of participants, standards required, training objectives and evaluation.

5.3.1 Needs Analyst Role

A considerable amount of literature is currently available on training needs identification and analysis (Boydell 1990; Goldstein, 1980; 1986; Pace et al. 1991; Field and Drysdale 1991; Peterson 1992). A training need is defined here as:-

'A need for human performance improvement that can best be met by training of some kind' (Peterson 1992:14)

The United Kingdom Cabinet Office (1988:5) state that:-

'A needs analysis provides evidence as to the performance needed, the resources required and the priority attached to meeting the needs'.
Pace et al., (1991:69-73) summarize the 'needs-analyst' role in terms of:—

'Recognizing and documenting a problem e.g. a performance concern, with the use of historical information, information about job procedures; information about the organisation and employee perception of the job.'

Within this context a skills analysis is used to describe the skills necessary to do a job, a job/task analysis is used to describe the behaviours it takes to complete a job/task in the most efficient way. A performance analysis assesses how well an employee actually performs a task in terms of how and when it is done and the standard expected, (Peterson, 1992:40-2)

Current literature suggests that training officers need to know precisely the training needs in terms of the following:-

a. Needs at organisational level (see Roscoe, 1992:50)

b. Needs at occupational level which may be defined by job or task analysis

c. Needs at individual level which may be defined in terms of skills, knowledge and attitudes.

A summary of some of the problems in organisations which can be detected by needs analysis is given by Boydell (1990:10) and includes the following:-

i. Low or falling output by staff
ii. Falling performance by staff
iii. High or rising absenteeism by staff

Some of the reasons for organisational problems may include:-

i. lack of motivation
ii. out-of-date technology or machinery
iii. lack of specialist operatives.
iv. poor attitude of management

Boydell (1990:5-9) emphasises that many situations are complex and that the training specialist cannot hope to remedy all faults quickly and easily. Rather, a careful analysis of organisational needs will be required.

5.4 GENERAL METHODS TO FACILITATE STAFF DEVELOPMENT

Wiggs (1984:7.3-7.4) and Kenny and Reid (1986:115-143) emphasise that it is important for the designer of training programmes to take into account how adults learn and the best method for each individual. They may also need to focus on the particular educational topics of interest to individuals. They may make choices from
a broad range of educational and training topics and include them in the education and training curriculum. Examples of topics for courses or seminars may include 'Total Quality Management', 'Time Management', 'Management of Stress', 'Interpersonal Skills', 'Communication', 'Stress management' all of which are publicised in national journals.

Location and duration of courses may vary. Some may be residential, others offered on-site. Costs of courses too may be an important factor, some costing several thousands of pounds. Travel costs too may be vary. For example an international conference across the other side of the world may be expensive in terms of the air-travel involved.

If training officers work in a moderate-to-large organisation, they may plan, design and run courses or informal video-sessions themselves. In other instances lectures or seminars may be provided by qualified in-house staff. Sometimes a training officer may hire external trainers to run courses on-site or consultants to advise on the training programme. The type of provision may include open or distance learning (described by Stewart and Winter 1992:206-216), residential or non-residential courses on-site or off-site or computer-assisted learning.

Workplace learning is often implemented by formal or informal on-the-job (at-the-bench) training. Skills training or computer training readily lends itself to this method. In some instances volunteers may be found to teach others on-the-job, however they need to possess the necessary coaching skills. In some countries on-the-job training may be certificated as in the case of some apprenticeship schemes in Europe. In the U.K. the National Council for Vocational Qualifications provide certification based on competencies (see Fletcher, 1991).

In-house Learning Groups may be formal or informal e.g. self-help groups, quality management, think-tanks, workshops, health clubs. Often a training officer takes the role of planner, organiser and initiator in getting these initiatives underway. 'Self-help' groups may vary in their levels of expertise on given subjects. An example of such a group may be found in the workplace where groups meet to exchange information on topics such as 'computer programming' or 'advanced word processing.' Emphasis is on support for the individual which is provided by the joint expertise of the rest of the group.

Numerous authors including Malasky (1984:9) have described the methods used in education and training. Most emphasise that for each learning situation, the teaching strategies should be varied so as to maintain the interest of participants and to facilitate learning. There exist a variety of instructional methods with which the instructor/trainer needs to be aware. In most instances s/he acts not only as facilitator but also as a provider of resources e.g. video players, conference rooms. Some examples of methods to enhance or facilitate learning include the following:- Brainstorming, Case Studies, Discussion, Simulation games, Practice interviews, Role-Play, Programmed Instruction, Lectures.
5.4.1 Management Development

Management development has been described by various authors including Decenzo (1988), Marsick and Watkins (1990), Mumford (1991), Boak, (1991). It is defined by Mumford (1991:5) as:-

'An attempt to improve managerial effectiveness through a learning process'

It can be directed at individual self-development or at group/organisational development. It may occur on-the-job (see Pedler 1983; Senge, 1990; Mumford, 1991) and may include job 'shadowing', job-rotation or job exchange. As Mumford (1991:5-7) points out learning on-the-job does not have to be informal, accidental or incidental, it can be planned and designed by education and training professionals, by directors and by managers themselves. It is future-orientated, seeking to enhance skills in time-management, interpersonal effectiveness, interviewing, coaching, creativity, team-building, communication, accountancy or appraisal. Decenzo (1988:248) argues that training, as such, cannot overcome a manager’s inability to think conceptually or logically.

The training officer may facilitate a number of approaches to individual learning and development either by presenting education and training options to individuals or to groups. Specific examples of Management development include:-

a. Action planning which typically involves self-diagnosis by an individual manager followed by guidance from the training officer and colleagues for a construction of an action plan which will lead to self-improvement.

b. Action learning which focuses on improving a manager’s performance in real job situations so that problem areas can be remedied. It is based on regular group meetings, group support and interaction. For example the group may choose the visiting speaker. As in all successful learning initiatives, the starting point must be the readiness of the group to accept the underlying values of action learning, rather than have the idea foisted upon them (see Pedler, 1983:12)

c. Management by objectives (MbO). Typically the individual meets with his/her line-manager to discuss and agree targets for the coming year. Subsequently performance is evaluated against these targets. Appraisal may be linked to this evaluation and potential training options discussed.

d. Management learning contracts systems (MLCS). These involve discussion and agreement between individuals and training professionals and have
been used extensively in the USA particularly in the development of conceptual skills. They usually indicate what specific subject area the participant will research, the resources to be used and the method of appraisal. Boak (1991:148) emphasises that part of the tutor role is to support participants in MLCS by providing resources such as video-tapes and books, organising review and progress meetings, providing help-lines. Boak (1991:129-130) stresses that trainers may have to fulfil a number of roles in the processes for management development described above, either as all or part of their job. He suggests that these roles might be grouped under the following categories:- Designer, Organiser, Publicist, Recruiter, Tutor.

5.5 THE TRAINING OFFICER AS INSTRUCTOR / FACILITATOR / TRAINER

Training officers take prominent roles in the education and training process, acting not only as instructors or facilitators but also as a controller of the learning environment. Laird (1978:119-121) provides a useful overview of facilitation, citing the theory of Rogers (1969) who places great emphasis on the learner's involvement and social interaction in the process of learning. Truelove (1992:171-194) provides some useful guidance with regard to delivery techniques for trainers.

5.5.1 Motivation

Before trainees can benefit from any form of education and training they must be motivated to learn and must possess appropriate background experiences and qualifications e.g. basic academic qualifications or worldly experience. Goldstein (1986:69-70) emphasises that trainee readiness is critical in ensuring that an individual is motivated to learn. He also stresses that programmes must meet particular needs in order to motivate participants. Examples include the physiological needs model described by Maslow (1954:10). Herzberg et al. (1959) cited by Goldstein (1986:71) has postulated that two sets of work motivators occur - one extrinsic in origin, the other intrinsic. Extrinsic factors e.g. pay and working environment stem mainly from the external, organisational environment. Intrinsic factors are internal to the individuals. The authors suggest that extrinsic factors may not fully provide job satisfaction and place emphasis on intrinsic factors as motivators of job performance.

Other suggestions for the stimulation of interest include the presentation of interesting and challenging tasks and the stressing of the value of the activity in terms of job opportunities or promotion (see Goldstein, 1986:76-79). With regard to goal setting and motivation, Locke, Shaw, Saari, & Latham, 1981) cited by Goldstein (1986:78), found that in most instances the setting of challenging goals led to better performance than easier ones, though other research suggests that poor performance may occur if the individual tries too hard. These factors are of obvious importance and interest to training officers as motivators.
5.6 THE TRAINING OFFICER AS CONSULTANT

For every facet of the education and training process there are advisory and counselling responsibilities. Although many training officers may not act as consultants full-time, there are those who act as consultants as a major part of their job. Peterson (1992:25-28) provides a summary of the role of consultant, in this instance basing it on the work of the needs-analyst. For example, a training officer may be called upon to advise about education or training provision.

5.6.1 Counselling for education and training.

If sufficiently qualified, the training officer may take on the role as 'Counsellor'. Much of this work is concerned with individuals who experience problems at work such as stress or poor interpersonal relationships. As Woolfe et al., 1987:151-2) emphasise, work-related counselling tasks should be undertaken within a framework of empathy. The training officer may act as negotiator and mediator in the workplace. S/he may be called upon to undertake the following actions:-

a. Support an individual if s/he feels that the situation warrants it.

b. Providing sources of appropriate and accurate information.

c. Promoting the use of reflection in encouraging an individual to confront the problem and choose options.

5.7 EVALUATION OF THE STAFF DEVELOPMENT FUNCTION

Evaluation is concerned with assessment of the total value of the training or education system programme in social as well as financial terms, (see Goldstein 1980:237; Bramley 1986:3-6).

Rothwell and Kazanas (1989:469) emphasise that timing of evaluation is important as it may be used in decision-making about future learning events. It should provide a link between successive stages in the staff development process.

A number of factors may cause difficulty for the training officer in attempting to quantify the outcome of training and compare it with costs. Where cost benefit analysis is involved it is necessary to gain an understanding of improvements that are brought about by education and training in terms of staff education, new technology, benefits to the organisation etc. Pepper (1984:101) points out that costs may be computed and measured against achieved objectives in a number of ways, depending on a variety of factors, not least what the training department is trying to show. He suggests that the main rule is that training officers should:-
...understand the physical and organisational processes and activities' (p.101),

because costs in terms of numbers alone present only part of the picture. Blanshard and Montgomery (1978:2-14) conclude that evaluation can be effective but that it must be planned, relevant, objective, verifiable and needs the cooperation of all participants and that it should highlight strengths and weaknesses, accomplishments and shortfalls. They consider that it should be:

'practicable and capable of being carried out without turning the organisation upside down..(p.3)'

In the above sections I have described some approaches to the training officer role as derived from the current literature. In the following section I shall describe various approaches undertaken by training officers in the performance of their roles. A further discussion of evaluation methods is given in Chapter 17 which examines the way in which evaluation of staff development programmes may be undertaken.

5.8 ROLE-PERSON-CULTURE CONGRUENCE

Pettigrew et al (1982:7-8), were some of the first to explore the congruence between the role of training professionals and the culture of the organisations or staff with whom they worked. They took the term 'role' as referring to attitudes and behaviours expected of a training officer not only by others within an organisation but also by the self perceptions of officers themselves. The authors suggest that role behaviours are not static but evolve over time, depending partly on the organisation and on its staff. They suggest that each role occupant will bring with her/him to the job, values, attitudes and knowledge. Pettigrew et al., emphasise that a good fit between the three factors of role, culture and person usually result in stability of the job. They take the view that if a gross misfit exists between role, person and culture then chaos may occur and the energies of the training officer will be used for personal survival rather than for getting tasks done.

In terms of congruence there are two main requirements for the successful training officer:-

a. S/he must possess professional training skills.

b. S/he must be able to manage a complex social role.

The authors consider that the above attributes are necessary for successful training to occur. They emphasize the need for training officers to integrate a wide variety of complex tasks and social situations in that the job may involve working between directors and line managers, with staff of various grades and with individuals from external organisations. They argue that skilful training officers must fit well into the organisation and be acceptable to a variety of cultures, making changes if necessary.
As a result of extensive interviews with staff involved in the training function Pettigrew et al. group each of the many roles of the training officer into five main categories. However they take care to point out that these categories are gross oversimplifications of the role group and could be considered as representing different perspectives on the data as a whole.

The categories given are:-

a. The provider
b. Training managers
c. Change agents
d. Passive providers
e. Role in transition

a. The provider offers training which is designed to improve and maintain organisational performance rather than to make great changes. Pettigrew et al. (1982:8-9) argue that this role carries moderate to high legitimacy in that it is relatively stable, part of that legitimacy perhaps being due to a 'stance of neutrality'. The role is limited in that the provider does not seek to 'rock the boat' or to bring about great changes. Rather s/he seeks to provide what is needed in terms of education and training for the individuals with whom s/he works. Essentially s/he is seen as neutral, treating all interest groups as equal, whether representatives of top management, unions, or shop-floor. Generally the provider is concerned with implementing and coordinating training programmes and discussing with line managers and potential trainees the availability of education/training options. Pettigrew et al. suggest that the training officer in the role of provider has three different styles of operation:-

i. As cultural operator, the training officer follows the styles of the organisational culture as a way for her/him to link with management and staff. However there may be problems in that circumstances may predict that a training officer may have to move between two or more opposing cultures. As a result this may present difficulties. For example the company chairman may attempt to cut back on education/training-funds for a specific department while the head of that department may be seeking the help of the training officer in persuading the Board of Directors to provide the funds. The situation is akin to walking a tightrope. By taking 'sides', a training officer can appear as non-neutral and may be regarded with suspicion. On the other hand if s/he does not take sides then s/he may appear as lacking in integrity by both sides, thus congruence in one section of the organisation may reduce the likelihood of its existence in another section.
ii. As individual contributor. This second style within the provider group, stresses personal contribution on the part of the training officer which may be based on personal skills, experience, or personality. Here emphasis changes from cultural operator to individual operator within the organisation. For example a training officer may take on the role of instructor within a military training programme rather than acting as change agent/cultural operator in organisational development.

iii. As role performer. Here the training officer administers a routine training system, often involving much paperwork and there is little opportunity to be creative as the training programme in designed by someone else. An example is represented by the training officer in a large multinational company who has to follow a given training programme. Pettigrew et al., propose that the role is usually highly congruent with the culture of the organisation.

b. Training managers. These are concerned with the supervision and performance of staff junior to them and are generally concerned with managing the training function rather than acting at trainers. It is possible to divide them into two groups:-

i. Authority figures who are responsible for the performance of the training function and who may feel the need to develop a position of power.

ii. Coordinators who may be located at the head office of a group of companies and who are concerned with coordinating training through local managers.

c. Change agents. This role contrasts with the training providers in that while the provider is doing an up-front job within the organisation, the change agent is essentially concerned with changing its culture. Pettigrew et al. suggest that, acting as change agents, the type of training officers are more concerned with organisational problem-solving than with day-to-day training activities. They tend to work by means of discussion with top managers.

d. Passive providers of training services. These officers tend to be mainly concerned with the maintenance of training within the organisation rather than to make major changes. Because of their situation they do not usually exert much influence. They may be passive in the sense that they are reactive rather than proactive, often refraining from exerting any influence on top-management and waiting for individuals to come to them for help. They may be unaware of social and internal polities within the organisation and show little preponderance for the development of strategies which
could enhance their position. This passivity may be due to personal weakness and low self-esteem especially if the work environment is hostile or if their job is ambiguous.

e. The role in transition training officers. Usually these officers have customarily worked as providers and are thus expected to perform the general duties of a training officer. However, each has recognised that s/he could have a wider impact on the organisation if the role was altered to training manager or change agent. As Pettigrew et al., emphasise, this wider vision grows from changes in the training officer's concepts, though on occasions it may arise from the organisation's need to change. Training officers may experience problems in attempting to change their position in that they need to maintain legitimacy. Furthermore the organisation may not support the idea that it needs a change agent and top managers may resent anyone 'rocking the boat'. However training officers 'in transition' may use their personal legitimacy as a basis for changing their role - a sort of 'change by stealth'.

In describing the roles above, Pettigrew et al., indicate that a major issue is the management of each of the five types of role and the extent of the fit of the person within that role. This concept supports the idea that a significant factor in the survival and flourishing of any system, e.g. a system for advisory activities such as training and personal development, is how that system relates to its environment.

5.9 BOUNDARY MANAGEMENT

In the present context, 'Boundary Management' refers to exchanges occurring between training officers as role-holders, and the external environment. It can play a crucial part in the promotion of power, legitimacy and credibility. Factors include the building up of collegial relationships, not least for acquiring resources and exchanging services.

Pettigrew et al, (1982:13-14) discussing 'Boundary Management' from the point of view of role types, reported that change agents, role in transition, and training managers were very aware of the issues and importance of boundary management while this was not true of the more passive training officers. They give an example of the boundary management strategy of a 'role in transition' training officer who adopts an informal pro-active style:-

'I get a fair number of requests from people for training but I try to preempt, to know what they need before they come for it ... I'm always talking to people about their training needs, from managing director to secretaries ... I tend to be the wanderer, go to people, go out hunting, often by arrangement.. a lot of this is informal contact, knowing people on friendly terms.

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The authors note that most of the providers, although reliable, were less outgoing than this, tending to remain more reactive. The more passive providers choose, either deliberately or unconsciously to be managed by their environment, i.e. they would wait for individuals to come to them.

Pettigrew et al. (1982:14-15) were also able to establish the types of power base enjoyed by the different categories of training officer. It is interesting that most active boundary managers, e.g. training managers, change agents and "role-in-transition" trainers were aware of the need to develop a power base whilst most passive training officers were not. Generally most training officers mentioned 'political access' as one of the most frequent power resources. For example change agent and role in transition training officers spoke of political access provided by a large network of contacts. In contrast 'technical competence as a trainer' was hardly mentioned as a power resource. With regard to the latter, the authors suggest that it may be more important for trainer specialists to generate credibility for themselves by matching their skills and personal relationships to organisational culture.

In a second phase of their research Pettigrew et al. (1982) attempted to build on themes of boundary management to illustrate how trainers can lock themselves into a role and how this could be influenced by members of their role set. They emphasise the importance of the training professional to remain adaptable and open to change so as to be able to perform roles in keeping with organisational and individual needs.

In the next section I examine the various roles which I undertook as Training Officer at the Institute of Oceanographic Sciences including the planning, needs assessment, implementation, and evaluation of training initiatives. Finally the cost-effectiveness of having a training officer is discussed.

5.10 SUMMARY OF CHAPTER 5

5.10.1 The term training officer is used generically and may include training manager, specialist or practitioner, adult educator, interventionist. In various readings on the education and training function different views are expressed about the jobs of training officers and the roles that they perform.

5.10.2 Research undertaken during the 1970's and 1980's within the United Kingdom and North America suggests that there are at least 15 main areas of training and development activity which represent different roles within these roles there may be a variety of tasks and 'critical outputs' required.
5.10.3 Various roles of the training Officer are outlined including that of 'Needs Analyst', 'Programme Designer', 'Instructor', 'Facilitator', 'Evaluator', 'Consultant', 'Counsellor' and 'Administrator'.

5.10.4 A variety of training methods and procedures are described. It is emphasised that these may include on-the-job training, formal initiatives, or self-managed learning groups.

5.10.5 Congruence between the role enactor, organisational culture and individual culture is discussed. Current research suggests that role behaviours are not static but evolve over time, depending partly on the organisation and on its staff and that role occupants will bring values, attitudes and knowledge to the job. If there is a misfit between role, person and culture then chaos may occur. It is emphasised that training officers must manage a complex social role.

5.10.6 Training Officers may be categorised into various role-groups depending on their perception of their role, some carry a higher degree of legitimacy than others. A major issue is the management of each types of role and the extent of the fit of the person within that role.

5.10.7 It is emphasised that for any training or personal development system to be successful, it must suitably relate to its cultural environment.

5.10.8 Boundary management can play a crucial part in the promotion of power, legitimacy and credibility. Factors applicable to boundary management include building up of collegial relationships and the acquisition of resources. The need for the training professional to remain adaptable and open to change is stressed.
CHAPTER 6

RESEARCH METHODOLOGY
6 RESEARCH METHODOLOGY

6.1 INTRODUCTION

It will be recalled from Chapter 2 that I sought to answer two questions:-

a. 'What is the role of the training officer within a research organisation such as the Institute of Oceanographic Sciences and to what extent may s/he contribute to the cost-effectiveness of staff development programmes?'.

b. 'How cost effective are staff development activities at the Institute of Oceanographic Sciences?'.

From the discussion in Chapter 5, based on a literature search, it is clear that the roles and tasks of training officers are very diverse. On face value it seems relatively simple to list the key roles implicit in the job. It is more difficult to assess the number and type of tasks undertaken in assuming each role, to describe them and to place them accurately in the context in which they occurred.

An assessment of cost-effectiveness of the training function also requires a complexity of investigative pathways. One needs to evaluate given staff development initiatives in terms of their content, the learning methods used, the relevance of material and transference of learning to the workplace. Costs have to be computed and the benefits to the organisation assessed. A knowledge of staff attitudes too are important in evaluating initiatives including pilot schemes.

To gain as much information as possible about key roles and tasks, undertaken by the training officer, it was necessary to employ several research methods.

As Heron (1981:20) states:-

'.. it [research behaviour] is behaviour that is in particular detail unpredictable. We engage in it precisely because we cannot know in advance what particular form it will take'

However it is recognised that any methodology employed, and interpretation of resultant data and information, depends on the philosophical approach of the researcher. Examination of the evidence for and against different methodologies reveals that each has something to offer and that during the course of the research, elements of the various methodologies will come into play.
6.2 IN SEARCH OF A METHODOLOGY

Inherent in any research into natural or social events is a search for truth. But truth is elusive, indeed is there any such phenomenon? One can attempt to search for it and one can hope to recognize it but how can one be certain: that it has been found?. Indeed is the whole truth ever found? At best the physiological perceptive powers of any human are so limited that only a series of 'keyhole' pictures of external happenings in the world, separated by space and time, are perceived albeit by means of a variety of senses. Furthermore one must question whether mankind as a whole has the interpretive powers needed to understand social phenomena fully.

A problem inherent in all research approaches is that assumptions must be made. One of the methods I have used is Naturalistic enquiry in which I rely on observations and interpretation of events. In this method critical, careful observation allows a researcher to develop concepts which in turn may lead to theory. However at best this method is open to question and the resultant hypothesis needs to be confirmed by other methods. One factor of which a researcher must be aware is that of reflexivity; neither the researcher nor the subjects can fully remain neutral and external to a social situation. Thus it is impossible for the researcher to view events completely objectively. Indeed, nor is any given situation immune to a researcher's presence.

'The core element of the notion of reflexivity, is that all social research, and indeed all social life, is founded on participant observation' (Hammersley and Atkinson (1983 p.235).

As yet there is no evidence that any one particular methodology is rigorous enough to overcome fully human ineptitude. I take the view that one methodology is required for the present study but that elements of others are necessary and that these shall yield a wide variety of data from which interpretation and theory will emerge.

Before justifying my basic approach I shall describe two methods of inquiry - one is the scientific method, the other is ethnography.

6.3 SCIENTIFIC INQUIRY

Scientific or conventional inquiry had, until the early part of this century, been accepted unquestioningly as rigorous in its approach to the acquisition and interpretation of scientific data. To the present day it is seen as a method of research fully acceptable in the realm of some naturally occurring phenomena e.g. physical events. In essence, sampling conditions are experimental and controlled, and the outcome interpreted objectively. However interpretation depends on whether the stance of the researcher is positivist or realist.
Positive tradition in scientific theory, is based on the principle that knowledge and data may be reduced to particular patterns which are explained by reference to observable variables, (Reductionist approach). It is determinist in its assumption that the independent variable affects the dependent variable. Seen from this stance, analysis of a situation aims not only at revealing its logical structure but at interpretation in empirical terms. Critics suggest that the scientific approach is simplistic and represents a denial that hidden or unmeasured/unobserved phenomena may have an effect on a given set of data. Furthermore there is no attempt to view events holistically. On the other hand resultant data are likely to be replicable. A further criticism is that absolute determinism which is implicit in the scientific approach, stifles the generation of new hypotheses.

The realist tradition in scientific theory goes one step further towards a holistic approach. It recognizes that data may be explained not only in terms of observable phenomena but also by the unobservable e.g. physical, social phenomena but there remains the element of objectivity. As a result of this approach, conclusions although based on rigorous statistical analysis, are taken on face value thus resultant theory may be erroneous. But it is objective and therefore less open to subjective interpretation than ethnographically-oriented research.

6.4 ETHNOGRAPHY

Historically the scientific approach described above took precedence in social research up to the first half of the twentieth century but gradually there have emerged methodologies which are seen to replace or to complement it. Distinct from the scientific approach is that of ethnography as propounded by Garfinkel (1957). In order to understand it, Livingstone (1987:4) suggests that, as a starting point it should be thought of as 'in some anthropological sense the study of common everyday methods of practical action and practical reasoning'.

Inherent in this philosophical approach is the procedure of the naturalistic method of enquiry which, although not free of constraints, has received considerable support in its attempts to view society holistically and by placing less intellectual and social distance between researchers and their subjects of enquiry (Raggatt 1989:35). As a research methodology its philosophical basis is phenomenological while the enquiry paradigm is ethnographic (observing behaviour in its natural setting - see Blumer (1969:38). The strength in this method of investigation lies in its concern with social phenomena as discussed by Cohen and Manion (1980:37).

In ethnography the researcher adopts a mode such that the design is variable and emergent. Events are interpretable in a variety of ways. Methods are objective in the sense that they are factual and confirmable. In contrast to the scientific method this method of naturalistic enquiry does not oblige the investigator to have formed certain conceptions or theories about his field of interest. Initially there is a reductionist element but, because of the potential for a variety of contradictory outcomes over
time, judgement must be deferred until late in the study so that latterly the stance is basically expansionist.

Essentially observations on individuals, groups or communities are made in the context of the immediate natural situation being studied and pursued beyond this context if and when necessary. It assumes that observable dialogue and behaviour are conditioned by an individual's culture and beliefs and by his 'view of the world' which may be unique. As Cohen and Manion (1980:27-28) state:-

'Man is an entity who is capable of monitoring his own performance .. to devising plans, to developing strategies in getting things done the way he wants them doing'.

Implicit in ethnography is the assumption that enquiry and observation must disturb as little as possible the interaction and communication in the setting being studied. It does not change what it observes and furthermore information and data are rarely fed to subjects.

But although ethnographic enquiry goes some way to establishing a platform for creative thought, there are limitations to it as a research method. Although the method calls for a disciplined approach to research it is likely to focus on a limited setting and although giving accurate data, this may not be appropriate for empirical generalisation without further inquiry. One major limitation to traditional ethnography is the lack of contribution to the research by the subjects themselves.

One possible solution is the practice of relative determinism (rather than absolute determinism as seen in the scientific approach). The concept of relative determinism leads one to suppose that the human response may be determined at several levels, e.g. the natural world (physiological responses), an individual's cultural level, his/her purpose (autonomy), social norms within which the individual is enveloped within given space and time (convention). Thus for any piece of behaviour there may be several levels of explanation none of which are mutually exclusive (see Heron 1981:21). From the same starting point it is argued that human subjects should contribute to the construction of a set of concepts. Thus researchers need to gain insight into culture within which the research proceeds.

During the last decade academic debate has continued to reiterate the need to improve methods for exploring and making sense of human actions. Rowan and Reason (1981:113) put forward a new paradigm for the philosophy and practice of research which is seen as both collaborative and experiential. Essentially it advocates doing research with people rather than on people so that research is based on shared experiences of the researcher and his subjects. Basically it incorporates naive enquiry (day-to-day thinking) with orthodox ethnomethodology. It suggests that phenomenology and ethnomethodology, although by no means representing perfect approaches, none-the-less allow a researcher to analyse everyday behaviour and emerge with greater understanding than before.

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6.5 MY STANCE AS RESEARCHER

The research methods which I have used to enquire into the roles/tasks of the training officer and the cost-effectiveness of staff development programmes at IOS, is based on the assumption that the ethnographic approach forms the basis of my inquiry but that small elements of the scientific approach and action research come into play. During the past two years, I have kept letters and memoranda sent and received in the course of my work as training officer and have made notes on events, and on all aspects of my work at IOS. I have also gained information on the cost-effectiveness of staff development programmes by sending out questionnaires (see section 6.8).

Clearly the scientific method has extreme limitations but so does ethnography. For example ethnography is not an appropriate method for quantitative analyses (Spindler 1982:8). Furthermore as Guba (1978:5) suggests:-

'Naturalistic enquiry cannot be 'pure' in the sense of being absolutely free from constraints placed on either antecedents or responses.'

Indeed in this study I take the view that ethnography, and phenomenology should be used in the widest sense but that more scientific type of enquiry should be used where appropriate to the situation. To give examples, in most instances records of conversations and other daily observations were encompassed by an ethnographic approach. Such research could be repeated but it is most unlikely that the results could be replicated. In contrast, costs of implementing training programmes and numbers of courses run were provided by the scientific method and, in this instance, my findings could be replicated.

However it is emphasised that none of the data were viewed in isolation, so that a holistic approach was maintained. Ethnography, which implies an increasingly subjective approach, was used to gain additional information. Indeed as Hammersley (1985:3) argues, final interpretation and theory should stem both from detailed analyses of interdependent data which has been derived both from scientific and ethnographic methodology. Thus my results were derived in an 'objectively subjective' way. Cooperative research between staff and myself as researcher yielded insight which I hope has reflected innovative thought.

Returning to research methods, I suggest that relatively objective methods were used as catalysts for new outcomes which may themselves be viewed subjectively. For example one small part of the present research programme entailed sending out a questionnaire on whether there was a need for courses in computing. The results from a wide range of individuals could be viewed as objective, i.e. is there a need for a course or not? (answer can be 'yes' or 'no'). How many individuals indicate interest? (n=?). Were there sufficient numbers interested to warrant running an in-house course (answer; if viewed as 'objective', will be 'yes' or 'no'). But the very act of sending out
a questionnaire invited verbal comments from the participants in the survey. For example verbal answers, to the question received in addition to formal written answers could be, 'I need to go on that particular course but I am afraid to say 'yes' because I am afraid not only of computers but also of being involved in courses - therefore I have not admitted the need' or 'I think I need to go on that computer course but my line manager has refused to let me go, saying I am fully competent in that skill'. Thus I had to remain aware that the verbal comments elicited by the staff as subjects, sometimes yielded a different type of information than that gleaned in writing from a basic questionnaire.

6.6 ACTION RESEARCH

Although there exists a clear line of demarcation between simple small-scale 'Action Research' and broader-based applied research, boundaries become blurred when several action research projects, running concurrently, lead to cross project analyses (Raggatt 1989:43). Within the context of this study it is clear that completion of the task of answering the existing research question involved a number of elements, not least observing, establishing relationships between variables, having conversations, construing meanings, gaining insights, conceptualising, establishing hypotheses.

As Training Officer at IOS which was embarking on a programme of increased and new training programmes, I needed to ensure that educational practice was improved where necessary. Thus there needed to be provision for an element of modification to existing action as defined by 'action research'. I was placed in a unique position as researcher and trainer not only to observe but also to alter (albeit in a relatively small way) an educational situation and later to re-observe. Furthermore, small scale action research allowed for some input from participants (see Kemmis 1983:39). Thus encased within the ethnographic methodology adopted in this study is a small element of 'action research' which fits in well with the notion of subject participation and can be a natural element of 'new paradigm enquiry'.

Having selected various methodologies and approaches for my research there is the question of the way in which qualitative data should be generated. The 'Grounded Theory' approach of Glaser and Strauss (1967); Glaser (1978) considers that qualitative data must be generated by a constant comparison method whereby the researcher compares data from different groups of subjects. A series of research steps are all guided and integrated by 'emerging theory' (Glaser, 1978:2). A systematic approach may include theoretical sampling in which the researcher decides on which data to collect next (on particular groups or in particular situations) so as to develop his theory and on where to find them on the basis of emerging theory as the research progresses. The process is repeated and eventually a 'saturation point' is reached at which no new data are being found which contribute to further understanding of the situation. One criticism of this method is that it is too objective, but if used with other information, it can be useful. Indeed during the three years of my research, I obtained large amounts of data and information on the role of the Training Officer much of
which was repetitious. Thus I conclude that within the confines of the present topic a saturation point has been approached, though I question whether it is ever fully reached in any research.

Having used a variety of methods in the research, the final outcome was viewed by the process of 'Triangulation'. This is a technique whereby the researcher is able to view holistically from more than one standpoint, all of the emerging information based on differing viewpoints and derived by means of one or more research methods (Cohen and Manion (1980:214-215). Basic to this approach is the procedure of cross referencing by which means the investigator may check the data and make decisions on which research path to follow next.

6.7 CONTENT ANALYSIS

A method employed for analysing some of the data was that of Content Analysis. This is a tool for observing message content and handling and is applicable to any discipline in which written material needs to be analysed (see Carney, 1972). Many authors consider it to be a valuable technique, others consider it to have limited value.

Several authors, including Bradbury (1986) argue that the recent trend in content analyses is for hypothesis testing rather than for descriptive research. Berelson (1952:18) stresses that it is a research technique for objective and systematic quantitative description of the manifest content of communication. Budd et al. (1967:3) maintain that it is concerned not with the message as such, but with the process and effects of communication. Other researchers consider that the procedure is mainly descriptive.

It is emphasised that, in this study, the content analyses was conducted mainly at the manifest level but there is an element conducted at the latent level, e.g. this may be interpreted by Berelson as quantitative and qualitative. I attempted to break down complex messages into their separate components mainly at the manifest level. I found that some instances of verbal communication could be broken into what I perceived to be 'latent' elements. Here, although placing some reliance on accuracy and measurement, I looked for other more 'hidden meanings',

There are obvious problems in attempting a content analysis partly because the results of any one researcher may differ from another. She/he may :-

a) Approach the same problem in a different way,

b) Ask different questions,

c) Devise different categories for messages, etc.
Bradbury (1986:30-35) summarizes some of the views of various authors including Carney (1972), and emphasises some of the main procedures. These are as follows:

i) Determine the purpose of the exercise

ii) List categories and objectively identify content items taking care not to 'blur' categories. Devise positive indicators

iii) Identify the communicators

iv) Ask questions about the messages, which are the subject of the content analyses and check your results against them

v) Consider the aim of the messages

vi) Draw conclusions

vii) Consider the limitations of the procedure. Checks the validity of the exercise, e.g. repeat it using a different method.

Generally results should be significant and relevant.

6.8 **SAMPLING METHODS**

With regard to the time-tabling of the whole project, initially it was necessary to undertake a full literature search so as to:

a. Investigate the various roles of training officers

b. Investigate the various initiatives which are used to promote staff development e.g. courses, seminars, discussion groups.

c. Investigate the various methods for evaluating the staff development function.

6.8.1 Questionnaires

During the past eighteen months data on the following has been gained from questionnaires sent to staff within the organisation and later collated. They provided information on the following:

a. Previous training history (all staff)

b. Feedback from given courses. In most instances end-of-course
questionnaires were distributed to staff by tutors or trainers. In addition questionnaires on the effectiveness of courses were routinely sent to a sample of staff at least six months after they attended courses. Many of these were followed-up with informal discussion.

c. Computing expertise within IOS
d. Computing needs within IOS
e. The experience of industrial training students.

6.8.2 Keeping a Diary and record of major events within the organisation

Generally I have found ethnography to be an important research tool. It is important to emphasize that although this approach implies a loosely-structured inquiry, this has not been lacking in direction. I have gained large amounts of information by keeping a diary (from June 1991 until December 1992) on computer of all my activities (see Bell, 1987). In this I have recorded staff requests, their comments pertaining to the education and training function whether favourable or not. In addition I have recorded the diverse activities I undertook as Training Officer. I have also kept a variety of documents which passed through my hands including records of major events occurring within the institute between January 1990 and December 1993, which were likely to have an impact on the staff development function. Many of these data were coded and entered on a data base so that eventually they could be categorised according to the roles that I performed.

During 1991 and 1993 data and information have been gleaned from several sources, i.e. one-to-one opportunistic, informal semi-structured discussions, e.g in the staff restaurant or even in corridors wherever appropriate to the situation. Most conversations lasted less than three minutes and occurred during coffee/tea breaks or in corridors or after the informal video-based sessions which I ran periodically. Furthermore I have made visits to the Institute’s site at near Southampton specifically to discuss needs and to obtain a wide variety of feedback on education and training initiatives.

In addition to the information gained from day-to-day letters, notes and annual appraisal forms, as an on-going exercise, I have had informal discussions with at least 70 percent of staff about their immediate training requirements. Generally it is important to be able to discuss a subject with staff whatever their seniority because, as ethnographic research decrees, the language of the participant is important.

Riches (1983) in discussing interviews suggests that it is best to write short notes during a discussion and to make detailed notes later. The interviews I conducted with staff were loosely structured and took the form of an extended conversation. I made a point never to take notes during any discussions as this would have adversely
affected the research in that:-

a. It would probably have a derogatory affect on conversation and

b. It would advertise the research project which in turn might cause the results to be biased.

To some extent this made it difficult to record *verbatim*. Occasionally it was possible to go straight back to my office and write down *exactly* what was said during conversations between staff and myself. However because the training officer job is so busy I was usually interrupted by staff either on the way back or to my next destination. Thus I usually wrote notes and entries into my diary minutes or hours later using reported speech. Observational notes were also sometimes made on the behaviour or appearance of individuals.

In addition, I kept an account of major changes affecting IOS such as financial constraints, marketing strategy, relocation, so that their impact on staff development programmes could be judged.

6.8.3 Requests for Training on Annual Staff Appraisal Forms

Many of the staff training needs are discussed by the staff with their line manager at *annual* staff appraisals. Appraisal forms were routinely completed annually by line managers and by countersigning officers. I had no opportunity to design the questions on the form as these were used universally throughout all Civil Service and Natural Environment Research Council Institutions, however as Training Officer I was sent copies of the ‘Training’ section of each form and so had a valuable input to help me complete a needs analyses for each member of staff.

6.8.4 Recording communication pathways between myself as training officer and other staff

I monitored the extent of communication pathways between myself and other staff of various grades so as to determine to what extent other staff were of value in the implementation of the training function.

6.8.5 Monitoring Commercial Training Literature

During the course of my work I received numerous pamphlets on brochures on training initiatives run by commercial companies. One year’s supply of these were quantified. A content analysis was made so as to present a picture of the types of course available on the open market.
6.8.6 Monitoring Advertisements for Training Professionals

Some advertisements in the journal 'Personnel Today' were scanned for specific roles/tasks of training professionals as required by potential employers. These were analysed to determine the most important roles as perceived by a range of employers. Similarly personal qualities required of training officers as perceived by employers were analysed.

6.8.7 Contacts with external organisations

I telephoned and made visits to external organisations such as Guildford College of Further and Higher Education, so as to confer with other human resource managers and course marketers. Data and information have also been gained from letters received from internal and external sources as part of my day-to-day routine.

6.8.8 Pilot schemes

Several pilot courses were run and evaluated by discussion and questionnaire. To some extent the implementation of these schemes formed a type of 'action research'. These have included the running of video-based sessions on management and safety skills, an interpersonal skills course, a health and fitness course and a communication workshop. In addition the use of new technology including computer-assisted learning disks were monitored. Informal seminars on a wide range of scientific and management subjects were implemented in addition to the more usual formal ones. A summary of my main approaches to the research questions is given in Table 6.1

6.8.9 The time taken to perform the various roles

During the Spring of 1994, once having identified and categorised the roles which I performed, I also kept a record of the time which I spent in undertaking these various roles.
Table 6.1  The approaches I used in conducting the research.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Participant observation, noting non-routine comments</td>
</tr>
<tr>
<td>b</td>
<td>Keeping a diary (June 1991-December 1992) of notes, memoranda, letters (sent and received)</td>
</tr>
<tr>
<td>c</td>
<td>Recording major occurrences within the organisation (January 1990-December 1993)</td>
</tr>
<tr>
<td>d</td>
<td>Visits and conversations with external agencies (January 1990-December 1993)</td>
</tr>
<tr>
<td>e</td>
<td>Distributing and analysing questionnaires on staff computing needs and current expertise</td>
</tr>
<tr>
<td>f</td>
<td>Distributing and analysing questionnaires so as to evaluate staff training programmes</td>
</tr>
<tr>
<td>g</td>
<td>Collecting advertisements from 'Personnel Today' for the jobs of training professionals</td>
</tr>
<tr>
<td>h</td>
<td>Conducting a content analysis of items a and b</td>
</tr>
<tr>
<td>i</td>
<td>Conducting a quantitative analysis on the collection of training brochures received from external organisations (January 1991-December 1992)</td>
</tr>
<tr>
<td>j</td>
<td>Undertaking a cost-analysis of courses</td>
</tr>
</tbody>
</table>

6.9 MANAGEMENT OF DATA AND INFORMATION

a. Much of the day-to-day information gained between January 1991 and December 1993 has been stored in date order e.g. Letters, memos, invoices. Non-routine policy letters have also been stored. Notes were made in my diary about their content and about conversations and events. I found it useful to undertake a content analysis whilst entering data into the diary so that I could code it, ready for entering on a computerised data base to be sorted later by computer. Some examples of my entries into a diary showing dates and codes according to the contents are given in Appendix 6.1. The codes used are shown in Appendix 6.2. Most of the diary entries consisted of four lines or less so that they could easily be sorted by the ORACLE data base. Where an entry required more than four lines, a continuation record was made. Thus the whole input became relatively easy to sort by computer.

b. All brochures on staff development initiatives sent to me by external government and commercial organisations between April 1991 and April 1992 were analysed so as to provide basic information on types and cost of courses so that I could compare them with the costs of courses at IOS.

c. The results of questionnaires including those on evaluation of courses were summarised. Comments made on evaluation sheets were listed for given courses in such a way that the authors all remained anonymous.
d. Questionnaires on computer expertise or computer needs were analysed and the data summarised and made available to staff.

e. A content analysis of 50 advertisements appearing in Personnel Today in terms of roles/tasks required of training officers was made and roles/tasks listed, input to a data base and sorted by computer. Some examples of advertisements are given in Appendix 6.3. The requirements of employers when recruiting training professionals were coded as shown in Appendix 6.4. The letters 'JB' refer to the tasks listed by employers within the range of jobs offered and 'PQ*' to the personal qualities needed by applicants. An example of output from a data base Table giving (my coded) requirements of employers is given in Appendix 6.5.

f. Questionnaires, sent to training officers employed by Research Councils, and requesting information on their role were analysed for roles/tasks undertaken. A completed form is shown in Appendix 6.6.

g. All of the information gained on training officer roles from a-f above, were compared to that as recorded in my literature search.

6.10 MORAL ISSUES

Burgess (1989) discusses in general terms, the ethical problems in conducting educational research. At the outset of the project I felt it to be important that staff should be aware that I was involved in a research project in the field of training but equally it was not desirable that they should know exactly what the research was about (i.e. based on my roles but partly on their comments and attitudes). This thesis will be made available to them but the data and information has been summarised so that personal names have been omitted. Indeed although my diary includes actual names or initials of staff, within any part of this thesis, the initials or names of staff have been changed or omitted, except that of the Director. In a few instances, where people may be identifiable, gender has been changed. Before commencing the research permission was gained from the Trade Unions to undertake the research.

Comments which are given to me in private have never been conveyed to any other person, whatever their seniority. So far there has not been any problem from staff about my undertaking the research. Occasionally there are comments such as 'I hear you are doing some research into training' and I confirm that this is so. This does not usually provoke any further comment for two reasons: - Firstly IOS is a research Institute and virtually all scientists do research on something - so research is commonplace. Secondly staff at all levels have always seen me primarily as a research biologist and thus not an 'outsider'. I continue to have undergraduate students to supervise in the practices of biological science and therefore have a function at IOS which runs parallel to that of my job as training officer. On the other hand I had to maintain some marginality (see Lofland, 1971:97) balancing my interests as biologist.
and trainer and those of the Institute. Generally conversations have run smoothly and I do not have the feeling that staff have deliberately made comments for me to record.

In the next section of this dissertation, I shall examine some of my findings in terms of the roles I undertook as Training Officer. In addition, I shall provide an overview of cost-effectiveness of the staff development function.

6.11 SUMMARY OF CHAPTER 6

6.11.1 In this Chapter I have reiterated the two main research questions under discussion and provided an overview of the complexity of data and information required to provide an answer to each question.

6.11.2 The various types of methodologies which can be employed in research have been outlined.

6.11.3 I have described my stance as researcher and have emphasised that my approach is broadly ethnographic with observations and interpretation of events based on naturalistic enquiry. But I acknowledge that elements of the scientific approach and action research are applicable.

6.11.4 Sampling methods and techniques are discussed.

6.11.5 Methods for data-handling are described.
PART IIA

RESULTS
INTRODUCTION TO PART IIA (Chapters 7-15)

In Part IIA, I present an overview of the role of Training Officer as perceived from my research. This represents a summary of my findings as derived from the following:-

a. My day-to-day activities as training officer at the Institute of Oceanographic Sciences (IOS).

b. Discussions with other government-sponsored training officers and questionnaires received from them.

c. A survey of advertisements sponsored by organisations seeking to employ training professionals.

During 1988-1993, in devising its training program The Institute of Oceanographic Sciences had considered the requirements for better management expressed in government reports e.g. the Efficiency Unit Report; The Next Steps (1991). As discussed previously, it aimed to improve its centre of excellence in science and technology and improve its marketing. In Chapters 7-15, I discuss the various roles that I undertook in the context of the IOS planned strategy for staff and organisational development.

A flow chart is presented in Figure 7.0 which outlines each of the training officer roles as discussed in Chapters 7-15.

A detailed report on evaluation and cost-effectiveness of training at IOS is given in Part IIB. Here I include information on the curriculum, the cost of staff development, responses of participants and levels of organisational development. A summary is provided in Chapter 16.

In Part III I discuss my findings on the role of the training officer and cost-effectiveness of the training programme from the point of view of:-

a. The complexity of the job of training officer

b. Factors which contribute to a cost-effective programme.

c. Broader issues relating to the job of training officer and to staff development.
Figure 7.0 Part II Results Flow-Chart
CHAPTER 7

OVERVIEW OF THE ROLES OF THE TRAINING OFFICER
Figure 7.1 Main roles undertaken by the Training Officer

Based on 836 hours per year spent as Training Officer.
OVERVIEW OF THE ROLES OF THE TRAINING OFFICER

7.1 INTRODUCTION

It is clear from the discussion in Chapter 5 that the roles of training professionals vary greatly. What has not been clear until now is the extent to which these roles are practised by training officers. Furthermore previous literature has provided very little information about the actual tasks undertaken in the course of their daily activities at work.

My research has concentrated on identifying key roles as practised in a research Institute such as the Institute of Oceanographic Sciences and gaining some insight about the practicalities in undertaking such tasks. All of the roles which I identify can be categorised or placed somewhere in the continuum of a training cycle (see Figure 7.0). For example the role of Strategist is placed relatively near the beginning of training cycle because it is concerned partly with organisational needs and long-term planning and tends to be non-routine whereas other roles tend to be related to shorter-term routine implementation of events. A Needs Analyst also plays a part in the initial part of the cycle, while an Evaluator or Statistician plays a part towards the end of the conceptual continuum. The role of Communicator, Marketer of Training, Consultant or Counsellor may occur anywhere in the cycle and so is placed in a central position.

Roles may differ in other ways, some involve working "behind the scenes" i.e. Programme administrators. Others involve working more directly with staff, i.e. Trainers or Instructors. The role of Communicator is applicable to most other roles but in addition it may serve to enhance pro-activity as I shall discuss below.

In this chapter I present an overview of the key roles of training officers which I put forward as a basis for this thesis. I describe the following:-

a. The key roles and the amount of time spent on them

b. The tasks inherent in those roles

c. The relationship between roles and their importance in relation to the particular job of Training Officer at the Institute of Oceanographic Science (IOS).

d. Personal qualities needed by training officers

e. Role Conflict

In Chapters 8-15, I discuss each of the various roles in detail, describing practical events and outcomes to illustrate each role. I provide a view not only of dominant
roles but also the various tasks and the practicalities of undertaking them. In Part IIB of this thesis, I present an example of an evaluation and cost-benefit analysis of the staff development programme at IOS. A summary of the roles of the training officer and the cost-effectiveness of training at IOS is presented in Chapter 16.

7.2 THE KEY ROLES

One of the main thrusts of my research was to investigate which key roles were undertaken by training officers in the workplace. In this thesis, as discussed in Chapter 1, I define 'key roles' as the main titles related to tasks which are performed rather than to a range of activities undertaken. For example, the term 'evaluator' implies that an individual evaluates a given process. In undertaking this key role, s/he may undertake a whole range of activities or tasks such as measuring cost-effectiveness, obtaining feedback etc.

Although McLagan (1983) discussed key roles in terms of title, Pinto and Walker (1978) discussed roles of training professionals in terms of key tasks undertaken (see Chapter 5). These authors identified roles as:

activities performed by an individual in fulfilment of the expectations imposed by professional standards of behaviour or employer position requirements' (p.9.)

They listed a very wide rang of activities which they divided by factor analysis into 14 key areas or groups.

From my diary of daily activities, letters and other records which formed the basis of my research into the role of training officer at the IOS between January 1991 and December 1993, I found that I undertook seventeen roles. Some were similar to those described by the American Society for Training and Development (McLagan 1983:11), others were not.

As discussed in Chapter 5 these key roles (titles) of training professionals were described by McLagan respectively as shown in Table 7.1

In effect, I practised all of the roles described by McLagan, with the exception of Task Analyst and Media Specialist. Importantly, some of the key roles, took up a much greater proportion of my time than others. The approximate amount of time which I spent on the various roles is given in Table 7.1 and Figure 7.1.

I found that I practised five roles additional to those described by McLagan (1983) but which could be linked to several areas of activity, practised by training professionals, as described by Pinto and Walker 1978:66-80. Thus I describe further roles respectively as:- Trainer, Statistician, Theoretician/Professional self-developer and Consultant. These together took a total of about 11% of my time based on 19 hours
per week. A fifth additional role is concerned with non-routine communication which accounted for 6% of my time (Figure 7.1).

All the roles described above involved some degree of routine communication with staff and managers. However I found that communication in non-routine events was crucial to an effective and pro-active approach to the job. It accounted for about 6% of the time and was extremely valuable because it allowed me to 'keep a finger on the staff development pulse' mainly in terms of determining the current culture of the organisation and attitudes of staff. Thus in this thesis, I put forward 'Communicator in Non-routine events' as an important key role of the training officer. A subsidiary role of 'Negotiator' within the context of communication also proved to be of importance. I did not practise the role of 'NVQ Assessor', however in my daily activities, there was some indication of this as a possible future role of the training officer.

<table>
<thead>
<tr>
<th>Table 7.1</th>
<th>The approximate amount of time which I spent on the various roles. The roles described by McLagan are shown with a '+'.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles which I undertook</td>
<td>% Time</td>
</tr>
<tr>
<td>Manager of Training and Development</td>
<td>28</td>
</tr>
<tr>
<td>Programme Administrator</td>
<td>25</td>
</tr>
<tr>
<td>Needs Analyst</td>
<td>8</td>
</tr>
<tr>
<td>Evaluator</td>
<td>8</td>
</tr>
<tr>
<td>Statistician</td>
<td>6</td>
</tr>
<tr>
<td>Communicator</td>
<td>6</td>
</tr>
<tr>
<td>Strategist</td>
<td>3</td>
</tr>
<tr>
<td>Trainer</td>
<td>4</td>
</tr>
<tr>
<td>Group Facilitator</td>
<td>2</td>
</tr>
<tr>
<td>Programme Designer</td>
<td>2</td>
</tr>
<tr>
<td>Individual Development Counsellor</td>
<td>1</td>
</tr>
<tr>
<td>Marketer</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Roles which I rarely undertook and which involved a maximum of 1% of time

| Instructional Writer | + |
| Instructor | + |
| Media specialist | Nil | + |
| Task analyst | Nil | + |
| Theoretician | + |
| Consultant | - |
| Transfer agent | + |
| Professional Self Developer | - |

In some instances roles were undertaken by other staff at IOS. For example line-
managers usually assumed the role of Task-analyst or Instructor while the professional photographer sometimes assumed that of Media Specialist. Tutors employed by external organisations sometimes undertook the role of Instructional Writer. In organisations where staff other than the training officer do not undertake these roles, it will be necessary for the latter to undertake them.

7.3 TASKS LINKED TO KEY ROLES

As discussed in section 7.2, Pinto and Walker (1978:66-80) discussed roles of training professionals in terms of key tasks which they grouped by statistical analysis into key areas. For example they listed four different groups of tasks or activities under 'Professional Self-Development'. I compared my list of tasks undertaken during activities as training officer with those provided by Pinto and Walker and found many of them, though not all, to be broadly similar.

Table 7.2 Roles and tasks most of which I and other Research Council Training Officers undertook

<table>
<thead>
<tr>
<th>NON-Routine Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROLE OF:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>STRATEGIST</td>
</tr>
<tr>
<td>1. Make non-routine, long-range/future plans for staff development programmes (more than 12 months ahead) linked to mission statements/organisational policy/legislation</td>
</tr>
<tr>
<td>2. Monitor organisational development</td>
</tr>
<tr>
<td>3. Adopt strategies for coping with change within the organisation e.g. Quality management, mass redundancy</td>
</tr>
<tr>
<td>4. Adopt strategies for changing/promoting culture of the organisation e.g. equal opportunities</td>
</tr>
<tr>
<td>5. Innovate techniques for training and development, running pilot schemes where necessary</td>
</tr>
<tr>
<td>6. Develop/promote/maintain equal opportunities culture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROUTINE ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROLE OF:</td>
</tr>
<tr>
<td>TASK ANALYST</td>
</tr>
<tr>
<td>7. Identify activities, tasks, sub-tasks necessary to accomplish a job</td>
</tr>
<tr>
<td>8. Identify human resource and support requirements necessary to accomplish results/undertake tasks in a job or organization.</td>
</tr>
<tr>
<td>NEEDS ANALYST</td>
</tr>
<tr>
<td>9. Assess job competencies (so as to define needs)</td>
</tr>
<tr>
<td>10. Identify gaps between ideal and actual performance (diagnose needs) from information on Annual Staff Reports or by discussions with line-managers/other staff</td>
</tr>
<tr>
<td>11. Discuss with line managers ways of remedying the gaps.</td>
</tr>
<tr>
<td>12. Inform staff of link between staff training needs and the appraisal/career system in the organization</td>
</tr>
<tr>
<td>13. Monitor number and type of requests for training informing managers where appropriate</td>
</tr>
</tbody>
</table>

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<th></th>
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<tbody>
<tr>
<td><strong>...continued</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MANAGER OF TRAINING AND DEVELOPMENT</strong></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Manage administration systems within the organisation</td>
</tr>
<tr>
<td>15.</td>
<td>Communicate/liaise with NARC/JETS/NCS/Managers/staff/students about routine events (written or verbal)</td>
</tr>
<tr>
<td>16.</td>
<td>Ensure that organisation training policy is applied</td>
</tr>
<tr>
<td>17.</td>
<td>Maintain a broad awareness of resources which might be available e.g. JETS non-routine initiatives, NARC/SERC/NCS staff/materials, Training &amp; Enterprise Council etc</td>
</tr>
<tr>
<td>18.</td>
<td>Develop a core-curriculum</td>
</tr>
<tr>
<td>19.</td>
<td>Keep abreast of developments in training techniques e.g. computer-assisted learning, distance learning, interactive video</td>
</tr>
<tr>
<td>20.</td>
<td>Maintain broad awareness of commercial/other external training initiatives by perusing brochures, newsletters, etc.</td>
</tr>
<tr>
<td>21.</td>
<td>Determine appropriate training approach</td>
</tr>
<tr>
<td>22.</td>
<td>Match training demand as outlined in needs analyses with relevant supply</td>
</tr>
<tr>
<td>23.</td>
<td>Plan/organise/coordinate/control staff development sessions/courses on or off site</td>
</tr>
<tr>
<td>24.</td>
<td>Monitor staff development</td>
</tr>
<tr>
<td>25.</td>
<td>Plan/organise/control cross-team/department training and development operations across the organization (including management development)</td>
</tr>
<tr>
<td>26.</td>
<td>Prepare budgets, advising staff of costs where necessary</td>
</tr>
<tr>
<td>27.</td>
<td>Submit bids for funds</td>
</tr>
<tr>
<td>28.</td>
<td>Maintain central files of staff development activities</td>
</tr>
<tr>
<td>29.</td>
<td>Recruit/supervise staff/students</td>
</tr>
<tr>
<td>30.</td>
<td>Make arrangements with external organisations for staff to obtain National Vocational Qualifications</td>
</tr>
<tr>
<td><strong>PROGRAMME DESIGNER</strong></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Prepare/define, objectives, content of courses, selecting and sequencing activities for a specific programme.</td>
</tr>
<tr>
<td>32.</td>
<td>Evaluate and select instructional methods</td>
</tr>
<tr>
<td>33.</td>
<td>Develop materials and tools for training sessions</td>
</tr>
<tr>
<td><strong>INSTRUCTIONAL WRITER</strong></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>Prepare scripts for training sessions</td>
</tr>
<tr>
<td>35.</td>
<td>Prepare artwork/overheads</td>
</tr>
<tr>
<td>36.</td>
<td>Prepare instructional materials</td>
</tr>
<tr>
<td>37.</td>
<td>Prepare distance-learning materials</td>
</tr>
<tr>
<td><strong>MEDIA SPECIALIST</strong></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>Producing software for and using audio, visual, computer and other hardware-based technologies for training and development.</td>
</tr>
<tr>
<td><strong>PROGRAMME ADMINISTRATOR</strong></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>Book commercial trainers/tutors</td>
</tr>
<tr>
<td>40.</td>
<td>Negotiate for reduction in trainers/tutors fees</td>
</tr>
<tr>
<td>41.</td>
<td>Manage resources e.g. funds, materials, staff</td>
</tr>
<tr>
<td>42.</td>
<td>Evaluate potential learning materials e.g. videos calling upon the expertise of local staff if necessary</td>
</tr>
<tr>
<td>43.</td>
<td>Negotiate for/obtain external resources e.g. materials, staff (JETS, NCS*, institute), accommodation</td>
</tr>
<tr>
<td>44.</td>
<td>Ensure that the facilities, equipment, materials, participants, tutors and other components of a given learning event are present</td>
</tr>
<tr>
<td>45.</td>
<td>Ensure that the standard of accommodation/catering for staff development events are satisfactory</td>
</tr>
<tr>
<td>46.</td>
<td>Train staff as internal instructors/trainers</td>
</tr>
<tr>
<td>47.</td>
<td>Evaluate tutors/trainers’ input</td>
</tr>
<tr>
<td>48.</td>
<td>Apply techniques for organisation development such as: - Team building, role playing, simulation, group discussion</td>
</tr>
<tr>
<td>49.</td>
<td>Arrange cross-project education e.g formal/informal seminars</td>
</tr>
<tr>
<td>50.</td>
<td>Act on suggestions for organisational development from team members</td>
</tr>
<tr>
<td><strong>FACILITATOR FOR GROUP AND ORGANISATIONAL DEVELOPMENT</strong></td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>Present Job/Performance-Related Training</td>
</tr>
<tr>
<td>52.</td>
<td>Assist with on-the-job training and development</td>
</tr>
</tbody>
</table>

Continued...
<table>
<thead>
<tr>
<th>Role</th>
<th>Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAINER</td>
<td>53. Conduct/deliver staff development sessions/seminars (including workshops)</td>
<td>3 (1)</td>
</tr>
<tr>
<td></td>
<td>54. Lecture, lead discussions during staff development sessions</td>
<td>2 (1)</td>
</tr>
<tr>
<td></td>
<td>55. Operate audio-visual equipment</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>56. Cope with learning groups</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td>STATISTICIAN</td>
<td>57. Remain up to date with information technology e.g. e-mail, basic computing</td>
<td>3 (1)</td>
</tr>
<tr>
<td></td>
<td>58. Maintain staff development records on computer</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>59. Present and analyze statistics and data relating to staff development</td>
<td>5 (1)</td>
</tr>
<tr>
<td></td>
<td>60. Communicate through reports and proposals the results of analysis and experience so as to influence future training and development activities.</td>
<td>4 (1)</td>
</tr>
<tr>
<td>EVALUATOR (POST-EVENT)</td>
<td>61. Evaluate commercial/governmental 'ready-made' courses or materials.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>62. Evaluate programmed instruction</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>63. Evaluate video/audiotape/interactive video sessions</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>64. Evaluate customised courses</td>
<td>3 (1)</td>
</tr>
<tr>
<td></td>
<td>65. Monitor attendance at seminars</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>66. Evaluate job exchange/mentoring programmes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>ASSESSOR FOR NVQs</td>
<td>67. Assess competencies for NVQs</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>68. Monitor NVQs</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>COMMUNICATOR</td>
<td>69. Liaise with NARC/UETS/ providing an overview of training</td>
<td>9 (1)</td>
</tr>
<tr>
<td></td>
<td>70. Liaise/consult with Local Managers/Directors keeping them informed of initiatives/non-routine events which might be of interest to their staff</td>
<td>8 (3)</td>
</tr>
<tr>
<td></td>
<td>71. Work proactively with all grades of staff advising them of new training initiatives/options in which they might like to participate</td>
<td>8 (2)</td>
</tr>
<tr>
<td></td>
<td>72. Manage working relationships with Health/Safety officers to provide training in accordance with E Directives</td>
<td>5 (2)</td>
</tr>
<tr>
<td></td>
<td>73. Interact/communicate with Unions</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>74. Consult/communicate with external government and external organisations e.g commercial organisations, local Universities, Colleges</td>
<td>5 (3)</td>
</tr>
<tr>
<td></td>
<td>75. Liaise with local schools link officer to monitor short-term student/work experience training</td>
<td>6 (2)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
</tr>
<tr>
<td>COUNSELLOR</td>
<td>76. Help individual(s) to assess personal competencies, values, and goals</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>77. Help individual(s) to plan/develop his/her career.</td>
<td>4 (2)</td>
</tr>
<tr>
<td></td>
<td>78. Arrange staff development programmes in response to individual needs as perceived from counselling sessions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</tr>
<tr>
<td>MARKETER</td>
<td>79. Publicise/promote options for staff development e.g.learning packages/programmes</td>
<td>5 (1)</td>
</tr>
<tr>
<td></td>
<td>80. Motivate staff to engage in staff development</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>81. Target audiences outside one's own work unit.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
<tr>
<td>THEORETICIAN</td>
<td>83. Test and develop theories of learning in training and development.</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>84. Conduct Research on staff training and development initiatives</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td>PROFESSIONAL SELF DEVELOPMENT</td>
<td>85. Attend seminars/conferences</td>
<td>6 (1)</td>
</tr>
<tr>
<td></td>
<td>86. Keep up to date with practices and concepts for staff development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>87. Regularly meet/discuss/exchange ideas for staff development with other training officers</td>
<td>6 (2)</td>
</tr>
</tbody>
</table>
With the help of information on role types presented by McLagan (1983) and that on tasks or activities described by Pinto and Walker I was able to categorize my research data and information on the roles and tasks. Thus I am now able to present a summary model of 92 tasks which I believe are undertaken by training officers as shown in Table 7.2. Although certain tasks have been assigned to given roles these are presented mainly as a guide to outline the 'scope' of each role.

I personally practised only about 85% of the above roles and tasks listed in Table 7.2, during my daily activities. However as a check on my model, I needed to know whether other training officers employed in the United Kingdom by various Research Councils, also undertook the roles and tasks outlined and to what extent. My questionnaire-based survey of twenty training officers yielded twelve respondents who between them practised most roles and 90% of the tasks. No-one individual practised all of the roles and tasks I had listed. At most two respondents practised 90% while the rest averaged 50%. This suggests that while training officers do undertake most of the roles, some tasks are more commonly undertaken than others. On the other hand, it is questionable whether some tasks are undertaken to any depth. One training officer who undertook all the roles except four and many of the tasks said that he did:-

'a little of a lot'

As part of the questionnaire, I gave the Research Council training officers the opportunity to add any roles or tasks to my list but none did so, several indicated that they were allocated very little time in which to undertake the job of Training Officer. I also asked those training officers to indicate which tasks were practised most often. These are indicated in brackets in Table 7.2 and most commonly include some of those listed under 'Needs Analyst', Manager of Training and Development and Programme Administrator.

7.4 THE ROLES EXPECTED OF STAFF BY EMPLOYERS IN THE UNITED KINGDOM

The survey of advertisements for 'Training Officers' and 'Training Managers' in 'Personnel Today' revealed that most advertisers cited tasks to be undertaken in the
job which could be fitted into the role types which I describe above. Although there
were generally fewer advertisements for 'Training Managers' than for 'Training
Officers' there was hardly any appreciable difference between the stated requirements
for the two jobs. A summary of what advertisers of 'Training Officer' jobs require is
given in Table 7.3. In the right hand column I have listed the suggested role types into
which the tasks are most likely to fit. Some fall into two categories but as found from
my own experience as Training Officer, the role of 'Manager of Training and
Development' carries more tasks or activities than other more focused roles.

<table>
<thead>
<tr>
<th>Task</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Management</td>
<td>Strategist</td>
</tr>
<tr>
<td>Facilitate Change</td>
<td>Facilitator</td>
</tr>
<tr>
<td>Use political judgement</td>
<td>Strategist</td>
</tr>
<tr>
<td>Develop Culture/Philosophy</td>
<td>Strategist</td>
</tr>
<tr>
<td>Formulate strategy</td>
<td>Strategist</td>
</tr>
<tr>
<td>Create culture</td>
<td>Strategist</td>
</tr>
<tr>
<td>Develop equal opportunity culture</td>
<td>Strategist/Manager</td>
</tr>
<tr>
<td>Identify needs</td>
<td>Needs analyst</td>
</tr>
<tr>
<td>Assess staff</td>
<td>Task analyst</td>
</tr>
<tr>
<td>Assess competencies</td>
<td>Task analyst</td>
</tr>
<tr>
<td>Diagnose</td>
<td>Needs analyst</td>
</tr>
<tr>
<td>Liaise</td>
<td>Manager</td>
</tr>
<tr>
<td>Co-ordinate</td>
<td>Manager</td>
</tr>
<tr>
<td>Budget</td>
<td>Manager</td>
</tr>
<tr>
<td>Monitor</td>
<td>Manager</td>
</tr>
<tr>
<td>Manage personnel</td>
<td>Manager</td>
</tr>
<tr>
<td>Know COSHH Regulations</td>
<td>Manager/Trainer</td>
</tr>
<tr>
<td>Know Appraisal Systems</td>
<td>Manager</td>
</tr>
<tr>
<td>Understand Man Management</td>
<td>Manager/Trainer</td>
</tr>
<tr>
<td>Understand Methodology</td>
<td>Manager</td>
</tr>
<tr>
<td>Understand Psychometry</td>
<td>Manager</td>
</tr>
<tr>
<td>Manage Resources</td>
<td>Manager/Prog. Admin.</td>
</tr>
<tr>
<td>Rotate jobs</td>
<td>Manager</td>
</tr>
<tr>
<td>Career Development</td>
<td>Manager</td>
</tr>
<tr>
<td>Recruit</td>
<td>Manager</td>
</tr>
<tr>
<td>Priorities</td>
<td>Manager/Needs analyst</td>
</tr>
<tr>
<td>Train/Develop</td>
<td>Manager</td>
</tr>
<tr>
<td>Develop Managers</td>
<td>Manager</td>
</tr>
<tr>
<td>Develop Staff</td>
<td>Manager</td>
</tr>
<tr>
<td>Plan/organise training</td>
<td>Manager</td>
</tr>
<tr>
<td>Assist line Managers</td>
<td>Manager</td>
</tr>
<tr>
<td>Match demands with supply</td>
<td>Manager</td>
</tr>
<tr>
<td>Know Management Charter Initiatives</td>
<td>Manager</td>
</tr>
<tr>
<td>Explore Training Possibilities</td>
<td>Manager</td>
</tr>
<tr>
<td>Develop students</td>
<td>Manager</td>
</tr>
<tr>
<td>Know employment law</td>
<td>Manager</td>
</tr>
<tr>
<td>Plan/Open/Distance learning</td>
<td>Manager/Trainer</td>
</tr>
<tr>
<td>Know/Train Health and Safety</td>
<td>Manager/Trainer</td>
</tr>
<tr>
<td>Understand the principles of learning</td>
<td>Manager/Trainer</td>
</tr>
<tr>
<td>Practice quality/TQM</td>
<td>Manager/Prog. Designer</td>
</tr>
<tr>
<td>Plan/design courses</td>
<td>Prog. Designer</td>
</tr>
<tr>
<td>Understand techniques</td>
<td>Prog. Designer</td>
</tr>
<tr>
<td>Prepare courses</td>
<td>Prog. Designer</td>
</tr>
<tr>
<td>Prepare visual aids</td>
<td>Prog. Designer</td>
</tr>
<tr>
<td>Produce distance learning packages</td>
<td>Prog. Admin.</td>
</tr>
<tr>
<td>Organise seminars</td>
<td>Prog. Admin.</td>
</tr>
<tr>
<td>Circulate course literature</td>
<td>Prog. Admin.</td>
</tr>
<tr>
<td>Run Workshop</td>
<td>Prog. Admin/Trainer</td>
</tr>
<tr>
<td>Run courses</td>
<td>Instructor/Writer</td>
</tr>
<tr>
<td>Write Literature</td>
<td>Facilitator</td>
</tr>
<tr>
<td>Motivate/be motivated</td>
<td>Facilitator/Trainer</td>
</tr>
<tr>
<td>Team-build</td>
<td>Instructor/Trainer</td>
</tr>
<tr>
<td>Coach</td>
<td>Instructor/Trainer</td>
</tr>
<tr>
<td>Train</td>
<td>Trainer</td>
</tr>
<tr>
<td>Deliver/Conduct courses</td>
<td>Trainer</td>
</tr>
<tr>
<td>Monitor cost-effectiveness</td>
<td>Evaluator</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Evaluator</td>
</tr>
<tr>
<td>Use information technology</td>
<td>Statistician/Manager</td>
</tr>
<tr>
<td>Maintain records</td>
<td>Statistician/Manager</td>
</tr>
<tr>
<td>Have business acumen</td>
<td>Marketer</td>
</tr>
<tr>
<td>Employ Customer-Care</td>
<td>Marketer</td>
</tr>
<tr>
<td>Act as Consultant</td>
<td>Consultant</td>
</tr>
<tr>
<td>Advise</td>
<td>Consultant</td>
</tr>
<tr>
<td>Counsel</td>
<td>Counselor</td>
</tr>
<tr>
<td>Undertake Research</td>
<td>Prof self dev.</td>
</tr>
<tr>
<td>Process NVQs</td>
<td>Assessor</td>
</tr>
<tr>
<td>Communicate with Departments</td>
<td>Communicator/Manager</td>
</tr>
<tr>
<td>Communicate with Line-managers</td>
<td>Communicator/Manager</td>
</tr>
</tbody>
</table>

Table 7.3 A summary of what advertisers of 'Training Officer' jobs require
7.5 THE RELATIONSHIP BETWEEN KEY ROLES

Although Figure 7.0 is presented partly as a guide to the subject matter within the 'Results' section of the thesis, it presents a broad model of the relationship between key roles. At IOS information about changes and 'needs' of the organisation were passed to me via the Director and together we periodically discussed future strategy for staff development. We also monitored the needs of given teams or departments from an organisational point of view, e.g. to improve marketing; to follow guidelines for 'Health and Safety training'.

As Strategist, I also worked closely with the Management Team in putting ideas forward and discussing future plans, however this tended to remain a joint effort rather than my sole responsibility. Indeed, because of the necessity for any strategist to obtain detail information about an organisation's plans or needs, I suggest that it is impossible for the Training Officer to act independently as Strategist unless s/he has a seat on the Management Board or Team or at least has regular meetings with individuals in top Management Teams. The role of strategist is discussed further in the next Chapter.

The role of Needs Analyst, discussed in Chapter 9, was important in that it was concerned with defining needs, identifying gaps in performance with the help of line managers, monitoring types of request for education and training and determining priorities. In my role as Needs Analyst at IOS, I obtained information on the needs of the organisation and the individual from a number of sources including the 'training' section of appraisal forms, from discussions with individual staff, line-managers, project managers and the members of the Management Team. Once a list or matrix of needs had been collated, these formed the basis on which the staff development programme could be planned in terms of a timetable of events, recruitment of tutors/trainers and the assessment of resources.

I found that the role of Manager of Training and Development, which followed from that of Strategist, although of importance, was concerned very much with the smooth running of the training function. One had to be aware, in the broadest sense, of the needs of the organisation and those of the individual, both types of need having been coordinated in the role of needs analyst.

One of the most important tasks to be undertaken in the role of Manager of Training and Development was to match staff development needs with a supply of effective education and training material. For this to be effective, one had to remain aware of, or negotiate for, internal and external resources, to understand training techniques and to plan, coordinate and develop the whole of the staff development function. This role was also concerned with administration and routine communication. It is discussed further in Chapter 10.

The role of Programme Designer followed from that of Manager of Training and Development in that it was concerned with defining objectives, determining the
content of given courses and evaluating materials for training events. However I found that in practice some of the work overlapped with the role of Programme Administrator who, in addition to ensuring that all participants, trainers and materials were at the right place at the right time, has a responsibility for the management of resources and of learning materials. The roles of Trainer, Instructor, Facilitator fitted closely with that of Programme Administrator in that all the latter four roles were more concerned with the implementation of given learning events and required a more narrow focus than that of the Manager of Training and Development which tended to be more broad-based. I have discussed these roles further in Chapters 10 and 11.

The role of Evaluator entailed complex procedures which were undertaken towards the end of the training cycle. As shown in Part II B to this thesis, there are several ways in which staff development programmes may be evaluated. Methods include investigations into organisational success in terms of fulfilment of business plans, increased profits and new markets. Evaluation may also include a written or verbal assessment of staff development initiatives from the point of view of staff and their line managers. A cost analysis may also be undertaken. These methods are outlined in Chapter 12.

Once staff development initiatives had been completed it was part of the role of Statistician to summarise data on the amount of training and development programmes provided by the organisation. In my own role as statistician I included information on the following:- number of courses completed, the total number of hours of training taken up by staff, the costs of initiatives per member of staff. These aspects are discussed further in Chapter 13.

Non-routine written and verbal communication was important to all roles. For this reason I have placed the role of Communicator within a central position in the model together with Consultant and Counsellor. These latter two roles may be called upon in any part of the training and development cycle, are often undertaken non-routinely and should therefore be accessible from any where within the model. For example, in my role as Needs analyst, on several occasions I did not discover an individual’s real development needs until I had conversed informally with him/her. I found that the role of Marketer was also linked closely with that of Communicator in non-routine matters in that one undertook marketing strategies by communicating i.e. publicising future training events in newsletters, by E-mail, by posters or verbally. I found that as programme administrator I tended to arrange courses according to needs and that only if there were other free spaces available did I market them. Some other examples of the importance of communication are given in Chapters 9 to 14.

As Training Officer it was important that one should up-date on technical and professional information and to remain aware of innovation in terms of learning techniques, new technology and other initiatives knowledge of which could be useful to managers and staff. Professional Self-Development is discussed further in chapter 15.
7.6 PERSONAL QUALITIES NEEDED BY TRAINING OFFICERS

As part of my questionnaire I asked Research Council training officers to select from a list of thirty-one attributes (which employers had cited in advertisements) those they considered to be the most important in the job of training officer. A summary is given in Table 7.4. The number cited most often is shown in brackets.

7.7 IMPLEMENTING THE ROLES

So far I have said little about what actually happens during the course of daily activities as Training Officer. I found it to be a very enjoyable job but one that required much energy, patience, resourcefulness, initiative and efficiency. As London (1988:22) pointed out, in his discussions about 'Change Agents', one also needed to be resilient. I often encountered problems and negative attitudes when attempting to change the culture by even small steps. On the other hand there was satisfaction in helping individuals.

<table>
<thead>
<tr>
<th>Table 7.4</th>
<th>A list of personal attributes of training professionals originally derived from job advertisements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number in brackets indicate the number of citations given by 12 respondents to my questionnaire in answer to the question on which personal attributes they thought were most necessary in training officers.</td>
<td></td>
</tr>
<tr>
<td>Asterisks indicate those most commonly required by employers.</td>
<td></td>
</tr>
<tr>
<td>Good Communicator</td>
<td>(10) *</td>
</tr>
<tr>
<td>Build-up good working relationships</td>
<td>(7)</td>
</tr>
<tr>
<td>Has good interpersonal skills</td>
<td>(5)</td>
</tr>
<tr>
<td>Flexibility</td>
<td>(4)</td>
</tr>
<tr>
<td>Able to handle groups</td>
<td>(5)</td>
</tr>
<tr>
<td>Display confidence</td>
<td>(5)</td>
</tr>
<tr>
<td>Cope with pressure</td>
<td>(5)</td>
</tr>
<tr>
<td>Be proactive</td>
<td>(5) *</td>
</tr>
<tr>
<td>Possess management skills</td>
<td>(5)</td>
</tr>
<tr>
<td>Possess personal credibility</td>
<td>(4)</td>
</tr>
<tr>
<td>Maintain a high profile</td>
<td>(3)</td>
</tr>
<tr>
<td>Has prestige within the organisation</td>
<td>(2)</td>
</tr>
<tr>
<td>Assimilate new ideas</td>
<td>(4)</td>
</tr>
<tr>
<td>Think ahead</td>
<td>(4)</td>
</tr>
<tr>
<td>Be articulate</td>
<td>(4)</td>
</tr>
<tr>
<td>Show initiative</td>
<td>(5)</td>
</tr>
<tr>
<td>Retain motivation</td>
<td>(4)</td>
</tr>
<tr>
<td>Remain enthusiastic</td>
<td>(3) *</td>
</tr>
<tr>
<td>Possess an ability to solve problems</td>
<td>(4)</td>
</tr>
<tr>
<td>Lively personality</td>
<td>(2)</td>
</tr>
<tr>
<td>Fit in with the organisation</td>
<td>(3)</td>
</tr>
<tr>
<td>Be creative/original</td>
<td>(2) *</td>
</tr>
<tr>
<td>Be determined</td>
<td>(3)</td>
</tr>
<tr>
<td>Have an influential style</td>
<td>(1)</td>
</tr>
<tr>
<td>Possess strong social skills</td>
<td>(1)</td>
</tr>
<tr>
<td>Remain energetic</td>
<td>(-)</td>
</tr>
<tr>
<td>Possess resilience</td>
<td>(-)</td>
</tr>
<tr>
<td>Show integrity</td>
<td>(1)</td>
</tr>
<tr>
<td>Able to negotiate</td>
<td>(1)</td>
</tr>
<tr>
<td>Be dynamic</td>
<td>(-)</td>
</tr>
<tr>
<td>Display drive</td>
<td>(1)</td>
</tr>
</tbody>
</table>
With regard to role/person congruence as discussed in Chapter 5, Pettigrew et al., (1982:7-12), exploring the congruence between role, the individual and the culture of the organisation, suggest that role behaviours evolve over time and that each role occupant will bring with him/her to the job, values, attitudes and knowledge. I think this was true of my position at IOS in that for most of the time I was the only person undertaking these roles and therefore had a relatively free hand in how I undertook each role. Exceptions occurred when I was acting as Strategist and was influenced partly by the Management Team.

One of the important factors was that, as Pettigrew et al (1982:12-14) had suggested, training professionals have to fit well into the organisation and be acceptable to a variety of cultures. In this respect I found that my many years of experience at IOS was valuable in that I knew staff well and could predict their likely response to staff development initiatives. I was not always right in my predictions but having prior knowledge of personalities helped. This knowledge provided a useful springboard from which to launch the staff development programme, without it I may have encountered more difficulties.

Essentially I was acting in the category of Provider (See Pettigrew et al, 1982) in that I was offering training which was designed to improve and maintain organisational performance rather than to make great changes. As seen in Chapter 5, the authors suggest that this is a relatively stable role and it carries moderate-to-high legitimacy. They suggest that part of that legitimacy is due to a stance of neutrality. This was confirmed in that, during my daily activities, I sometimes felt that I was being 'tested' by staff about my 'neutral' stance. My stance was neutral, indeed it had to be neutral in that my remit was to do my best for staff and managers, treating interest groups equally.

With regard to my style of operation, I felt that I was acting in part as cultural operator in that I was attempting to change the culture, albeit in relatively small steps. In some instances where there were opposing cultures i.e. the opposing views of managers and staff, sometimes I felt that I was walking a tightrope, however usually I was able to handle differences between staff attitudes.

In describing the roles above, Pettigrew et al.1982:12-14) , suggest that a major issue is the management of role and the extent of the fit of the person within that role. Sometimes I did experience role conflict but this was partly in terms of my role as Research Biologist versus that of Training Officer rather than between the various roles which I undertook as Training Officer. For example, my salary was paid from various funds at IOS and based on the assumption that I would divide my time equally between that of biologist and that of Training Officer, although my various managers did not exert undue pressure on me, at times I had difficulty in allocating time to either one of these activities when I felt that there were pressing needs to be involved in the other. The following extract from my own annual appraisal form (April 1993) illustrates this:-
Her twin role of researcher and training officer is quite difficult in that for carrying out the research she needs blocks of time with little if any interruption, but as training officer the calls on her time are out of her immediate control. (Institute of Oceanographic Sciences, 1993)

In fact this particular reporting officer was sympathetic to the problems I have described but it could have presented difficulties if he had taken the opposite view.

In terms of role conflict between the different training officer roles, on some occasions at IOS there were difficulties in finding money for vocational courses mainly because of the system of funding. As a matter of routine, money for JTS courses was top-sliced annually from Institute funds by NERC and all Joint Training Service (JTS) sponsored courses (which were virtually all management-orientated) were provided free of charge. Although a limited amount of computer training was provided by the NERC Computing Service (NCS), much computer training and all vocational training had to be paid from Institute funds. But, except for a limited amount of money for incidentals, there was no separate training fund for any IOS-sponsored non-management training e.g. vocational or computer training. Instead, all IOS income, derived from NERC or from commercial contracts, was split between departments and it was up to the fund-holders (project leaders, or line managers) to decide whether funds should be allocated to training or to other initiatives e.g. research.

Thus there was a real conflict for fund-holders as to whether they should prioritize in favour of training or in favour of research. The situation sometimes arose that staff would request vocational training but fund-holders would refuse or postpone it due to shortage of funds. This situation had arisen because fund-holders had needed to spend the money on other items in their project. From my point of view, role conflict arose because, as Needs Analyst, I had to acknowledge staff needs for training and to note their requests, but as Manager of Training and Development, I was unable to match their need with supply of vocational training unless funds could be released.

Role conflict sometimes took other forms. I occasionally experienced some difficulty in my role as Programme Administrator, and Evaluator on the one hand and Facilitator/Trainer on the other when attempting to place staff on courses. In some instances, particularly with regard to management courses, a few staff tended to 'drag their heels' and either refuse to participate in them or to find reasons why they should drop out. As Programme Administrator and Evaluator, I had to ensure that places were filled and courses were run cost-effectively. However as Facilitator or Trainer, I needed to respond to the wishes of staff in their choice of subject matter to be learned. On the other hand in some instances, I felt that those same non-participants would benefit personally from the excellent management courses offered, such was the dilemma. Throughout most of the time there was an element of pressure and role strain in the job as there was never enough time or money to do the job exactly as I would have wished. For example, there were sometimes requests for vocational
training but relatively few funds available. To some extent I was working in a 'contingency situation' in the hope that the following year the current recession within the United Kingdom would cease so that an increase in government funding would be made available.

7.7.1 Boundary Management

Pettigrew *et al.*, (1982:13-14) in discussing 'Boundary Management' reported that some training professionals were very aware of the issues and importance of boundary management while this was not true of the more passive training officers. As elaborated in Chapter 5, these authors gave an example of a successful training officer who adopted an informal pro-active style, often wandering about the workplace and talking to people about their training needs. In essence I adopted that stance in that I worked pro-actively. Nearly every day I visited each one of the two separate buildings at Wormley. I also visited the Southampton site regularly and kept the staff there informed of staff development matters either by electronic mail, telephone or the internal mail system. The executive officer there was also very useful in helping me to spread information. He was interested in the work of the training officer and had volunteered a limited amount of help where necessary.

7.8 SUMMARY OF CHAPTER 7

7.8.1 In this Chapter I have provided an overview of the various key roles of the training officer as derived from my own experience as training officer and that of other authors.

7.8.2 The roles which I describe form a basis to this thesis. Information derived from other training officers employed by Research Councils and from job advertisements have confirmed my view.

7.8.3 A description has been given of some of the tasks inherent in most of the roles described and of the personality traits most needed by training officers.

7.8.4 The relationship between key roles has been discussed and a simple model put forward to describe sequences in the training cycle. The problems of role conflict and boundary management have been described.

In the following Chapters 8-14 I will describe daily events, based partly on ethnographic observation, to illustrate the various roles described above.
CHAPTER 8

THE ROLE OF STRATEGIST
Figure 8.1  
Strategic Role of the Training Officer  
(Percentage of time spent)

Based on a total of approximately 25 hours per year as Strategist
8 THE ROLE OF STRATEGIST

8.1 INTRODUCTION - ADOPTING A STRATEGY

As discussed in Chapter 2, the Institute of Oceanographic Sciences (IOS) had considered trends in management in the outside world and the requirement for better management expressed in government reports e.g. Efficiency Unit Report 1992. It was also actively taking steps to maintain its reputation as a centre of excellence in Science and Technology, to improve its output and to increase its income from new markets. To fulfil its objectives it needed to enhance its staff development programme so as to enable staff to improve on their personal and vocational skills. I acted as Strategist in that I sought to plan and enhance staff development on a long-term basis and also sought to promote the development of a 'training' culture within the organisation.

I estimate that the time taken as Strategist amounted to 3% of my time as Training Officer. This was mainly because some of this responsibility was jointly undertaken by the Director of IOS and the IOS Management Team. Nevertheless throughout all of my activities, I needed to be aware of policy decisions and to develop a strategy for implementing them.

The role involved the planning of strategies to help individuals to cope with change and also involved planning and monitoring of organisational development (OD) which took up a relatively large proportion of the time (see Figure 8.1). The percentage of time allocated to each 'task' is based on the average amount of time I spent on each type.

Four of the twelve Research Council training officers who responded to my survey on the roles and tasks which they undertook, reported that they adopted a strategic role but only within certain areas. For example four respondents undertook this role only in terms of developing, promoting or maintaining an equal opportunities culture. Half of other respondents took on some but not all 'strategic' activities.

My role of strategist is discussed below in terms of the following:- Developing and maintaining a 'training' culture (including equal opportunities); making non-routine long-term plans; monitoring organisational development; coping with change; innovative techniques and pilot schemes.

8.2 DEVELOPING AND MAINTAINING A TRAINING CULTURE

During 1990, although IOS had staff with excellent reputations, there was a noticeable absence of a 'training culture'. Scientists regularly attended seminars and other meetings to maintain an awareness of developments in the field of marine research, but there was little evidence of staff involvement in a coordinated programme for
In discussions with Directors, NERC had said that targets would be set to provide all staff with training to fulfil their career potential. NERC stated that, to reduce waiting lists for training, from 1992, it would provide the Joint Training Service (JTS), based at Swindon with extra funding to supply bulk training as relevant to staff at its various institutes. It went on to state that the performance of JTS would be monitored over 3 years. It emphasised that other types of training would be paid by the Institute’s own budget. It stated that the next step was for local training officers to arrange for nominations for training courses to be sent to JTS. (26.11.91) A copy of the staff notice is shown in Appendix 8.1.

Thus with regard to the staff development function, it was important that I should promote the culture that:-
a. IOS was a learning organisation (see Senge, 1990)

b. Education and training were available to all staff and that all should be given equal opportunities

c. Staff development could help to improved personal efficiency and advancement

d. That the whole organisation would benefit from improved efficiency of staff.

Clearly the NERC policy was that all staff of whatever grade or sex, whether on fixed-term appointments or whether professional or not should be given opportunities to develop their personal and job skills. Indeed during 1990, NERC sent IOS a copy of a report by Wroe (1990), a training officer at the Rutherford Appleton Laboratory, a component Institute of the Science and Engineering Research Council (SERC) which shared the JTS facilities with NERC. In part of the report, he stated:-

"...it follows that HRD training must be widely available - it must be for everybody not a selected elite. If it is not then the integrated effect will not be large. Indeed I think there is a 'critical mass' effect in this area where the benefits are not seen at all - the reaction does not go - unless a training culture is established in which everyone feels involved" (p.8).

I needed to ensure that staff development programmes were available to all, regardless of age, sex or creed. Moreover I was aware that positions of responsibility traditionally held by men e.g. sea-going, leading projects, were gradually becoming open to women and to this end I maintained an awareness of their needs in terms of management skills, use of new technology and improved communication.

8.3 MAKING LONG/RANGE FUTURE PLANS FOR STAFF DEVELOPMENT

Maintaining an awareness of strategic policy decisions made either by Headquarters or locally by the IOS Director, did not present any problems as NERC was in regular contact with the Directors of all its component institutes to discuss policy decisions. NERC regularly held six monthly meetings about training provision in which Institute training officers were invited to participate. Linked to the development of their new strategy for training, headquarters staff requested that all training officers should and forecast their requirements for up to two years ahead.

The Director of IOS, also acting as Strategist and 'Change Agent' was adept in keeping staff informed of major events or changes which could affect their future and was always ready to point out that staff development made an important contribution
to organisation development. In May 1991 he sent a letter entitled 'Developing the IOSDL of the future' to relatively senior staff which had implications for the long-term planning of staff development. He was referring to the planning and development of new projects linked to the move to Southampton University (see Appendix 8.2):

'As our Southampton move draws near and many of our projects are already halfway through their lives it is time to think again about where we ought to be in our science and technology in ten year's time and how we plan to get there'. (16.05.91).

He included a section on each of the following: Marine disciplines e.g. biological oceanography, geology and geophysics; technology development; the need for larger computers. He emphasised that senior staff needed to involve themselves in marketing to potential customers' (16.05.91). He included a framework for discussion and asked staff to read the letter, confer with colleagues and pass to him any comments on it. Therefore he had set a scene which allowed staff to contribute ideas which might improve the functioning of the organisation. I made several suggestions including the fact that we could make more use of unpaid students needing projects for pre-University work (18.05.91).

Although I was already aware that changes were to be made, clearly this new initiative had implications for me as Strategist. Quantity of output in terms of data and information by Institute staff, although excellent, needed to continue to improve, as did management and marketing techniques. Furthermore later plans to reorganise staff into new teams approximately 18 months before relocation occurred would incur the need for further management and team-work training. All this was important information when developing a long-term plan for staff development.

Eventually IOS was reorganised into four units or teams ready for the move to Southampton University. Each unit had its own title and its own mission statement. During various meetings with the Director in late 1993, we discussed a strategy for improving cross-team communication and for improving interaction within teams. After discussion with Unit leaders (most of whom were members of the Senior Management Team) we agreed that the best course of action would be for me to run a series of training videos in 1994 on team-work and leadership and also to persuade the Joint Training Service to run a pilot scheme on team-building.

A further important aspect of my role as Strategist was that, following European Community regulations in 1992, NERC and IOS had to reformulate its 'Health and Safety' Training. Previously, although there had been regular training in 'First Aid' and 'Fire Safety' (involving approximately 20% of staff), there had been very little formal training on aspects of office security, use of visual display units, manual lifting, protective clothing, hazardous chemicals or radiological protection. Thus I was asked by the Director to develop a strategy for training staff in these aspects of Health and Safety training and to discuss it with the Health and Safety Committee.
8.4 MONITORING OF ORGANISATIONAL DEVELOPMENT

As Strategist, I monitored organisational climate and development in a number of ways. One important source of information was the IOS Annual Report which contained information on successes in terms of new projects, new markets and income. The IOS Director also gave an annual lecture in which he reviewed organisational climate. More importantly I gained information about the successes (or failures) of projects or new markets from day-to-day discussions with staff in offices, the staff canteen or during staff visits at lunch-time to the local pub.

8.5 ADOPTING STRATEGIES FOR COPING WITH CHANGE

During 1991, it became clear that if IOS was to maintain its improvement as an organisation and to compete in a fast changing world, it needed to streamline its operations in terms of quality management. In Autumn 1991, the Director discussed with me, his proposed long term initiatives for improving quality in the some departments. He had decided to run a pilot scheme and had asked me to help implement it. (Here I adopted a 'Trainer' role rather than a strategist). The pilot course in 'Total Quality Management' (TQM) programme for the Finance Department was run successfully for 1 day in February 1992 (12.02.92).

Towards the end of 1992, the Director invited me to suggest ways in which TQM could be implemented throughout the organisation. We discussed the advantages and disadvantages of implementing such a programme on several other occasions but eventually, in Autumn 1993 we both decided that it would be better to review the situation after the relocation to the site at Southampton University in April 1995. There were three main reasons for this:-

a. Prior to the move some (mainly support) staff were to be made redundant and some reorganisation was to occur.

b. There was some unrest and disputes with Unions partly over staff cuts.

c. I felt, from discussions with scientists (most of whom had excellent reputations for quality) that the present level of training (in Management, Health, Safety and other personal and vocational skills) was then set at a relatively high level and that additional training would add a burden to their already busy schedule. Furthermore we were gradually establishing a 'Training' culture and I did not want to destroy it by imposing too much training on staff who were already working under pressure. I sent a note, to this effect, to the Director who agreed, that we should include quality in the video-based training awareness programmes which I was to run during 1994. In summary, in this role as Strategist, I had in consultation with top management, to decide when the time was ripe for new initiatives.
With regard to relocation of staff to Southampton University in 1995, in my role as Strategist, I visited the University Training Officer to discuss arrangements for ensuring that newly transferred staff (who would still be sponsored by NERC rather than the University) could participate in the normal staff development activities at the University. I also discussed the curriculum and administration procedures for course nominations (November 1993).

On a shorter time-scale, I discussed with Headquarters staff, arrangements for providing courses for redundant or non-mobile staff or those nearing retirement during 1993/1994 (Sept/Oct.1993).

8.6 INNOVATING TECHNIQUES AND PILOT SCHEMES

There were several initiatives which I introduced, these included video-based programmes, computer-assisted learning disks, self-help groups and Pilot Schemes, all of which cost relatively little.

a. Video-based programmes.

During 1990, I wrote to JTS to establish whether we might be able to borrow videos and they agreed to lend us several. In addition we were able to hire several from local sources. In 1992, I also wrote to NERC to ask them if they were prepared to set up a training video library (Appendix 8.3). Videos were run successfully as will be described in Chapter 10.

b. Computer-assisted Learning Disks

These were initiated during 1991 following their provision by the NERC Computing Service (NCS). They proved effective as will be described in Chapter 11.

c. Self-help Groups

Following a needs analysis and also observations from staff that, due to lack of funds, computer training was relatively hard to obtain, I discussed the problem with one of the NCS staff who was responsible for providing computer support. She agreed that further training was needed but felt that, due to lack of time and staff, she could not provide additional training. Previously we had agreed that it might be useful to set up self-help groups in computing so as to share expertise and to promote learning of new software. Eventually we agreed to send out jointly a questionnaire, requesting information on the software used, the level of expertise in given applications. We also enquired whether members of staff might be available to coach others. The rather limited success of this initiative is discussed in Chapter 11.

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d. Other Initiatives

There was one initiative which I attempted to implement but which did not ever get underway. In 1990, I visited the Surrey Training and Enterprise Council (TEC) and had discussions with their staff about borrowing their resources for a nominal fee. I put forward the possibility that it might be possible to set up a 'small firms group' mainly to share resources and trainers. I was told that this would be discussed and asked if I would be prepared to sit on such a Committee. Later, after not hearing from the TEC, I reiterated the suggestion of shared resources at a later local TEC meeting to another TEC official. He said he would contact me but I heard nothing. Following the confirmation of impending relocation of IOS staff to the Southampton area which would come under Hampshire TEC, I dropped the idea of collaboration with Surrey TEC. (Hampshire TEC was contacted in Spring 1994).

A further example of strategy was provided by the IOS Director. In 1991, He had visited India and had noticed that Indian scientists received very little senior management training. He had suggested to NERC HQ that JTS might be interested in making contacts internationally, so as to implement a training programme for them, either in the United Kingdom at NERC/IOS or in India. During a visit to IOS, JTS staff discussed, with the Director and myself, the feasibility of pursuing this initiative. During the ensuing discussion it was decided that the British Council or the Overseas Development Agency might be approached to coordinate further discussions, (22.06.92)

8.6.1 Pilot schemes

I ran several pilot schemes including:-

a. A workshop for Line Managers on their role as communicator and

b. An interpersonal effectiveness workshop

These all proved worth running though they varied in their degree of success as will be outlined in Chapter 12 (evaluation).

In this chapter I have sought to emphasise the broad-based, long-term planning required of the strategist. In the next Chapter I discuss the role of the Needs analyst who is generally concerned with more short-term issues.

8.7 SUMMARY OF CHAPTER 8

8.7.1 In this Chapter, I have presented an overview of the role of Strategist and discussed its possible impact on organisational staff development.
8.7.2 I emphasise that, as Training Officer I 'shared' this role with the Director and Senior management Team in undertaking long-range planning of initiatives.

8.7.3 I stress that this role requires pro-activity and foresight on the part of training professionals.

8.7.4 The various tasks inherent in the role are discussed particularly with regard to changing/promoting organisational culture and adopting strategies for coping with change.

8.7.5 Example are given of strategic activities which I and NERC/IOS Management undertook. I is emphasised that strategy and forward planning should ensure that initiatives should occur at the right time for staff and for the organisation.
CHAPTER 9

THE ROLE OF TASK AND NEEDS ANALYST
Figure 9.1  Percentage of time spent in the 'Needs- Analyst' role

- Monitor Requests: 70%
- Discuss with Line-Managers: 12%
- Other: 18%

Based on 67 hours per year spent as 'Needs Analyst'
THE ROLE OF TASK AND NEEDS ANALYST

9.1 INTRODUCTION

As discussed in Chapter 5, Task analysts usually assess tasks required for jobs to be carried out in any given level of occupation. Needs analysts identify needs of organisations and those of staff. They define overall training objectives and indicate the resources required to improve performance and the priority attached to meeting those needs (see Boydell 1990:5-10; Peterson 1992:14).

As Training Officer at IOS, I rarely became involved in task analysis because tasks involved in any given job were usually previously well-defined. Moreover job descriptions were reviewed and agreed each year by line-managers and it was their responsibility to understand the tasks which their staff undertook in successfully completing a job. However I had to be aware in broad terms, of the competencies needed for a given job. For example, I had to understand the competencies in which staff had to be proficient in order to produce or present a scientific paper e.g. technical writing skills, presentational skills and to be able to assess their needs accordingly.

From my survey of the roles/tasks undertaken by NERC training officers, I found that only 4 out of 12 of respondents practised some part of the role of Task Analyst, only one person having included it as a task which involved a large percentage of his/her time.

The role of needs analyst took approximately 8% of my time (67 hours per year) and accounted for 15% of the entries in my diary. All other training officers within the Research Councils, who responded to my questionnaire, also performed this role, 70% having cited this as involving a large percentage of their time.

In the role as Needs Analyst I was concerned mainly with amassing and collating information on the following :-

a. Organisational needs, for example, those which followed from the requirement of groups of staff to improve output, implement new technologies or to improve marketing. These also included needs arising from European Community Health and Safety initiatives.

b. Individual needs, i.e. those which arose when individuals changed to different tasks or jobs or needed to improve their personal, managerial or vocational skills, for example computing or report writing.

In some instances there was no clear demarcation between organisational and individual needs. For example I found that there was clearly an organisational need to improve marketing strategy. This policy involved most senior staff. On the other
hand, individual staff sometimes independently asked me for marketing courses during general discussions.

I calculated that, out of the 1100 places filled during 1991 to 1993, approximately 50% were provided as a result of organisational needs, 26% were provided as a result of discussions with staff and line-managers and 24% were provided as a response to requests on annual staff appraisal forms (see Table 9.1). The various tasks which I undertook in the role of 'Needs Analyst' role are discussed in sections 9.2-9.9. An approximation of the amount of time which I spent on those tasks is given in Figure 9.1. Most of this was taken up with identifying gaps between ideal and actual performance, on discussions with staff and monitoring the number and type of requests for training.

9.2 IDENTIFYING GAPS BETWEEN IDEAL AND ACTUAL PERFORMANCE FROM INFORMATION ON APPRAISAL FORMS, FROM DISCUSSIONS AND FROM OTHER SOURCES

I assessed all staff development needs from the following main sources:-

a. Discussions with the Director and/or Management Team.

b. Discussions with staff and line-managers.

c. Annual Staff Reports (ASRs) training section.

d. Questionnaires

e. JTS analysis of needs.

Items a-c provided most of the information about a wide range of staff needs, while item d. provided information mainly on computing needs. With regard to item e, JTS exceptionally provided information on needs for six inexperienced administrative staff.

9.2.1 Discussions with the Director and/or Management Team

Discussions with top management were often about organisational needs rather than individual needs. These often involved the training of all or large groups of staff. For example, prior to my commencing the job of Training Officer, the Director had initiated 'Time Management' training for all staff so as to increase the efficiency of staff and that of the Institute. There were several other initiatives in which I became involved. For example, in Autumn 1992 I had a discussion with the Director about the need for increased Health and Safety Training so as to observe new European Community legislation. In 1993 we discussed training needs arising from relocation of the Institute to Southampton University.
Similarly I had discussions with Senior managers about marketing training for senior staff. There were other examples of initiatives needed to improve the organisation as a whole which came from the staff themselves. At the end of one video session on management topics (1990), some staff had indicated that there was a need for improved communication within IOS. I discussed this with the Director and we decided to remedy this where possible. First of all we decided to run a pilot workshop (1991) on 'the line manager as a communicator' (February 1991) and secondly we circulated the Industrial Society booklet on 'Communication' to all staff. Furthermore, in May 1991, the Director sent a note to all staff asking them to suggest ways of improving communication.

9.2.2 Discussions with staff and line-managers

Although about 24% of my information about staff training and development needs arose from an analysis of the training section of annual staff reports, at least another 26% arose from discussions with staff and line managers. These occurred wherever I happened to meet individuals during the course of routine activities. On many occasions I made a point of visiting them in their offices to inform them of new initiatives. Sometimes they came to my office or telephoned me, often in response to publicity material about courses. Some extracts from my diary are shown below:-

'I visited JRC [James Rennell Centre] saw H. She said she would like to do 'technical writing' and 'presentation skills'. I said she could [also] do Management 1 [JTS course] eventually.' (23.07.92).

Sometimes it was desirable that staff should not have to wait long for courses. For instance it was a NERC ruling that before completing annual appraisal forms, Reporting Officers (usually line managers) needed to participate in 'Staff Reporting' courses. Thus it was necessary to deal with this type of request before the next round of appraisals:-

'I had a note from MS asking me if he could attend the RO [Reporting Officer] course in July as he had recently become a R.O.' (07.06.90)

In 1990/1992 I ran several videos for all staff on various management topics. The discussions which followed were a useful source of information about staff needs. For example following one such video in May 1991, one member of staff asked me to think about a training course for her line manager who she said was 'too verbose' In this instance I promised her that I would invite him to some management training video sessions - which I did.

Sometimes staff found courses which were advertised in journals or magazines and asked me if I was prepared to sponsor them. For example, J. asked me if she could
do a 'Springboard' course (a woman's confidence building course) which had been advertised in 'Good Housekeeping'. I agreed that it could be run as a pilot scheme. (17.05.91)

In other instances requests were less specific about their needs as indicated below:-

'D. saw me on the stairs - he asked me for a course whereby 'if I get into a corner I can get out'..' (he had just been given the task to find markets for IOS research and expertise. He asked me to keep the matter confidential. (04.06.91).

In this instance I suggested a course in which I had participated the previous year. It was also necessary to search the numerous brochures on training courses that I received throughout the year, to select several for him to peruse and then discuss them with him prior to selection.

Following the announcement of relocation of the Institute, staff tended to ask me about courses which might be useful to available to them if they had to change jobs:--

B: - 'Have you managed to get us a new computer yet?..I'd like to train in word processing..I might have to look for another job' [reference to the move to S'ton] ..other people here [her dept] might be interested..' (07 11 91).

Later I arranged for her to have course in basic word processing. During 1993, non-scientific staff tended to ask about National Vocational Qualifications partly because some were due to leave IOS during 1995.

On another occasion I spoke to a new, young member (N.) of the administration staff about his needs. I had noticed that he had not requested any vocational courses that would help him in a career. Furthermore he had a line manager who did not readily participate in training courses. Eventually he agreed that he might like to take an Open University course in Geology. I later spoke to his Countersigning Officer about it who agreed to fund his training (17.05.91). However, after several months, N. left to get a different type of job. In this respect I acted as a catalyst or negotiator in helping the member of staff to identify his own needs and in persuading his line-manager to take action if necessary.

With regard to individual needs, I sometimes discussed these with managers if there was some problem. For example sometimes I was asked by staff to persuade line managers to allow them to participate in courses. Even if I was somewhat dubious as to its usefulness to the organisation, I usually discussed it:-
...S asked me to persuade his line manager to let him do a course to get a PSV [Public Service Vehicle] licence'. (16.04.91)

In this instance I did discuss the course with his line manager and we agreed that we would review the situation the following year. The line manager said he would fund the course if it was found to be necessary and potentially useful. Neither he nor I felt that the course was really necessary, either for the particular member of staff to do his job more effectively or to benefit the organisation as a whole.

Sometimes provision of a given training source raised the question of further training needs:-

The NERC Computing Service (NCS) had supplied me with a 'DOS' Computer-assisted-learning (CAL) disk. P. had borrowed it - she said it was good. We discussed further training in computing. P. told me she would like A., one of her key staff, to do a special 'Data Base Version III' (DBIII) course either on- or off-site but that this was too expensive at £350 per person as she had 4 people to train. This was useful information in that it enabled me to keep track of staff needs and so look out for less expensive DBIII courses.

Sometimes line managers perceived a need for staff development but the individuals themselves did not, as shown in the following example from my diary:-

'H. rang me. He sounded furious. He told me that his line manager had told him to go on a course on 'O . DR. '. He asked me if I had suggested it. I said I had not. He said he was not going on the course. I saw him later in his office and suggested that he should talk to his line manager about it. He said he would. I saw him a few days' later. He had not consulted his line manager and had thrown away the application form for the course. As he was under some stress from other sources, I let the matter drop.' (23.04.91)

Another example:-

'Visited JRC - saw X. We discussed the possibility of him doing an MBA or 'Leadership 2000 course.- he is keen but his HOD [Head of Department] is not. I told X I would write and ask him if he could do a course..' (16.08.91)
On two other occasions there was disagreement between staff and their managers over 'Interpersonal skills' courses. One junior member of staff rang me to say that it had been suggested that he should do an interpersonal skills course but that he was not prepared to do it. I suggested that it might be good experience for him to go on it anyway. He declined. I then agreed that he didn't have to do it if he didn't want to and he seemed pleased.

On another occasion during 1992, a senior member of staff said that he was 'not sure' whether he needed to do an interpersonal skills course and asked me to wait until 'next year' to book it. I felt that he hoped that the whole idea would be forgotten by the following year.

Heads of department also consulted me informally or advised me on staff needs or interests verbally. Two extracts from my diary are given below:-

'M. says much interest in Stress and Minute writing courses.' (06.11.90)

K. said two of his staff were interested in French Lessons' (31.05.91)

9.2.3 Annual Staff Reports (ASRs)

The ASRs training sections and the associated appraisal interviews were useful in giving staff the opportunity to report their needs formally and to discuss them with their Reporting Officer (who was usually their line manager) and the Countersigning Officer. The procedure was for staff to complete the training section of the appraisal form (see Appendix 9.1) and this was completed and signed by the Reporting Officer. Later the form was perused by the Countersigning Officer who, in some instances, interviewed staff, commented on or added to the perceived training requirements. Eventually after processing by the Administration Department, the 'training' section of the form was passed to me so that I could provide a matrix of training needs and prioritise its content.

On-the-job training needs were sometimes entered on ASRs. Usually line managers ensured that training in work skills occurred 'at the work desk or bench'. However if the necessity for this type of training was listed on the training section of annual staff reports, I usually reminded line managers of the need to ensure that this was undertaken.

Most of the needs expressed on ASRs were for formal courses. Generally there was good agreement on the perceived needs as defined by staff themselves and by their Reporting or Countersigning Officers. In some instances the latter suggested training initiatives from which the individual might profit.
Agreement between staff and their line managers about training needs occurred in approximately 99% of instances as recorded on ASR training sections, though in some 20% of cases, the reporting officers/line manager had suggested that at least one more training initiative should be added (see Table 9.2). Only in 1% of occurrences did line managers totally disagree with staff.

9.2.4 Assessing needs from questionnaires

Information could also be obtained on staff needs by sending out questionnaires to them. For example I sent questionnaires out about the need for 'French Conversation' (25.05.91) and general computing (18.10.91) (Appendix 9.2). However one had to be careful to ensure that they were distributed to all staff. For example one person from the workshop asked me why his section had not received them while other groups had. It transpired that the secretary who should have sent them out had not yet got round to sending them out when she should have.(22.10.91)

One also had to ensure that all staff had received copies of questionnaires. For example one line-manager told me that his staff would not need to complete a questionnaire on computer needs as they would not be interested. Therefore he would say, on their behalf that they did not require computer courses (00.11.91). I suspected that he had not asked them.

9.2.5 Staff needs analysis performed by Joint Training Service (JTS)

Usually I, together with line managers, completed an analysis of training needs for all IOS staff but on one occasion the Joint Training Service visited IOS to advise us on needs for less experienced administration staff, many of whom were reluctant to attend residential courses. I had discussed with L. (from JTS), the possibility of conducting a needs analysis for nine junior administration staff early in 1991. She met most staff for ten minutes or so each to discuss their work, their past experience and their needs. She indicated to me that most were not especially keen to undertake training, she remarked that several had said:–

'.you can’t teach an old dog new tricks'

- an indication of staff attitudes.

The JTS visit was not particularly successful. By 1992, JTS had not come up with any firm offers of suitable courses. This was partly because D. left JTS in 1992. Meanwhile the relocation exercise at IOS, scheduled for late 1994/1995, was also having some effect in that some of these junior administration staff were either to retire early or to leave. Therefore in 1993, again I asked many of them again about their future staff development needs. For several I provided local courses as requested e.g. basic computing, word-processing. Several also expressed an interest in NVQs.
Why courses were run during 1991-1993 incl.

<table>
<thead>
<tr>
<th>Table 9.1</th>
<th>Why courses were run during 1991-1993 incl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Total number of places offered = 1100)</td>
<td>50%</td>
</tr>
<tr>
<td>Discussions with Management Team about Organisational needs (Arising from policy decisions)</td>
<td>26%</td>
</tr>
<tr>
<td>Discussions with staff/line-managers or as a result of publicising places</td>
<td>24%</td>
</tr>
</tbody>
</table>

A comparison of agreement between needs of staff as perceived by individuals and their reporting officers as indicated on the 'Training Section' of Annual Staff Reports (Dec-March)

Table 9.2

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Total No. of places requested by staff</td>
<td>100</td>
<td>117</td>
</tr>
<tr>
<td>Average No. requested per head</td>
<td>0.68</td>
<td>0.81</td>
</tr>
<tr>
<td>No. of courses added by Reporting or Countersigning Officer</td>
<td>23</td>
<td>19</td>
</tr>
</tbody>
</table>

9.3 DISCUSSING WITH LINE MANAGERS WAYS OF REMEDYING THE GAPS

Generally there were relatively few discussions with line managers on whether any given initiative might fulfill a training need so as to improve performance. Usually, if a course had been successful for any one member of their staff, the word soon got around and so, where relevant, line managers tended to nominate others for it. However they sometimes rang to consult me about course content, cost and location. For example R. rang to say that one member of his staff required courses in 'time management, self-management and project management. He asked me to suggest locations for the latter. Types of course and cost are given in Table 9.3.
### Table 9.3

<table>
<thead>
<tr>
<th>Course title/group needed</th>
<th>Number of places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertiveness</td>
<td>9</td>
</tr>
<tr>
<td>Computing</td>
<td>27</td>
</tr>
<tr>
<td>Contracts</td>
<td>18</td>
</tr>
<tr>
<td>Development for junior grades</td>
<td>3</td>
</tr>
<tr>
<td>Engineering</td>
<td>4</td>
</tr>
<tr>
<td>Engineering design</td>
<td>5</td>
</tr>
<tr>
<td>Finance</td>
<td>28</td>
</tr>
<tr>
<td>First Aid</td>
<td>8</td>
</tr>
<tr>
<td>First-aid</td>
<td>5</td>
</tr>
<tr>
<td>French Language</td>
<td>20</td>
</tr>
<tr>
<td>Further education (BTEC)</td>
<td>1</td>
</tr>
<tr>
<td>Health and Safety (several courses)</td>
<td>ca.190</td>
</tr>
<tr>
<td>(All staff/students)</td>
<td></td>
</tr>
<tr>
<td>Interpersonal effectiveness</td>
<td>6</td>
</tr>
<tr>
<td>Introductory</td>
<td>12</td>
</tr>
<tr>
<td>Librarian</td>
<td>4</td>
</tr>
<tr>
<td>Management</td>
<td>65</td>
</tr>
<tr>
<td>Negotiating/ Marketing</td>
<td>12</td>
</tr>
<tr>
<td>Oceanography</td>
<td>10</td>
</tr>
<tr>
<td>Post-Graduate</td>
<td>8</td>
</tr>
<tr>
<td>Presentation skills</td>
<td>4</td>
</tr>
<tr>
<td>Secretarial</td>
<td>11</td>
</tr>
<tr>
<td>Staff Reporting</td>
<td>65</td>
</tr>
<tr>
<td>Interviewing</td>
<td>23</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>35</td>
</tr>
<tr>
<td>Time management</td>
<td>9</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>3</td>
</tr>
<tr>
<td>Word-processing</td>
<td>12</td>
</tr>
<tr>
<td>Writing newsletters</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>636</td>
</tr>
</tbody>
</table>

#### 9.4 INFORMING STAFF OF LINK BETWEEN STAFF TRAINING NEEDS AND THE APPRAISAL CAREER SYSTEM

When I commenced the job in 1990, staff tended to be unaware that staff development initiatives could help them in 'getting on' in their career. This was particularly true of the 'Management' series which was made available to all non-industrial staff. However following the NERC 1992 staff notice about its training strategy and the proactive role of myself and line managers in promoting training, staff tended to expect training and sometimes mentioned its link to appraisal.
9.5 REASONS WHY STAFF ENQUIRED ABOUT COURSES OR WISHED TO PARTICIPATE IN THEM

In most instances staff seemed to wish to participate in courses so as to improve their personal and vocational skills and pursue a successful career. A few examples occurred where, to say the least, I felt some doubt as to their motives. The following illustrates an example:

For some time I had felt that we needed to run a health and fitness course for staff especially for those at Wormley some of whom were overweight and many middle-aged. After arranging for a tutor to take a class (see Chapter 10), I put a note in the Spring 1991 IOS newsletter 'Open Ocean' asking for volunteers, eventually getting eight. Several weeks before the course commenced there was an interesting comment from X. I saw him in the car park as we were both going to our cars. He wandered over and said

'When are you going to do your health and relaxation class?'
(15.03.91).

I said that it was being organised but that it would probably start within a month or two. X. said he thought it was a good idea to 'get our managers to see that we're in the 20th century..' He then went on to imply that some line managers treated staff badly as did the old mill managers. He said he was thinking about going on the course to annoy them. I laughed and wondered whether he had some pressure to work harder put on him by his line manager?. I didn’t get the chance to ask him he wandered off, also smiling. He never asked me again if he could come to the class.

9.6 MONITORING THE NUMBER AND TYPE OF REQUESTS FOR TRAINING

A list of needs was maintained on a training database and added updated regularly within a few days of the need occurring. This input increased in January to May each year following receipt of the training section of annual appraisal forms. Once training had been completed, information on dates and duration of the course was made on a different database table and the original entry listing the need was then erased. Line managers were kept informed of the training needs of their staff and sometimes asked to prioritize, especially if there was likely to be any problems in funding or if the circumstances of the individual had changed. I monitored changes in requests for training by means of graphs. An example is given in Figure 9.2. which shows the percentage of various grades of staff who had not written a request for training on their appraisal forms. The graph shows that middle grades (HSO/HPTO/HEO) had made the least number of requests while the most junior (ASO/AO/SGB) and senior grades (GR6/GR7) had made the most requests. The averages of all staff barely changed between 1990 and 1993. The role of the line manager in implementing the various training needs is discussed in Chapter 10.
Figure 9.2  Percentage of staff who did not request training (1990-1993)
In the next Chapter, I discuss the role of Manager of Training and Development who plans and implements staff development programmes so as to match training needs with supply. I describe the various aspects of the role and discuss the interesting occurrences as well as the pitfalls.

9.7 SUMMARY OF CHAPTER 9

9.7.1 In this Chapter I have recorded that although I undertook the role of Needs Analyst, I rarely undertook the role of Task Analyst because the latter role was usually undertaken by Line-Managers of staff. However I had to be aware in broad terms, of the competencies needed for a given job.

9.7.2 I have described the methods by which I, as Needs Analyst, obtained information about the needs of staff. These were assessed from discussions with all staff and managers.

9.7.3 Some of the daily circumstances in which I undertook the role as Needs-Analyst are discussed, as are some staff attitudes. In some circumstances I acted as a catalyst in helping staff or managers to identify training needs.

9.7.4 The types of course requested are summarised and the total number of places for which I surmised a need is given.
CHAPTER 10

THE ROLE OF MANAGER OF TRAINING AND DEVELOPMENT
Figure 10.1 Percentage of time spent as 'Manager of Training & Development'

Based on 234 hours per year spent as 'Manager of Training and Development'
10.1 INTRODUCTION

The main role of Manager of Training and Development is concerned with the broad planning, initiating, coordinating, monitoring and supporting of all staff development initiatives, (McLagan, 1983:31; FEU, 1987:6-7) I found it to be a complex role which involved maintaining a broad awareness of the various types of resources needed for the whole programme in terms of tutors/trainers, learning materials, accommodation and funding. It was also imperative that administration and communication systems should be well-managed and that staff development initiatives were run efficiently and in congruence with IOS organisation.

Unquestionably the mode and level of provision was linked to the availability of internal and external resources. For example, in respect of vocational courses, if funds were readily available, staff could easily be booked onto external commercially-run training events. However in several instances I found it to be cheaper to negotiate for courses to be run either in-house or locally. The in-house initiatives employed, are outlined below but discussed in further detail in Chapter 11 (the role of Programme Designer and Administrator).

In this Chapter, I shall discuss the role of Manager of Training and Development in terms of my objectives as Training Officer, the resources that were available, the procedures used and problems that were encountered. The various factors which influenced my decisions in making provision are described.

I found the role of Manager of Training and Development to be interesting but time-consuming, accounting for approximately 28% of my time (234 hours per year) as Training Officer and comprising 40% of the entries in my diary. Figure 10.1 provides a broad outline of the percentage of the time that I spent in undertaking the main activities. At least half of the time was spent on initiating, planning and discussing future events so as to match training needs with supply. This involved liaising with staff of all grades and with the providers of courses such as the Joint Training Service (JTS), the NERC Computing Service (NCS) and various external consultants. A further 6% of my time was spent in maintaining a broad awareness of commercial and other external training initiatives outlined in appropriate education and training journals and in the numerous brochures which were received annually, while at least 8% was concerned with maintaining administrative systems (discussed below).

Most of the respondents to my survey of training officers employed by Research Councils, also indicated that the role of Manager of Training and Development accounted for much of their time and that time-consuming tasks included those of routine written and verbal communication, administration duties and maintenance of a broad awareness of commercial or other external training initiatives. The various aspects of the role are discussed below in sections 10.2-10.15.
10.2 MANAGING ADMINISTRATION SYSTEMS

An important aspect of this role was to maintain an efficient administration system. For example, JTS had set procedures for providing courses in that they required a nomination form for each participant and this had to be signed by the appropriate line manager and also the training officer e.g. the following represents one of several similar entries in my diary:

'Sent batch of nomination forms to JTS' 18.10.91

If staff dropped out of courses without notice, JTS could charge cancellation fees, so I had to be reasonably sure that staff were aware of this i.e.:

'Received letter from JTS sending details of new cancellation charges w.e.f 1991 range from 25% fee if 15-28 days notice to 100% charge. (up to £1700 for Sen Man'). (04.09.91)

The IOS finance department also required that bookings for training courses to external companies should be accompanied by an order form which, in turn, was linked to a system for payment. I had to ensure that this amount was recoverable from projects e.g.:

'I estimate that RH bill for TW or OS course will be £1600 each course /8 staff = £200 each. Have to recover this amount from projects'. (08.09.91)

Furthermore whilst all staff training records were entered on to a mainframe computer, it was also necessary to ensure that central records were kept of the following:

a. All correspondence e.g. letters, memoranda and notes sent and received.

b. Prints-out of costs incurred from the training budget.

c. Non-computerised staff training records and other miscellaneous which could not be entered on computer e.g. copies of certificates awarded to staff or other personal documents.

In addition brochures and mail shots, giving details of various external courses, were kept for reference for one year and made available for staff to peruse. (The number of mail shots received in 1992 amounted to more than five hundred)

Usually 20% of the costs of Further and Higher Education courses were paid by the staff themselves and I had to ensure that these costs were recovered via the Finance Department. For example the following is an extract from my diary. :-

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When I spoke to H.[Admin. Officer] about getting cost of courses paid, H. said that according to his records some of the new staff at JRC had received 100% funding in the past but they realised that they would only receive 80% of the fees this year and next.(17.06.92)

Some of my time was also spent in ensuring that the filing system was reasonably efficient because occasionally I needed to look up past records, sometimes at the request of managers. For example during December 1992, the Director asked me to provide a summary of the number of finance courses that had been offered to IOS by NERC during the past five years. He asked for dates on which requests had been made and the number of courses that had been provided in response to these requests. This information provided him and myself with a means of monitoring the NERC finance division response to our past requests. (Appendix 10.1).

Most training officers who responded to my survey also undertook the task of managing the training administration system and at least one quarter said it took up much of their time.

10.3 COMMUNICATING / LIAISING WITH NERC / JTS / NCS / MANAGERS / STAFF / STUDENTS ABOUT ROUTINE EVENTS

Good verbal and written communication and liaison about routine training events, although time-consuming were also essential. In undertaking this task, I had to ensure that all interest groups were informed of events. I did much of my own word-processing but did call on secretarial help during busy periods. The number of letters sent and received during 1991-1993 is shown in Table 10.1. A note about training initiatives for distribution to new recruits is given in Appendix 10.2

<table>
<thead>
<tr>
<th>Table 10.1 The number of letters sent and received during 1991-1993</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No of Letters/Memos sent (Includes E-Mail)</strong></td>
</tr>
<tr>
<td>Internal</td>
</tr>
<tr>
<td>Research Council/JTS</td>
</tr>
<tr>
<td>External</td>
</tr>
<tr>
<td><strong>No of letters/Memos received</strong> (includes Fax, E-Mail, copies to me) (excludes JTS nomination forms)</td>
</tr>
</tbody>
</table>

In addition I made and received numerous telephone calls about routine training events. Informal meetings and discussions with JTS, NCS, IOS managers, staff and
students about training-related topics were commonplace and took place in offices, corridors, the staff canteen or the local pub. Some examples will be described in the following Chapters.

Most of the twelve training officers responding to my survey, practised this communication/liaison task, at least half including it in the top ten items which involved much of their time. Almost three-quarters also practised the task described in the next section 'ensuring that training policy was applied'

10.4 ENSURING THAT ORGANISATION TRAINING POLICY WAS APPLIED

As I pointed out in Chapters 2 and 8, since 1973, NERC, had strongly supported a policy for staff development. In May 1991 it produced an updated discussion document on training initiatives, emphasising that training for change was imperative in terms of technology updating, management skills and budgeting. NERC had also expressed concern about the lack of a system to link 'training needs' and the 'call forward' of staff for courses and the fact that some scientists had rarely received training whilst employed by NERC.

Thus in the role of Manager of Training and Development I had to ensure that:-

a. The type and level of training was appropriate to the needs of staff, and,

b. Staff were encouraged to participate in courses if not at sea or at other meetings

c. Staff were given plenty of notice of training events.

Generally all department heads, project managers and line managers were happy to accept the above NERC/IOS policy on staff development but they often experienced difficulty in funding training initiatives. An example from my diary is given below:-

'Note from DO saying thanks for CAD info - has sent people to FTC CAD courses -says "good and handy" .. 'I cannot afford much of it’ (01.11.91)

In another example, a line manager had objected to the fact that one of his staff had been allocated a 'Management' course. I wrote to him pointing out that staff development is an on-going process and that individuals have a right to it (Appendix 10.3).
10.5 SUBMITTING BIDS FOR FUNDS

It seems from my research that this task is not undertaken universally by Research Council Training Officers. Only one third of respondents undertook this task and none indicated that it involved much time. I found that I applied for funds in a number of different contexts:

a. By applying for my (albeit small) training budget and,

b. by applying for funds on behalf of staff and managers.

Although funds for training were routinely top-sliced from NERC institutes so as to pay for JTS-run initiatives, all other funds, obtained either from the Government sources or from commissioned research were held by project managers. In addition NERC provided some additional funds for senior staff training. As Training Officer, I had a small budget varying between £1000 and £3000 per annum to cover incidentals and pilot schemes. This was intended to cover the cost of hiring videos, running pilot schemes, language training, travel and subsistence for attending meetings, and refreshments for courses. An example of a submission for my 'incidentals' budget for 1992 is given in Appendix 10.4.

In my submission for 1991, I had informed the Director that French language classes would cost approximately £1000 for the year. He replied, saying that he was not sure that IOS would be able to afford that amount from April 1991 onwards. He asked me to find out if it would be cheaper to send staff to external adult education classes. Thus in February 1991, I wrote to Waverley Adult Education Institute to enquiring about cost of French courses so as to compare them with in-house courses. In March 1991 Waverley Adult Education Institute replied giving the cost of 'Business French' courses - (one lesson per week) as '£112 per person for 20 weeks'. As the French tutor cost only £15-£20 per hour for on-site courses, it became obvious that it was no cheaper to send staff out to the local Adult Institute and so we kept on the existing tutor of 'French Conversation'. However, I was informed that during 1992, participants in 'French' might be asked to contribute 50% of the costs.

There were other examples in which I submitted bids for funds. In December 1991 I had put in a bid for approximately £14,000 for training during 1992. This was partly to pay for eight new staff to undertake post-graduate courses (not usually paid from projects), partly to run some pilot schemes and partly to pay for incidental expenses. However the usual courses were still to be funded from departmental projects.

In February 1992, following financial problems, in common with all IOS departments my budget was reduced and an embargo placed on any non-essential expenditure by all IOS staff until further notice. For several days I worked with the finance officer to decide on the essential training costs for 1992/1993. For example in June 1992, I sent questionnaires to staff intending to take post-graduate courses, enquiring about their projected costs for University training of which IOS paid 80% and staff 20%.

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10.5.1 Supporting managers in application for funds for training

In May 1991 the level of funds for all projects was relatively low. Most project managers mentioned this to me but there was little we could do to get more funds except attempt to get new commissioned research projects. One project manager did ask me if I could ask the Director to get him more money for training. I did mention it to the latter but meanwhile he had already given the project manager £5000 additional funds for vocational training. The Director asked me to make sure it was spent on vocational training, which I did.

By April 1992 it became apparent that lack of funds would affect training provision. The following represent some of the comments written by line-managers on the 'Training needs' section of annual appraisal forms:

'The Customs course would be useful but funding is a problem'  
(April 1992)

'I would like D. to expand and maintain his technical knowledge through supplementary courses and attendance at conferences but unfortunately finance appears to prevent this'  
(April 1992)

'Technology changes so rapidly that we all require regular seminars, courses and conferences. Unfortunately finances are likely to hold us all back.' (April 1992).

My dilemma and that of the Director was that, although I recognised the lack of funds there was little I could do about it. I did approach NERC Headquarters for more funds (with the knowledge of the Director) but, although offering additional support from JTS there was nothing they could do.

10.5.2 Supporting staff in receiving funds for training

Usually if staff were refused funds for training or were reluctant to ask for them, they informed me and I liaised/negotiated with project managers on their behalf so that:-

a. The cost would be paid for from a departmental project;

b. Staff could attend a given course. An example is given below:-

In October 1991, Mrs A. had stopped me in the corridor and told me that she would like to go on an 'Office Management' course - she wasn't sure which yet. Eventually after looking at several brochures we found a suitable course which was to cost about £250. She had discussed the possibility of getting all the money with her project manager and, understandably, he was reluctant to take this amount from his funds. She
discussed this with me and I saw him several days later. I suggested that I would pay about half the cost from my training budget if he would pay the rest. He readily agreed and Mrs A. did the course.

However there were other examples where it was impossible to find funds for technical writing, presentation skills or vocational courses. For example P. Put a note on my letter to him in which I had requested that his staff could attend courses:-

'Sorry I can't afford the £860 for this. I am told that the maximum allocation...[for his projects]... is only 50%... cancel projected attendances of M., C., H., and W.' (26.04.91)

and another example:-

'PW rang to say he doesn't know whether he can afford an Occasional Speakers course' (17.05.91)

Due to the embargo on expenditure in February 1992, as discussed above, there was some danger of staff having to cancel previously arranged training. One group of staff, potentially adversely affected by lack of funds were those studying with the Open University for Bachelor of Arts degrees. Several had completed four years of a six year course and needed funds to continue. Another group of young new graduates had registered for postgraduate 'Oceanography' courses with Southampton University. Several others had been about to register. In June 1992, one person sent a note asking me for support, pointing out that several young staff needed to register despite the financial crisis.

I wrote to the Director to attempt to get more funds for the most urgent training needs. The following is an extract from my diary:-

'I wrote to CPS [Director] today - told him I thought that there were good reasons why he shouldn't cut (mainly OU) courses already arranged for next Spring, said that staff might pay some costs themselves. I also said that some staff had studied for O.U. courses on the understanding that they had sponsorship from IOSDL for a degree course'. (16.06.92)

and the reply from the Director as summarised:-

'CPS rang in response to my letter of 16.06.92. He said that he would cut OU courses next year as under the OU regulations it was O.K. to take a year off. I pointed out that a gap in studying might cause a student, especially the young, to discontinue studies and so previous work for the degree course might be lost as the student would never complete the final unit. He said that he couldn't make a decision yet as he wasn't sure of
funding. I told him he could make a decision as late as November '92. I pointed out that if he cut training of staff already undertaking degree courses he would incur the wrath of the Unions. I suggested that we might ask staff to pay their fees in Feb' 93 and repay them in May '93 when we get our new funding. CPS agreed not to make a decision until Nov. I told him that (.X.) dept couldn’t afford to lose a certain experienced and valuable young member of staff if he decided to leave (due to lack of training)’ (17.06.92).

(Eventually the Director found funds to pay all OU and post-graduate fees).

There were numerous other instances when staff asked me about funds.

10.6 MAINTAINING A BROAD AWARENESS OF RESOURCES WHICH MIGHT BE AVAILABLE

In the role of Manager of Training and Development, it was important to maintain a broad awareness of resources available and to actively seek new ones. This task was also undertaken by over half of the training officers who responded to my survey.

It was often necessary to negotiate for additional free courses from JTS and to recruit tutors, trainers or lecturers so as to implement new initiatives. Five major factors which affected the type of training provision that could be offered were:-

a. Accommodation and equipment available at the Institute;

b. The level of funding available from the Institute budget;

c. The level of support offered by NERC related organisations e.g. the Joint Training Service (JTS) and the NERC Computing Service (NCS).

d. Support provided by various NERC Departments e.g. Administration, Finance, Contracts, Welfare.

e. Support offered by staff at IOS

f. Resources provided by external organisations such as the Training and Enterprise Council, Universities, Colleges or Commercial firms.

From year to year, I had to assess the above resources and, depending on their level of availability, plan and design a training programme accordingly so as to match training needs with supply.

JTS staff were very involved in helping to maintain the high training profile. One
member was appointed to take care of IOS interests, others made regular visits to IOS to provide training. On several occasions I visited them at the Swindon Office (22.07.91). It was useful to discuss mutual problems in provision of courses, to get advice on training procedures and to look through the JTS book and video library so as to beg and borrow, for a few weeks, whatever seemed useful. On two occasions, difficulties in getting dates for courses were resolved by a visit to JTS. I also negotiated with them for special on-site courses e.g. 'Management of Stress', 'Assertiveness' to be provided at IOS.

In my role as Manager of Training and Development I also regularly liaised with NCS staff. They were helpful in providing some on-the-job computer training at IOS, computer support and occasionally, courses on computing. One member of their support staff spent about one-third of her time in helping staff to cope with computer problems or with new software. Importantly NCS provided computer-assisted-learning (CAL) discs, a type of programmed learning on a range of applications including spreadsheets and ORACLE data-bases. NCS staff also helped me to assess computer needs and to collate information gleaned from questionnaires.

I also consulted with various other NERC Departments e.g. Finance, Contracts, Welfare who, in response to my requests, periodically arranged courses or workshops free of charge. NERC also provided a special fund for senior management training to which I had access during 1991 and 1992.

In addition to assessing the existing resources provided by NERC, it was suggested by the IOS Director that we should seek the wider NERC community as a resource for running in-house courses in technical subjects (11.11.91). Indeed I did approach the Rutherford Appleton Laboratory about the possibility of IOS staff participating in their project management course for engineers. Initially their training officer agreed that we might be able to participate, however she changed jobs and the replacement training officer informed me that there would not be any more of these courses for the present.

Staff at IOS were also very supportive and provided a useful resource. For example since 1989 the Director had run 'Time-Management courses and as Manager of Training and Development I asked him to give another in 1991 (15.04.91). Several staff also readily agreed to give informal or informal seminars on a variety of oceanographic subjects. Many staff also helped their peers in running computer software. Indeed the results of a questionnaire which I sent to all staff to assess the computing expertise at IOS (discussed further in Chapter 17), indicated that at least one quarter of the staff were prepared to help others with computing problems on an occasional basis. This information was publicised to staff (discussed further in Chapter 14). One secretary also taught several others 'Desk Top Publishing'. This self-help approach received the support of the Director as shown from my diary :-
'Received letter from the Director asking if we could use in-house trg [training] resources by our own staff to save costs e.g. he cites example of S. as a teacher of computing (11.11.91)

It was also necessary to assess the level of support provided by external organisations such as local Colleges, Universities and the Surrey Training and Enterprise Council. As discussed in Chapter 8, I did contact the Surrey Training and Enterprise Council in 1992 but I could not get an 'Exchange' scheme for resources 'off the ground'. On several occasions I assessed the costs for external consultants to run courses. After 1992 we found that generally we could not afford to use them unless they were of exceptionally good value.

In Autumn 1991 I visited Farnborough Technical College:-

'Visited FTC (cont) She [CP] gave me details of courses on CAD, CNC, UNIX and marketing in well designed coloured folders. She also showed me the film/video studio where recordings were made' (16.10.91)

I found the Marketing Officer to be very helpful, she had saved me a car-parking space and spent at least an hour showing me around the College. A few days later I took some Farnborough College of Technology brochures to show one of the line-managers in his office. We had a discussion about the possibility of getting students trained on CNC (Computer controlled machinery) and getting small workshop jobs done in the process.

I had need to call upon the above resources. In response to lack of funds, the Director wrote to me in 1992 as follows:-

'We are in a difficult financial situation so money for training in 92/93 will be extremely limited. Bearing that in mind can you please develop a costing for a prioritised bare-bones training programme' (20.03.92)

Indeed I did present him with a bare-bones training scheme based mainly on JTS-NCS- or NERC-run courses and in-house initiatives. In Autumn 1992, following discussions with the senior Management Team it was decided that the new Health and Safety-awareness courses should be presented mainly by IOS staff on a self-help basis. Seven staff were involved including myself and we each presented and discussed various aspects of Health and Safety training. The design and implementation of this initiative is described further in Chapter 11.
10.7 DEVELOPING A CORE-CURRICULUM

In accordance with NERC policy, a particularly important task for Institutes was to provide a core training curriculum which was linked to appraisal and promotion procedures. I undertook this role together with the Management Team. Early in 1991, shortly after commencing the job of Training Officer the Director asked me to provide a core curriculum. To undertake this task I had to collate the training needs derived from my work as Strategist and Needs analyst and to discuss with line managers, their priorities based on available resources. Eventually after discussions with the Management Team, I included the following subjects as core courses:- 'Introduction to IOS', 'Public Speaking', 'Technical Writing', 'Sea Survival', 'JTS Management series', 'Time Management', 'Staff Reporting/ Countersigning'. The following is an extract from my diary:-

'Sent a note to CPS with copy to admin and NCS [NERC Computing Service] staff giving my design for a curriculum for new staff. I made a point of saying that vocational courses should be chosen by Heads of Dept. and that computer courses should be run by NCS'. (26.03.91)

The Director later circulated the curriculum to all Reporting Officers, pointing out that not everyone would need all the courses listed and that this would depend on the individual. He said that basic training needs and support in computing must be decided by line managers.(08.04.91)

Generally it seems that this is not a task for which training officers have sole responsibility. Indeed only two respondents to my survey undertook it.

10.8 KEEPING ABREAST OF DEVELOPMENTS IN TECHNIQUES; DETERMINING THE APPROPRIATE TRAINING APPROACH

I was aware that any given training initiative, relevant to one job holder, might not be applicable to others and so it was necessary to discuss course content before staff participated in given courses. It was also necessary to remain aware of the techniques available to enhance learning. As discussed in Chapter 5, numerous authors including Malasky (1984:9) have described the methods used in education and training. Most emphasise that teaching strategies should be varied to maintain the interest of participants. Methods to enhance learning include:- practice interviews, role play, discussion, practical experience, process groups and programmed instruction. All were employed at various times at IOS. So as to enhance my experience of training techniques, I participated in two JTS management courses myself and found them very useful.

With regard to determining the correct training approach, I was guided to some extent by JTS and other external trainers. Although not time-consuming I felt this task to be
important, a view supported by the fact that at least half of training officers responding to my survey, maintained an awareness of training techniques and about half of them played a part in determining the training approach.

10.9 MAINTAINING A BROAD AWARENESS OF COMMERCIAL / EXTERNAL TRAINING INITIATIVES

This was an important task undertaken by most Research Council Training Officers. I found that at IOS, numerous mail-shots and pamphlets from commercial companies arrived during each year offering courses, videos etc. I usually compared prices of courses and video-tapes from several firms but most were expensive. (I will discuss this aspect later in the section on cost-effectiveness). Although this task was relatively time-consuming, it was useful as it provided an example of the wide range of staff development initiatives in the commercial world and also their costs.

10.10 PLANNING, ORGANISING, COORDINATING AND CONTROLLING STAFF DEVELOPMENT

In the role of Manager of Training and Development I had to plan and coordinate activities so that staff received the appropriate type of training within a relatively short space of time i.e. within several months to a year. This meant that I had to book trainers/tutors and accommodation well ahead and obtain some broad indication of whether potential participants were likely to be available at the right place and time. The letter from a trainer, shown in Figure 10.2 illustrates this point well. All arrangements had to be undertaken within the constraints of the IOS administration system which demanded that official orders were sent out at the same time as informal or formal bookings were made. Also I had to ensure that information on needs for JTS core courses e.g. Management courses were passed to JTS reasonably quickly as they sometimes had a backlog.

FEU (1987:7) suggests that the planning of staff development initiatives is an important function of management and I readily confirm this view.
Figure 10.2 An example of a letter received from a training firm

Mrs P M Hargreaves
Training Officer
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Deacon Laboratory
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Worley
GODALMING
SURREY
GU8 5UB
18 January 1991

Dear Pat

I thought the Occasional Speakers Course went very well.
It was most enjoyable to run and I hope your people enjoyed
it too and found it useful. You asked me to send in the
invoice quickly, so I enclose it now.

For the immediate future we have agreed the next Speakers
Course on 18 and 22 March, with Technical Writing on
19 - 21 March. Enclosed are programmes for both courses
which the course members may like to have before hand.

Looking further ahead we have provisionally booked the week
of 3 June. During that week it is perfectly possible for
me to run a 2 day Occasional Speakers Course; 2 days on
Report & Letter Writing for Admin staff; and 1 day on
Leading Meetings and Discussion Groups. It is a good idea
to split the speakers course so that the days are not together
as this gives people more time to prepare their main presentation.

Enclosed are programmes for these courses. You will see
that the Report & Letter Writing course I ran at Swindon
was 3 days but there were 12 course members. We will cover
the same ground in 2 days with about half that number.

Looking even further ahead, we have provisionally booked
the week of 14 October for Southampton.

I am looking forward to meeting you again on 18 March, and
I know you will let me know about the provisional weeks as
soon as you can.

Yours sincerely
10.11 MATCHING TRAINING DEMAND WITH SUPPLY

This task was very important and practised by about half of the respondents to my survey. Indeed it formed a pivot from which other roles followed e.g. Programme Administrator, yet it required a precise knowledge of staff needs, their personal requirements and the available resources etc.

I have shown in the earlier part of this Chapter that I obtained courses from a wide variety of sources i.e. JTS, NERC, NCS, External organisations, and Higher Education Institutes. However, I found that, in some instances, learning needs were met by on-the-job training provided by colleagues and line managers. This was often supplemented by more specialised training e.g. Computer-aided learning systems.

Factors other than costs which affected the matching up of staff development initiatives to participants included the following:-

a. The objectives of available courses
b. Learning methods
c. The geographic location
d. Whether the course was residential or not
e. Whether potential participants were available when the course was to be run

Basically it was quite difficult to initiate courses until I was sure that there would be enough participants available at any given time. For example some individuals, especially female staff found it a problem to remain away from home on residential courses. Other people could not always promise to be available on a given date as they were often working at sea. These aspects will be discussed further in Chapter 11 (The role of Programme Administrator).

10.12 MONITORING STAFF DEVELOPMENT

In my role as Manager of Training and Development I remained aware of the success or otherwise of courses mainly by informal discussion with staff and by periodically comparing the number of outstanding needs. For example in February 1991 I received a copy of a letter from the Director to all Heads of Departments to say that staff presentations had improved. Staff also were very helpful in discussing the general programme - I suspect that if there was any hitch in the system, however small, they told me about it!. If a course went very well I also heard about it!.
I also monitored the whole staff development process in my role as Evaluator. In that role, I focused on various aspects of each event in greater detail than as Manager, receiving feedback from staff and trainers/tutors.

10.13 PLANNING / ORGANISING / CONTROLLING - CROSS-TEAM / DEPARTMENT DEVELOPMENT

As seen in Chapter 7 very few other training officers, who responded to my survey were involved with cross-team development. Indeed, it only formed a small component of my own total work-load. From 1991-1993 most of cross-team development initiatives were provided by formal and informal seminars. However, following the IOS reorganisation into four separate Units in 1993, I had discussions with the Director about providing team training. Staff were involved with pressures due to relocation and to increasing work-loads as a result of loss of some support staff, so we had to be careful about the timing of extra training initiatives and to ensure that the culture of the Organisation was 'right'. Eventually we decided to run some videos which I had previously evaluated (see Chapter 11), to ask JTS to provide information on team training and/or run a pilot scheme (Appendix 10.5). Thus although I did not undertake the role of team trainer, I was preparing the way for it.

10.14 RECRUITING/SUPERVISING STAFF

Over half of the respondents to my survey of Research Council training officers undertook this task though it was not clear whether they spent more time on supervising than recruiting. At IOS I did supervise some part-time administration staff but was more concerned with recruiting or negotiating for trainers or tutors.

Having established that there were sufficient nominations to make it worthwhile to run in-house courses, it was necessary to find tutors/trainers (30.04.91). One such general trainer was FS. She came to IOS and we talked about courses on sales negotiation, counselling, communication, time management and negotiation. Initially I told her I would give her some work if IOS could afford it (18.10.90).

Generally there was no difficulty in finding well qualified people to run on-site courses, though one had to be aware of likely costs for trainers/tutors and balance provision with the current year's budget. Often it was possible to negotiate with tutors so as to obtain reductions in their fees. On some occasions they could be persuaded to reduce their fees by 5-10% if several bookings were made in advance.

From mid 1991 until the end of November 1993, I recruited three trainers/tutors locally ('Health and Fitness'; 'French, Conversation'; 'Interpersonal skills') and three others from various organisations. JTS provided seven others tutors/trainers. Usually I recruited as a result of recommendations or because of their personal expertise. For
example one excellent tutor for the technical writing course was already known to IOS and JTS and I had no doubts about using him.

An important aspect was that all tutors/trainers had to agree to abide by Health and Safety regulations prior to being employed. Some, including the Health and Fitness expert, carried her own insurance.

Having arranged for the employment of tutors and trainers, I was then ready to implement particular training initiatives. This aspect was undertaken in one of my other roles i.e. that of Programme Designer and Administrator as will be discussed in the next Chapter.

Occasionally I recruited students to help out with administration or the computing. For example the following is an extract from my diary:-

'I wrote to GCT [Guildford College Technology], offering 2 placements for work-experience students in .. word processing and administration' (08.10.91)

10.15 RECOGNITION OF PATHS FOR ACCREDITATION E.G. NATIONAL VOCATIONAL QUALIFICATIONS.

Another of my tasks was to ensure that staff were aware that they could obtain nationally recognised accredited qualifications from a variety of sources. For instance some staff obtained graduate and postgraduate qualifications either by attending local colleges and Universities or by distance learning. From 1991 it was possible to obtain vocational qualifications based on in-house practical work and training e.g. National Council for Vocational Qualifications, British Computer Society professional development scheme. I visited Guildford College of Technology in Autumn 1993 to discuss ways in which our staff could obtain formal National Vocational Qualifications (NVQs).

One-quarter of respondents to my survey undertook this task. None acted as an Assessor for NVQs.

10.16 SUMMARY OF THE ROLE OF MANAGER OF TRAINING AND DEVELOPMENT

In this Chapter I have discussed the many facets of this complex, time-consuming role and have emphasised that it is practised by most training officers employed by Research Councils. Other roles and tasks either contributed to this task or stemmed from it. This role took up approximately one-third my time as Training officer and involved the managing of administration systems including systems for funding which involved internal and external interest groups.
10.16.1 It is emphasised that one of the main tasks is to match training needs with supply.

10.16.2 The importance of working within given budgets and liaising closely with all interest groups is stressed.

10.16.3 The roles of Programme Designer and Programme Administrator stem from that of Manager, the latter is broad-based but the former two roles are more narrowly focused on specific initiatives.

10.16.4 This role was concerned with the broad planning, initiating, coordinating, monitoring and supporting of all staff development initiatives so as to ensure that organisational training policy was applied including that for Health and Safety as decreed under the terms of the European Union.

10.16.5 An important aspect of this role was to developing a core-curriculum for all grades of staff.

10.16.6 It was a complex role which involved maintaining a broad awareness of the various types of resources needed for the whole staff development programme and keeping abreast of new training techniques current commercial or governmental staff development initiatives.

10.16.7 It was also necessary to supporting managers and other staff in application for funds for training.

10.16.8 Maintaining an awareness of resources which might be available was vital in ensuring that staff were given opportunities for a wide range of staff development initiatives.
CHAPTER 11

DESIGN AND IMPLEMENTATION OF STAFF DEVELOPMENT INITIATIVES
Figure 11.1 Percentage of time spent as 'Programme Administrator'

Based on 209 hours per year spent as 'Programme Administrator'
11 DESIGN AND IMPLEMENTATION OF STAFF DEVELOPMENT INITIATIVES

11.1 INTRODUCTION

I have grouped the roles of Programme Designer, Instructional Writer, Programme Administrator, Group Facilitator and Trainer together in this Chapter because they are all concerned with the design and implementation of specific programmes. This is in contrast to other roles such as Evaluator or Statistician (described in the following Chapters) which are more generalised and concerned with various aspects of the total staff development programme.

The roles described in this Chapter, accounted for a total of about 30% of my time (255 hours per year) as Training Officer. The principle one of Programme Administrator accounted for 25% while that of Programme Designer and Trainer took approximately 2% as shown in Figure 11.1.

11.2 THE ROLE OF PROGRAMME DESIGNER.

In Chapter 6, I pointed out that there may be several interest groups concerned with the process of putting together a training programme (Wiggs 1984:7-10) and that input at the design and planning stage may come from a variety of sources, e.g. Unions, management, resource-providers, funders, and the participants themselves (the role of Unions will be discussed further in Chapter 14).

I found that the role of Programme Designer followed from that of Manager of Training and Development. In the latter role, (described in Chapter 9) I managed the whole of the training function, matching training needs with a supply of relevant staff development initiatives. These included JTS-run core courses, commercially-run courses and in-house programmes. For example, following discussions with the Management Team and line managers, I decided on the broad objectives, method and content of various courses. However in my role as Programme Designer, I was concerned with designing specific programmes within the context of stated objective and also with the sequence of activities.

I did not undertake the role of Programme Designer often because many of the courses run at IOS had already been designed, either by JTS, NERC or commercial organisations or tutors/trainers. Indeed programme design took only about 2% of my time. I undertook this role when organising 'Introductory' courses, 'Health and Safety seminars', 'French Conversation', 'Computing' courses,'Communication' and 'Interpersonal skills' workshops. One-third of respondents to my survey of Research Council Training Officers also performed this role.

Basically in my role as Programme Designer, I adopted a flexible approach more
closely allied to Nadler’s (1974) ‘Critical Events Model’ than a prescriptive one. Procedures were adaptable so as to ensure that the training programme would accomplish individual learning as well as following organisational interests. Some of the main tasks are described below.

11.2.1 Preparing/defining objectives and deciding on the contents of courses; selecting/sequencing activities for specific programmes.

This task overlapped with those of Programme Administrator in that the latter, was also concerned to a small extent, with defining and discussing with tutors and trainers, the contents of courses and sequencing the activities within each programme prior to confirming bookings. Much of the programme was curriculum-led as in the instance of the JTS 'Management series' which formed part of the core-curriculum for most scientists and technologists. However at least 10% of initiatives were extra to the core-curriculum and customised to IOS needs and so objectives, content and sequencing had to be discussed with trainers and staff. I did not often design material specifically to test learning as this was usually undertaken by the tutors or trainers. Numbers of staff who could be accommodated on any given course were usually decided by tutors or trainers and depended mainly on their class contact time and the number of participants which they could comfortably supervise. In the instance of computing courses, it often depended on the numbers of computers available as each participant usually required the sole use of one for the duration of the course.

The following extract from my diary, presents an examples of circumstances in which decisions were made about course content:

'Meeting with G. and S. at X University. We arranged a UNIX course. He gave us a Unix synopsis to take to show IOS staff [for decision on content]. Cost: £55 each’ (10.03.92)

and :-

'Received letter from C. to say that he will be delighted to give a marketing seminar and asked if we get together to plan seminar topics and nos. attending’ (18.05.92)

and:-

[I] Sent out a questionnaire about who wanted to go on French course and their present standard and if they were prepared to pay towards it (24.05.91)

In all the above instances, I discussed with staff which topics they would like covered.
11.2.2 Evaluating and Selecting Instructional Methods

Occasionally I evaluated instructional methods mainly from questionnaires and verbal feedback. Similarly only 2 out of 12 respondents to my questionnaire to training officers undertook this task. For example, when evaluating learning methods from questionnaires, I found that out of some 80 people who had been involved in learning in process groups during various courses, only 10% indicated that they did not feel happy working in them. On the other hand, although only a few people were involved in 'Role Play' at least one person indicated that she and others were not happy about it.

Usually I had no need to select instructional methods for NERC/JTS-run courses as these were pre-arranged by JTS and by NERC. When organising IOS-sponsored courses to be run in-house, I usually discussed methods with tutors/trainers before booking them, especially when implementing pilot schemes. The following extract from my diary describes one of the factors which contributed towards making a decision about what form a training initiative on 'Finance' should take. I had originally meant to run this event as a talk with some practical work, (MC was the expert in his field) :-

'MC rang to say he is happy to give a finance course as I had asked [him] but he preferred to give it in the form of a workshop as he didn’t like having to stand up to give a talk'  
(28.10.91)

In one instance I found that staff as individuals were less likely to learn from an instructional book than from a course. In planning how best to improve 'Communication skills' at IOS, I had shown five staff or students a small booklet on the subject which had been produced in an easily-read form by 'Scriptographic Publications'. On asking them individually if they would read it if it were circulated to them, only one individual (Imperial College undergraduate) said she would read it all:-

'I received Scriptographic booklets (industrial trg [training] booklets) - asked 5 people in bio [biology] dept whether they would read them. Results: R. - 'I wouldn’t bother to read them' .. H. (young -ITS- Imperial college) said she would 'definitely read them': P. would 'sift and read bits': C. would 'read bits': F. wouldn’t read them'. (26.06.91)

I did consider the use of 'Open Learning' when deciding on methods of learning as discussed by Lewis (1984:12-14); FEU (1987:18), indeed several staff were already undergraduates of the Open University. During 1991/92, I suggested this as a learning initiative to at least two members of staff. One eventually left IOS due to a change of job. The other person was not keen and in any event, I felt that the second person needed more support than an 'Open Learning' situation could provide.
In Table 11.1, I list instructional methods and types of events which I discussed with the trainer/tutor at the planning stage.

11.2.3 Developing Materials and Tools for Training Sessions

Generally, I did not need to develop materials and tools for training sessions because these were provided by tutors, trainers or instructors. For example, one member of staff who presented 'Fire Safety' training provided fire extinguishers which staff could use for practice sessions.

<table>
<thead>
<tr>
<th>Table 11.1</th>
<th>Instructional methods discussed with trainers/tutors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
<td>Learning Methods</td>
</tr>
<tr>
<td>Health and Fitness</td>
<td>Brainstorming, Discussion, Fitness Exercises</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>Lectures, Videos, Realia</td>
</tr>
<tr>
<td>Intro course</td>
<td>Lectures, Discussion, Tour of IOS Departments</td>
</tr>
<tr>
<td>French</td>
<td>Conversation, Set written and verbal texts.</td>
</tr>
<tr>
<td>Workshops</td>
<td></td>
</tr>
<tr>
<td>Finance course</td>
<td>Discussion</td>
</tr>
<tr>
<td>Communication workshop*</td>
<td>Lecture, Discussion Groups</td>
</tr>
<tr>
<td>Interpersonal skills*</td>
<td>Discussion, role-play</td>
</tr>
<tr>
<td>* Pilot Schemes</td>
<td></td>
</tr>
</tbody>
</table>

11.3 INSTRUCTIONAL WRITER

I undertook this role infrequently as did only two out of twelve training officers who responded to my survey.

11.3.1 Preparing artwork/overheads

It was usually necessary to prepare overheads when acting as trainer e.g. for 'Introductory', 'Health and Safety' seminars and for some video-based sessions. An example, shown in Figure 11.2, was used in 1992 during an 'Introductory' course
when I explained to new staff that IOS was 'a learning organisation'

3.2 Preparing Instructional Materials

I only ever prepared scripts for one video session. Usually well presented sets of hands-out prepared by commercial companies accompanied video-tapes, however in one particular instance these were less than clear and so I put together a summary for distribution to participants. In other instances either tutors/trainers had prepared these or there was already material available, suitable to hand-out. For example for 'Introductory' courses, the latest well-illustrated and coloured IOS Reports were available.

MORE EFFECTIVE...
IS TO CREATE AN ORGANISATION IN WHICH CONSTANT LEARNING AND RENEWAL ARE PART OF THE CULTURE ....

ARTICLE ON MANAGEMENT
FINANCIAL TIMES
9.1.91.

Figure 11.2 An example of an overhead used in an 'Introductory' course.
11.3.3 Preparing Distance-learning Materials

As IOS staff Development initiatives were open only to staff, I did not prepare any distance learning material. Exceptionally, I was only once involved in this task early in 1994 when I made arrangements for the photographer to video-record a 'Staff-reporting' seminar at the Wormley site which was to be used later for staff at the James Rennell Centre. No other Research Council training officers undertook this task.

11.4 THE ROLE OF PROGRAMME ADMINISTRATOR.

This was a very important and time-consuming role which followed from that of Programme Designer. More than 30% of the entries in my diary were involved with programme administrator tasks. This role was concerned with the organising and making administrative arrangements for specific events. Much of the time was spent in ensuring that training events ran smoothly and in negotiating for resources (See Figure 11.1).

Essentially in this role one had to get together, at the same time, date and place, the trainers/tutors, participants and all the resources needed to ensure that any given staff development event followed closely its original design. This was not an easy task when one had several initiatives running concurrently and when potential participants were likely to be called away to sea at relatively short notice. Usually there was also a need to make arrangements for refreshments, sometimes by negotiating with the canteen manageress. Occasionally there was a need to book hotel accommodation for trainers/tutors.

One also had to evaluate each trainer's input within the whole process. On occasions I was asked by a trainer to be present during the actual course so as to help him/her. For example the health course tutor asked me to help her run brainstorming sessions. Almost always I had to be at hand to discuss with various trainers/tutors the special needs of participants, the content of each course or session, the problems they might experience or the successes or problems that they had experienced.

Importantly I had to make sure that the IOS cashier paid invoices from trainers or tutors on time (a role which I also ascribe to Manager of Training and Development). Once I had an irate Tutor in my office (who the finance Department had not paid) complaining that she needed outstanding fees immediately.

Almost all of respondents to my questionnaire to Research Council training officers undertook the role of Programme administrator, several of them completing all of the tasks which are described below:-
11.4.1 Booking Commercial Trainers/tutors

Having ensured that there were enough participants for a course to run, it was necessary to book people on to courses or to arrange for tutors or trainers to give courses/seminars in-house. It was often necessary to book several months or a year ahead and also to confirm the address and booking some months before commencement of the event. For example:

'Memo [from myself] to all project leaders asking for nominations for Occ. sp [Occasional Speakers’] course so I can book a trainer as necessary, (£200 per person)’ (30.04 91)

and:-

'. Letter from TRACA confirming booking for 2 courses between 19th and 22nd March at IOS for Occasional Speaking course' (08.12.91)

11.4.2 Negotiating for a Reduction in Trainers/tutors Fees

Sometimes it was possible to negotiate for a reduction in fees for on-site courses, as I was able to do on several occasions. For example one trainer was able to offer Government-run organisations at a cheaper rate for bulk bookings. On another occasion one tutor approached me and offered to run a health and fitness course called 'Look after yourself' for eight weeks in return for expenses only. She was willing to undertake this arrangement if she could run a pilot scheme at IOS. Apparently, although well qualified, she needed to run an advanced course so as to obtain higher qualifications. I asked her to write formally to the Director which she did:-

'P. [Trainer] told CPS that she will get an advanced certificate if she completes a project - look after yourself (therefore low cost)' (25.04.91)

I asked for volunteers to do the course and obtained eight:-

'M. jumped at chance of doing P.’s health course says she is getting too fat sitting down at her job all day' (April 1991)

11.4.3 Managing resources e.g. funds, accommodation, materials, staff

a. Managing Funds

As discussed in Chapter 7, it was also necessary to ensure that participants could pay
for their share of the course fees. As funds were usually low, one had to inform them of costs, prior to booking places:-

'Sent letter notifying time and date of Occas. Sp. [Occasional Speaking] course on 3,7 June (split to two days to give time to prepare). Gave costs and asks parties [participants] to sign form (26.04.91)

Usually trainers’ and tutors’ fees were settled at the time of booking, however they sometimes required reimbursement for hotels and travelling expenses. Once costs were agreed by all interest groups including staff and their line-managers, the Finance Officer was asked to transfer funds to a separate account for payment. Occasionally I subsidised courses from my small training fund if line-managers were unable to pay the full cost.

b. Managing accommodation and support materials.

During visits by trainers/tutors it was usually necessary to provide support for external them in a variety of forms. In the role of Programme Administrator I had to ensure that either of the two conference rooms and/or syndicate rooms were free and that the required number of chairs were arranged as required. I often had to provide equipment such as the following:-

a slide-projector, screen, video recorder/player, television monitor, overhead projectors and up to eight tables (for group work), one or two flip charts (with clean paper and pens).

Sometimes photocopying and computing facilities, telephones and telex or facsimile were also needed.

During 1990, after having wasted time looking for the one and only IOS flip chart for tutors or trainers, I decided to buy three more flip charts and to place them permanently in conference and seminar rooms. This was one of the most time-saving operations that I experienced, saving days of valuable time. Sometimes I had to ensure that computers were also available for courses, though usually they were provided by participants. On one occasion I hired six lap-top computers from a local Company as part of their package to provide an on-site course in 'Microsoft Project'. These had to be left at the office overnight and because IOS had two recent burglaries, these valuable items had to be securely locked away.

c. Working with Colleagues who provided practical support for Staff Development.

Several staff at IOS were invaluable in supporting training and development initiatives. Several volunteered to teach their colleagues vocational subjects, particularly computing skills. Others were willing to participate in pilot schemes. For
example a total of eight staff helped to run the Health and Safety seminars, each providing a total of at least a week each which was devoted to the design and implementation of the 'Health and Safety' programme. I discussed with them their respective tasks and provided encouragement and support.

11.4.4 Evaluating potential learning materials

Learning material included video-based courses, including written hands-out, computer-assisted learning disks, and interactive video.

a. Assessing Audio/Video material

Facilities for viewing audio/video material were provided by a firm at Famborough which I visited for this purpose (17.10.91). In addition, details of videos available for hire were regularly sent to me by many organisations including Longmans, British Broadcasting Corporation, and Melrose. JTS and NCS also supplied some videos. For example in June 1990 I previewed a video writing course so that it would be available to staff on a self-help basis. Several staff viewed it with me but we found it to be too elementary for the majority of our staff. I also made notes on several other videos to ascertain and evaluate the content matter before presenting the material, e.g. 'Where there's a will', 'You can't do it all', 'Excellence in the Public Sector', 'Achieving Excellence through Quality'.

Importantly I evaluated the message of the videos, providing a summary with an assessment of its potential value to IOS staff. Not all videos were suitable for use. For example I evaluated one which was loaned to IOS by an Audio/video Library (for schools) virtually free of charge I had intended to lend it to a tutor for an 'Interpersonal skills' course if it had been suitable, however it proved to be scratched and had a very poor sound track. Another video I pre-viewed seemed to be out of date, (18.12.91). It showed manager and staff in a situation which emphasised the hierarchical structure of their organisation and was not applicable to IOS where there was very little hierarchical structure.

On some occasions I asked staff to give their opinion:-

'I showed AD and ME preview of video 'Good Vibrations' (interpersonal skills' to get their reaction to it - for showing to all staff) They felt that the film would be better run as part of a course'. (28.06.91)

Included in my evaluation of training material were three 'Sunday Times' videos which were lent to IOS by NCS. Each of the three sets comprised two video-tapes of approximately twenty minutes duration which gave examples of how effective team-work and quality of output can be built into an organisation. The first tape in each set emphasised quality control at a fictitious firm called 'Lampeter and Sons'.

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The second tape provided a number of case histories based on organisations within the United Kingdom which have a reputation for excellence (e.g. Texaco). An extract of my evaluation report is given in Appendix 11.1. These videos proved suitable for viewing by IOS staff.

b. Assessing interactive video

JTS had an interactive video system (IVS) which was available for loan. In 1991, I discussed with its staff the possibility of borrowing the IVS and its integral set of 'management' learning tapes so as to evaluate them for use by IOS. One of the JTS staff) told me that I was welcome to borrow it but she expressed some concern that it required close monitoring. Apparently staff had to be given time slots in which to use it, otherwise it was not fully utilised. With regard to its value, D said that, although some NERC Institutes thought it was a good system, others thought it was poorly presented. She also pointed out that characters were played by American actors and that staff often preferred British ones.

I borrowed the IVS from JTS on two occasions. Once in 1991 and once in 1992. On both occasions neither I nor the visiting JTS staff could get the equipment to operate properly so I sent it back to JTS for repair (04.12.92). On the second occasion (in 1992) I asked JTS to send the IVS to James Rennell Centre Staff for evaluation. They reported that one of the system disks was missing from the package and they too could not get the system to work properly. Several months later JTS decided not to renew the lease for this equipment.

c. Evaluating computer-assisted learning disks

Before making CAL disks available to all staff, I asked members of staff to evaluate material and report their observations because I felt it was better for certain types of material to be assessed by someone who had not had experience of using it previously. For example, after borrowing a computer-assisted learning disk on stress management from the commercial suppliers. I asked M. who had expressed an interest in taking a course in 'Stress Management' to evaluate it. He reported that it was not very good mainly because it relied on users having full-colour screens on their personal computer (which hardly any staff had at that time), (01.08.90).

On another occasion I ordered a free copy of a disk on UNIX software from a commercial firm and gave to local NCS representative for evaluation - she was not particularly impressed with its content as it did not contain all the information which she felt was necessary to learn UNIX. (14.10.91). On the other hand I received many comments from staff to say that other CAL disks, were very useful.
11.4.5 Negotiating for or obtaining External Resources e.g. materials, staff (JTS, NCS, Institute), accommodation

An important task was to negotiate with JTS, NCS and other external organisations for resources of any description including materials, information or staff help. Organisations external to IOS were sometimes happy to make these resources available free of charge on the condition that they were not needed for their own purposes. For example, as discussed above, JTS and NCS loaned video-tapes and IBM also provided me with a free course on 'Creativity'. Subsidised courses were also offered by the Surrey Training and Enterprise Council.

11.4.6 Ensuring the presence of facilities, equipment, materials, participants, trainers/tutors and other components of a given learning event are present.

One of my most important task was to ensure that all the materials, trainers/tutors and participants in a given course or seminar were present at the right location and time. I performed virtually the whole of this task at the Wormley site but for staff development initiatives run at the James Rennell Centre Chilworth (Southampton site) it was necessary for me to obtain the support of one of the Administrators:-

'Received letter from SH [JRC] confirming who [which participants] would attend the CPS time-management course on 1 March. He confirmed that the JRC conference room was booked and flip charts, overhead projector etc was available - I told him that an additional table was needed.' (08.02.91).

a: Facilities, equipment and materials

In setting up courses, workshops or seminars, I found that, in addition to the need for conference and syndicate rooms, computer terminals which could be linked to the Joint Academic Network (JANET) were sometimes required. Other specialist equipment needed, included a video-camera for observing participants in public speaking course. In one instance the wrong camera was sent and I hastily had to acquire another (24.05.91).

Sometimes audio- or video- tapes were required for use by individual staff to be used in conjunction with courses:-

'S. asked about French Tapes - says he can't find them - Nor has B. got them?.. Said I will find tapes for him.' (11.07.92)

Unquestionably one of the most time-consuming tasks was to ensure that, once a course or workshop had been booked, the number of places on it were filled. JTS had the right to implement cancellation charges for its core management courses and so I had to remind staff of this fact:-.
'I sent note to all potential participants in JTS on-site appraisal interviewing course. Asked them to complete form if they wished to attend. - reminded them of cancellation charges.' (11.09.91)

One also had to inform staff of the cost per person:-

'Memo from myself to all pot. [potential] participants in courses 'Writing reports' and 'writing up meetings' asking if they would like to attend (cost £215 each from projects).’ (30.04.91)

Non-JTS courses did not carry cancellation charges, however in general the onus was placed on line-managers to find a substitute if there was the likelihood of drop-out.

In many instances staff did not confirm that they would attend a course or occasionally they simply forgot it. Sometimes members of the Management Team were particularly helpful in ensuring that course places were filled:-

'I received copy of note from RP to his line-manags. confirming I had arranged a TW [Technical Writing] and Occ sp.[Occasional Speaking] course at JRC in Oct. [He] asked them who in grp would benefit & to allow for last-min. drop-outs.’ (30.05.91)

Despite the fact that some staff forgot about times, locations and dates, others adhered to them and tended to become very annoyed if, for any reason, they had to be changed, though fortunately this was a rare occurrence:-

'P. is upset before because I had to change date on occas. sp. [occasional speakers] course and he couldn’t make revised date. Motto don’t change dates unless it is imperative’ (11.07.91).

In other instances staff would not confirm attendance if they were uncertain about obtaining funds from their respective projects:-

'DPW rang to say he can’t do the Occas. Sp [Occasional Speaking] course as he has little money in project.’ (20.05.91)

Sometimes courses happened to occur too close together. In the following instance I had invited a manager to attend an IOS/Branel University course on 'project-management' but this occurred within a few months of a JTS-run course:-

'L wrote me note to say that he thought opportunity to go on the Brunel course at Urchfont Manor is excellent. But he decided it is too close to his prev. sen.[senior] manage. course.’ (09.10.91)
In some instances the hours did not suit staff or staff were committed on other projects in their spare time:–

'French still seems popular - SBT can’t do it now because hours don’t suit - also doing OU course. Asked me to keep her informed in the future as she may wish to do it (07.10.91)

Sometimes despite the fact that the IOS core curriculum was virtually mandatory for inexperienced staff, some did not perceive that they had time for these compulsory initiatives. One new member of staff told me that he had 'No time’ to go on courses (01.07.91). His line-manager had other views. On the other hand new recruits often wished to participate on courses but were a little wary of them. Thus they needed reassurance that a given course would not represent an ordeal for them.

It was not always possible to place staff of similar educational calibre on the same course. For example for the 'Business French course, I had to ensure that participants were of a given standard as required by the tutor:–

I wrote to all staff informing them of classes in general French conversation to be run in parallel with business French course. Asked them to say which level [e.g. GCSE] they were at.(21.05.91)

Staff attitudes to courses are discussed further in Chapter 14.

c. Trainers/tutors

Usually trainers and tutors were very reliable, and, provided that I had supplied a useful map of the location of Institute sites almost always arrived well in time. Only once did a tutor have to cancel and this was due to sickness.

11.4.7 Ensuring that the standard of accommodation/catering for staff development events are satisfactory

Although this seems to be a mundane task for the training officer, it assumed relatively great importance for course members and for tutors or trainers. The latter were well aware of the need for physiological well-being in students as indicated in Maslow’s 1954 theoretical representation of a hierarchy of needs which could be linked to motivation (discussed in Chapter 5). Moreover participants themselves often commented on the standard of refreshments and meals made available to them. One training officer from a local technical college said that students nearly always took the standard of food provided on courses into account when filling in questionnaires about courses (16.10.91).
11.4.8 Training Staff as Internal Instructors/Trainers

Nearly all staff who regularly gave seminars, either had received a course in 'Presentation skills' or were already very experienced public speakers. However in some instances e.g. 'Health and Safety' seminars where there were a number of different presenters of mixed ability it was usual for myself and other 'presenters' to conduct a rehearsal beforehand, ironing out any major problems. It was important that this task was undertaken for three main reasons:-

a. If staff were not confident about presenting sessions they were unlikely to perform the task well.

b. Participants tended to lose interest in poorly-presented sessions.

c. Participants were more likely to attend further sessions if they had deemed the first ones successful.

11.4.9 Evaluating Tutors/Trainers' input

I performed this task mainly by noting comments from staff, from questionnaires or by attending the course myself e.g. 'French Conversation', 'Health and Fitness'. Comments from staff were made either in writing usually on evaluation forms, or verbally. In Appendix 11.2, I present an example of a written comment about the excellence of a tutor. With regard to verbal communication, I found that if a trainer of tutor was particularly effective, course participants tended to inform me almost immediately. In contrast, if tutors were ineffective (a rare occurrence), staff seemed to prefer to make a written comment on the fact rather than to inform me verbally.

11.5 THE ROLE OF FACILITATOR FOR GROUP AND ORGANISATIONAL DEVELOPMENT.

This role was concerned with arranging cross-team and inter-team training. Relatively few of the Research Council Training Officers who responded to my survey performed this role.

During the period before April 1993, the structure of IOS tended to be hierarchical and in addition to administration, and marketing departments, there existed five main departments based on scientific disciplines, i.e. Marine Chemistry, Marine Physics, Geology and Geophysics, Marine Biology and Ocean Instrumentation. Following reorganisation in 1993, the structure was altered so that the organisation become multidisciplinary and matrix-based such as that described by Handy (1976:301).

Four new multidisciplinary teams were set up, based on the type of research they were to undertake rather than on scientific disciplines. For example one team was
concerned with studies of the sea floor and its associated processes whilst a different team was concerned with the physical properties of the upper ocean, though members of both teams were either physicists, chemists, biologists or geologists. Strategies for facilitating cross-team interaction are given below.

11.5.1 Applying techniques for organization development such as:- Team building, role playing, simulation, group discussion

As training officer I did not directly apply techniques such as role-play or simulation to facilitate organisational development, however I did run management-awareness seminars so as to promote group discussion and to enhance communication between staff. This aspect is discussed further in Chapter 14 (The role of Communicator).

11.5.2 Arrange cross-project education

Previously a series of formal and informal seminars described in Appendices 11.3. and 11.4 respectively had served to promote exchange of ideas across departments. The responsibility to arrange the formal seminars fell to one or two scientific staff who arranged for visits of external speakers. In some instances, departments also invited speakers either from within the Institute itself or from Universities. The system worked well in that it promoted the exchange of scientifically-based ideas both within and across Departments, however I found that, although the seminars were open to all, staff from the ‘Administration Department’ and other support staff did not participate either because they were not familiar with the subject matter or because they felt that they did not have enough experience to ask relevant questions. Thus many were ill-informed about the research undertaken or about the jobs of various personnel. It was for this reason that I introduced a series of 'Young at Heart' seminars particularly for less experienced staff.

This proved to be an interesting exercise because although the seminars were designed for junior, less experienced staff, none-the-less many senior staff also attended and provided valuable input. This aspect will be discussed further in Chapter 12 (The role of Evaluator).

Following the reorganisation of IOS to a matrix-based structure it became clear that additional training was needed, mainly to facilitate inter- and intra-team interaction. Following discussions with the Director and Management Team about the best course of action to take, I suggested that during 1994 and 1995, I should facilitate team interaction by running a series of video-based seminars giving examples of team-building initiatives from external commercial and government-run organisations. Moreover I also arranged for JTS to run a pilot scheme to facilitate team-building for ten staff. The earliest date they could undertake this was in the Autumn of 1994.
I also ran management-awareness seminars which aimed to improve communication. This aspect is discussed further in Chapter 14.

11.5.3 Acting on suggestions for organisational development from team-members.

At IOS, I sought to maintain a pro-active approach to the training function and so was always ready to act on ideas from staff. For example in response to a call from management for staff to remain aware of marketing techniques, two people expressed concern that they knew little about obtaining commercial sponsorships. In response to this I organised, through JTS, a marketing consultant to talk to staff.

11.6 THE ROLE OF INSTRUCTOR.

11.6.1 Job or Performance-Related Training

I rarely presented job or performance-related training as this task was usually assigned to line-managers, many of whom received training in coaching skills during management courses. My survey showed that approximately one-third of other Research Council Training Officers performed this task.

11.6.2 Assisting with on-the-job Training and Development

Line-managers or colleagues of staff usually assisted with on-the-job training or, in some instances, it was undertaken on a self-help basis with the use of computer-assisted learning disks. As training officer I facilitated self-help groups in that together with one of the NCS staff, I collated information about staff expertise in computer software and made the information available via the local computer network. Occasionally I was asked by biology students for help but this was mainly in my role as scientist rather than training officer. However during the course of my daily activities, I did occasionally train students as part of their work experience project, as was common practice at IOS. Usually they helped to file letters or to sort mail shots and brochures. They were a valuable source of help in a busy office. One had to ensure that they also found the experience valuable. A discussion about the value of work experience at IOS from the point of view of students is given in Part IIB.

11.7 THE ROLE OF TRAINER

My role as Trainer took only about 4% of my time. It was an important role but because JTS trainers and tutors were routinely available and there were other efficient
external consultants who were experienced in presenting material, there were few opportunities to practise as trainer thus my role was rather limited. Similarly only one-third of Research Council Training Officers who responded to my survey performed this role. Essentially one had to present training sessions with confidence and to make lively and interesting presentations so as to promote learning, ensuring that participants were able to contribute to the proceedings, for example by discussion. Some of the tasks I performed within this role are given below:-

11.7.1 Conducting and delivering staff development sessions e.g. seminars or workshops

In my role as trainer, I conducted staff development sessions as follows:-


b. I helped the Director to run a half day session for a group of ten staff on 'Total Quality Management' during February 1991.

c. I ran a 'Time-management' course in June 1993

d. I also organised and ran two Health and Safety sessions on the use of Audio-visual equipment during 1993.

e. I organised and ran three 'Introductory' courses between 1991 and 1993.

To undertake the above sessions it was necessary to discuss objectives with participants, to prepare material, to present it in a lively manner which was conducive to general discussion, to motivate staff, provide feedback to participants and to ensure that learning had occurred. The 'Management-awareness' videos included topics on 'Negotiation', 'Motivation', 'Body Language' and 'Stress Management'. Usually these were followed by lively discussion. Forward planning of topics and presentation promoted efficient running of sessions.

With regard to item b., a one-day session on Total Quality Management (TQM) had been organised by the IOS Director. One proven technique for TQM is for staff to review all aspects of procedures which they undertake at work so as to streamline the process and make it more efficient (see Oakland, 1989). The Director had produced a time-table in which the morning session consisted of lectures and discussion. The afternoon was set aside for practical work. Here participants (who were split into two similar groups) were asked to follow procedures described earlier in the day, so as to find ways of improving their strategy for ordering, costing and receiving goods. Essentially the aim was to increase quality throughout the organisation.

I supervised the afternoon session for one of the groups while the Director supervised the other. One main task as trainer was to ensure that procedures for training in TQM
were followed and that all participants had the opportunity to express their views whatever their level of seniority. A further task was to provide feedback about their performance and to promote discussion and thought so that a conclusion was reached about how to streamline the work in order to contribute to total quality within the organisation. Later during this session I ensured that participants collated their results for final presentation thus reinforcing the final learning.

Generally most of the sessions in which I acted in the role of trainer proceeded without any difficulty. Only once did I have a slight problem and that was during an 'Introductory' course that I was running for several new staff. Prior to this course I had asked staff (who had recently been recruited) to wear name-badges on the day. This was mainly so that I knew who they were. They did so, but prior to the session had exchanged name-badges between themselves. Fortunately I realised this had happened at the start of the course, otherwise it could have resulted in some confusion. I made a resolution not to ask new participants to wear name-badges but instead to ask them to introduce themselves at the start of each course. (10.07.91).

11.7.2 Lecturing and Leading Discussions

This was one of my routine tasks in the context of video-based training of various types. As discussed elsewhere in this thesis, one of the reasons for running these sessions was to promote discussion and to improve communication between staff of all grades and their line-managers. In promoting these events, one had to take care to provide regular pauses for questions and discussion. Often it was necessary to inject some humour into the session, especially if arguments between staff became unduly heated. In some instances it was useful to obtain technical assistance from other tutors for parts of a session. For example I asked two experts in the safe use of visual display units to help me to run a safety-awareness session.

11.7.3 Operating audio-visual equipment

In the role of trainer one inherent task was to operate video- and film- projectors which previously had been set up in the conference room. If audiences were large, two sets of equipment were needed. It was important to find the required place on the video-tape prior to the start so as to run each session with maximum efficiency. Similarly there was a need to be conversant in the operation of tape-recorders and overhead projectors.

11.7.4 Coping with learning groups

I undertook this task in my role as trainer. I found that it needed a considerable amount of skill to coping with learning groups who were either of mixed ability or who had strongly opposing views or who were resentful about being asked to
participate in courses. One had to relax, to give everyone the opportunity to present their views and to cope with the more 'difficult' participants ensuring that the discussion was not dominated by just a few staff. I received some feedback from a senior member of staff:

P. said "I liked the way you ran that session (referring to stress management) nice and relaxed" (14.11.91)

Generally training sessions provided useful vehicles were discussion with staff about their perceptions about the organisation - an indication about the prevailing culture. This aspect will be discussed further in Chapter 14 (Communication)

11.8 SUMMARY OF CHAPTER 11

11.8.1 The roles of Programme Designer, Instructional Writer, Programme Administrator, Facilitator of Group and Organisational Development and Trainer are all concerned with the design and implementation of specific programmes. These roles accounted for a total of about 30% of my work as Training Officer.

11.8.2 The role of Programme Designer, was concerned with designing specific programmes within the context of stated objective and also with the sequence of content and activities. Several interest groups were usually involved with programme design, for example: Unions, Management Teams, resource providers and potential participants. At IOS programme design was flexible rather than prescriptive. Much of it was curriculum-based. It was usually necessary to evaluate and select instructional methods.

11.8.3 The role of Instructional Writer was concerned mainly with preparing overheads for training sessions and with preparing summaries of video sessions. It represented less than two percent of my time.

11.8.4 The role of Programme Administrator was extremely important, complex and time-consuming. It was concerned with the organising of specific events and ensuring that they ran smoothly. Organising abilities were needed to ensure that participants, trainers/tutors and required materials were all assembled at a given location, date and time. Negotiating skills were essential to obtain reductions in fees for trainers, accommodation or for the use of resources. Funds needed to be managed and invoices needed to be processed for payment. An important aspect of this role was to evaluate potential learning material such as video-based training tapes. It was sometimes necessary to recruit colleagues as presenters and to ensure that they had the necessary skills for this task.

11.8.5 The role of Facilitator for Group and Organisational Development was undertaken at IOS mainly in the context of providing a comprehensive seminar programme to
which I contributed by running management-awareness video-based sessions and organising informal seminars. As a result of re-organisation at IOS, there followed discussions in which I was involved which sought to explore and implement methods for improving inter- and intra-team communication and team-building.

11.8.6 The role of Instructor usually involved on-the-job training. I rarely undertook this task at IOS mainly because it was undertaken by line-managers. My survey showed that approximately one-third of other Research Council Training Officers performed this task. One initiative which was linked to this role was to facilitate self-help computer-based learning.

11.8.7 The role of Trainer is an important aspect of the job of Training Officer but is not time consuming. It requires, confidence, resilience and the skills to make lively and interesting presentations, while at the same time ensuring that relevant learning occurs. As trainer, facilitator or presenter of staff development sessions, the training officer may receive valuable feedback from staff about their perceptions of the organisation and the prevailing culture.
CHAPTER 12

THE ROLE
OF
EVALUATOR (POST-EVENT)
AND
ASSESSOR OF NATIONAL
VOCATIONAL QUALIFICATIONS
(NVQs)
Figure 12.1  Percentage of time spent as 'Evaluator' 

Based on 67 hours per year spent as 'Evaluator' of staff development events
12 THE ROLE OF EVALUATOR (POST-EVENT) AND ASSESSOR OF NATIONAL VOCATIONAL QUALIFICATIONS (NVQs)

12.1 INTRODUCTION

Within the field of Training and Development the types of traditional training courses offered and the modes of study available are reasonably well understood. Less is known about the extent to which various staff development initiatives form a useful basis for the updating of information by scientists, technologists and support staff and for development of management skills. Furthermore little is known to what extent such staff development initiatives promote organisational development.

Recently, attention of training professionals has become focused on finding ways to improve training programmes systematically and to promote their cost-effectiveness. In this Chapter, I describe my role as Evaluator of Training at IOS and describe the tasks inherent in that role (sections 12.2-12.9). Furthermore in Part IIB I present an evaluation of training at IOS.

The role of Evaluator was time-consuming and complex. Routine daily activities accounted for approximately 8% of my time (67 hours per year). As discussed in Chapter 5, evaluation is basically a procedure or set of procedures whereby information is obtained on the effects and costs of training initiatives. It consists of a systematic collection of descriptive and judgemental information which provides organisations with information that allows them to make effective training decisions and to increase the effectiveness of their staff development programmes. It is concerned with the assessment of the total value of the training or education system programme in social as well as financial terms, (Hamblin 1974:33-36; Easterby-Smith 1986:46-47). As Blanshard and Montgomery (1978:14-15) point out, evaluation needs to be planned, objective, verifiable, cooperative and cost-effective.

Approaches to evaluation can be divided into five basic types (Bramley, 1986:7):-

a. The systems approach
b. The goal-based approach
c. Goal-free evaluation
d. The professional review approach
e. The quasi-legal approach

In my role as training officer, I tended to adopt elements of the systems approach and goal-based approach in that I calculated the number of staff who participated in programmes, examined the objectives of training and development initiatives and assessed the effectiveness of the programmes in terms of objectives such as improvement in work-based skills and in organisational growth. In accordance with Hamblin's 1974 cycle of evaluation, I provided feedback to trainers, JTS and other staff at NERC headquarters and to the IOS Management Team so as to influence
future plans for staff development. The types of evaluative feedback which I sought to provide included information on the following:-

a. The curriculum available to staff
b. The structure and content of specific programmes
c. Attainment of training objectives
d. The use of resources
e. The provision of funding

(see Burgoyne and Singh, 1977:17-21; Easterby-Smith, 1986:34-35).

In addition I provided feedback on the culture of the organisation and staff attitudes to training and development initiatives based mainly on ethnographic observation and which help the Management Team to assess organisational development.

As discussed in detail in Part IIIB, any person's perceptions of quality in training is relative in that it relies on the definition of standard required by the organisation or the potential employer or individual staff (Plant and Ryan, 1992:22-24). Moreover, as Kirkpatrick (1960:29: Easterby-Smith 1986:28) point out it is difficult to assess how much of an improvement is due to training as compared to other influences.

With reference to cost-benefit analysis, it was necessary to gain an understanding of improvements that were brought about by staff development programmes in terms of the benefits not only to staff but also to the organisation in the use of new technology, improved efficiency and effectiveness and increased output. Pepper (1984:101) points out that costs may be computed and measured against achieved objectives in a number of ways, depending on a variety of factors, not least what the training department is trying to show. He suggests that the main rule is that training professionals should 'understand the physical and organisational processes and activities' as fixed costs in terms of numbers alone present only part of the picture. Pepper suggests that authority often presents an obstacle to a systematic evaluation of training and that 'hierarchical influences' may persuade training officers (or other educational professionals), not to devise an examination of results. There are two factors involved here:-

a. either the training officer may be shown up in a bad light if the training proves to be cost-ineffective or,

b. Top management may be shown up in a bad light for asking for the training if it proves to ineffective.

Furthermore evaluation itself is costly and uses resources which could be applied to increase the training and development initiatives, so it must be cost-effective.

In some instances increased training may be easily measured in terms of increased productivity e.g. by workers on a production line. In other instances e.g. management
training, the benefits to the organisation or its staff may not be recognised until long after the training event. There are other examples where training can increase safety within the workplace, not only is there a legal requirement for certain aspects of safety training which must be enforced by the training officer. Moreover s/he may feel that union or employee pressure for given training fully justifies the expense in terms of time and other resources in that it makes for good working relationships.

The assessment of competence-based training towards National Vocational Qualifications (NVQs) represents a type of evaluation in that the standard reached by participants, following a period of training, is measured against national standards which, if reached, lead to certification. At IOS, I did not undertake this role, neither did any of the Research Council Training Officers who responded to my survey. The subject of evaluation is examined further in Chapters 17 and 18 (Part IIB).

12.2 PROCEDURES FOR EVALUATION

Under the leadership of Dr Summerhayes, the Director of IOS, a pro-active staff development and training programme was launched at the beginning of 1988, a summary of which is given in Chapter 1. Essentially its goals were:-

(a.) To help staff improve performance in terms of quality and quantity of output while maintaining its reputation as a centre of excellence.

(b.) To develop people in various ways, e.g. by teaching them how to manage themselves and others better)

(c.) To change the culture, adapting to change where necessary e.g. to become scientist-marketers) and to improve communication channels throughout the Institute.

(d.) To improve Health and Safety

(e.) To broaden and strengthen its customer base by improving presentation and marketing, thus increasing income

In my role as evaluator I received feedback from the IOS Management Team, trainers, course participants and/or line-managers in a variety of forms. I sought to identify the impact of the staff development programme and to measure its cost-effectiveness by various methods. However in practice, the procedures for evaluation were not as simple as they first appeared and, in some instances were difficult to achieve. In other instances I received valuable information about the climate of the Institute during informal discussions with staff. As a number of authors including Kirkpatrick (1959:1-5) point out, evaluation may be undertaken at four different levels:-
a. **Reaction of participants.** For example, how participants in training programmes react to a given initiative including its presentation, content and objectives.

b. **The amount of learning that has occurred.** For example changes in skills and attitudes or behaviour of staff which take place as a result of training and development initiatives and which lead to personal and vocational development.

c. **Transference of newly-acquired knowledge.** For example whether newly acquired information has been used by staff and managers in their job.

d. **Whether the organisation has benefitted.** For example whether improvement in performance by staff arising from training and development initiatives has impacted on the organisation in terms of measurable criteria such as increased output, increased share of markets, maintenance of a good health and safety record.

Levels a-d as described above can be linked to cost-effectiveness in various areas of training and development. The costs given in this thesis are based on approximations because I found that the actual costings for individual courses were difficult and cumbersome to obtain for two main reasons. Firstly costs for vocational training were paid by each department from their separate projects and I did not routinely receive a copy of the financial accounts. This was compounded by the fact that costs for travel and subsistence were often paid separately, sometimes several months later and were not necessarily paid from the same account.

In estimating the training costs for each year I included the costs of formal courses, film and video sessions (including Health and Safety), informal and informal seminars and computer-assisted learning. Costs for travel to external seminars were excluded because it was virtually impossible to keep track of staff attendance at these. Costs for 'on-the-job training' could not be assessed as there was no formal mechanism for recording the number of hours spent by staff or managers for on-the-job training.

As Evaluator I assessed a variety of initiatives (See Figure 12.1). These included commercial or government-run courses, customised courses, video-based management-awareness sessions and programmed instruction such as computer-assisted learning. I also monitored attendance at seminars (see Figure 12.1). It is expensive in terms of time and effort to collect data on the benefits of various staff development programmes so this had to be undertaken efficiently without involving the staff concerned in completing over-long questionnaires or in long drawn out discussions. Some examples of the methods used are described below.
12.3 METHODS FOR EVALUATING COURSES

Training Officers may evaluate staff development programmes in a number of ways which may complement each other. One well known method is by collating ethnographic data. For example much information may be obtained from informal discussions with staff as I discussed in Chapter 6 (methodology). Informal conversations may yield information on staff attitudes to training initiatives and whether they are likely to gain from participation in courses, seminars etc. In this context the Training Officer must be prepared to accept criticism as well as praise in the daily course of events, particularly when acting as Change Agent. Indeed as London (1988:22) pointed out, change agents must be resilient.

12.3.1 Collating ethnographic/discussion data

During my daily activities as Training Officer at IOS between May 1991 and April 1994 inclusive, I collated informal and informal comments about staff development initiatives. These arose from conversations with staff, tutors or line managers during the course of my daily activities. Written comments were also noted. As discussed in Chapter 6, the normally busy schedule prevented me from recording all comments, however during the three years of my research it was possible to 'keep a finger on the training pulse' and to obtain an understanding of staff attitudes to various training and development initiatives.

12.3.2 Information from questionnaires

I obtained further information about the impact and relevance of courses from questionnaires which had either been designed and distributed by myself or by other trainers/tutors. Basically there were two different types of questionnaire:-

a. End-of-course questionnaires

b. Post-course questionnaires distributed to staff several months to a year following a given event.

From these I collated and summarised information about the course relevance, methods and the amount of learning that had occurred. I also invited comments about administrative arrangements and domestic arrangements:-

End-of-course questionnaires

At IOS, end-of-course questionnaires were usually designed by the programme designer who were sometimes from JTS or from external organisations. An example is given in Appendix 12.1. These questionnaires were distributed towards the end of courses by tutors or trainers. At a seminar which I attended at Southampton
University Management School during 1992, one professor suggested that these end-of-course questionnaires or 'Happy sheets' as they are sometimes called, provided a limited measure of the quality of courses. Other training professionals disagreed, saying that they were of little value because they did not inform whether transfer of learning to the workplace would occur. Although I did not routinely receive all of these, I found those I had to be a useful source of information if used with other forms of evaluation.

Post-course Questionnaires

I also sent out questionnaires to participants six months to a year after a course had been completed so as to assess whether they had been able to transfer newly learned material to their work (or leisure), (see Appendix 12.2) In some instances where a training initiative had been attended by most staff, for example, Health and Safety seminars, I distributed questionnaires to a sample of staff rather than to everyone so as not to encroach too much on staff time. In undertaking post-course evaluation I remained aware that day-to-day occurrences since the training event might have interfered with the participants recall or with the transfer of learning to the workplace.

In addition NERC establishments Division allowed me access to evaluation sheets that they had sent out as a follow-up to JTS courses. Thus I was able to compare the latter with information obtained from questionnaires sent to IOS staff where relevant.

12.3.3 Information from line managers

In addition to information obtained by ethnographic methods and from questionnaires, it was also possible to obtain a limited amount of information from written comments made by line-managers on the training section of annual staff reports.

12.4 EVALUATING STAFF-DEVELOPMENT INITIATIVES

In some instances it was possible to evaluate staff attitudes to training initiatives whilst training was still at the planning stage. For example the following information recorded in my diary gave support to my intention to provide language training at IOS:-

'Met SB on stairs. He is delighted that we are going to offer French lessons. He asked me about getting courses in Russian' (31.05.91)

and the following comment had reinforced the view of the Management Team that 'Marketing' courses were necessary:-
'Visit to JRC It is interesting that T. said that P. had noted that several of his staff had asked to go to C.'s seminar [on marketing procedures] he said he is pleased about it' (17.07.92)

However not all comments were complimentary. Some staff clearly felt that training was impinging too much on their working life :-

'P. - comment at coffee ’ There's too much training’ (16.05.91).

During 1991 another person also asked me if I though I was 'overdoing' the training. However this type of comment was rarely heard during 1992 to 1993. Following these comments it was necessary in my role as Training Officer to judge whether there was indeed too much training (in which case the level should be reduced) or whether these were isolated comments. In this instance I judged them to be the latter as very few others to this effect were heard.

12.4.1 Evaluating the Total Staff Development Function

Evaluation of the total programme was undertaken early in 1994, towards the end of several years of a five-year comprehensive staff development programme. An example of a completed questionnaire is given in Appendix 12.3. As discussed above, the form was designed to assess the impact of the staff development function on the organisation in terms of :-


b. Benefits to the organisation.

In the example shown, the line-manager shows clearly that certain of his staff have benefitted particularly from the course in 'Project Management'.

12.4.2 Evaluating Commercial/Governmental 'Ready-made' courses

Four of the twelve respondents to my survey of Research Council Training Officers undertook this task. Information was obtained about JTS- or NERC-run, or Further/Higher Education and commercial courses. I evaluated several different types of course in my role of Training Officer. All are discussed in Part IIB of this thesis. As an example in this section I provide the type of information and data obtained from ethnographic observation and questionnaires relating to courses in 'Technical/Report-writing' and 'Leading Meetings' run in-house by a commercial firm. The following is an extract from my diary following a conversation with a participant two days after a course:-
'All R’s students seem to be enjoying his courses this week. V. showed me some of the reports she had written on R’s report writing course - she seemed proud of them - they are well written'. (07.06.92)

and

'People seem to be enjoying R’s course today 'Leading discussions' (AV. "It is super" -smiling), (04.06.92)

Post-course questionnaires also provided useful information. For example the answer to the question 'Have you had the opportunity of putting into practice what you learned on the course' yielded the following information from a participant who had completed a 'Technical Writing course in 1992:-

'It was the first week back from sea and I had until the middle of the following week to get a paper ready for publication..I managed it with time to spare'

On the other hand not everyone had done as well as the person portrayed in the above example. For instance, during 1993, one line manager had commented on an annual staff report that, although one member of his staff had completed a technical writing course, there was still a need for him to undertake a further one.

Other ready-made courses evaluated by ethnographic observation and/or questionnaires included JTS course in 'Management', 'French language', 'Public speaking', 'Managing Research and Development' and 'Interpersonal Effectiveness', the latter two of which were run by a London University.

12.4.3 Evaluating Programmed Instruction

Programmed instruction occurred mainly in the form of computer-assisted-learning disks which were used for training in use of computer software such as 'DOS', 'Microsoft Word' and 'Lotus'. This training method was evaluated mainly by noting comments from staff and line-managers. The following is an example from my diary of comments from a member of staff:-

'KT. said that the DOS CAL [Computer-assisted learning] disk is basic but good' (22.07.92)

and comments from a line-manager:-
'MM stopped me in the corridor and said that his group were very pleased with the 'Word' CAL disks - approximately four were sharing the learning disk - [I asked them to complete form for the licensing agreement' (22.07.92)

12.4.4 Evaluating audio- or video-tape sessions

Audio-tapes were used mainly for French conversation courses while video-tapes were used for running 'Management-awareness' sessions. The following represents an evaluative comment:-

'D. asked for french audio tapes He says he doesn't have time to go to lessons but looks forward to spending 15 minutes during the journey to work when he listens to the tapes'. (01.07.91)

During 1989-1991 the IOS Management Team felt that staff generally lacked training in management-awareness skills and so the latter were encouraged to attend video-based management-awareness sessions. I ran video-based sessions periodically which included topics such as 'Coping with Stress', 'Delegation', 'Body-language' and 'Team-work'. The sessions usually ended with a fifteen minute discussion which often continued beyond the seminar room indicating that at there was a genuine interest in the topics:-

'Saw KA at JRC He said my management video [about motivation and delegation] had helped him at his interview for promotion' (23.07.92)

Further comments from my diary provide an insight into the types of information which could be gleaned as a spin-off when evaluating training sessions. For example in the following extract I note the existence of staff problems within the organisation (e.g. reluctance of staff to discuss problems with their line-managers) and the amount of interest shown on the subject of 'stress management'. (In the diary I had split the information into several smaller components depending on type of content, however in the interests of brevity, I have shown them in one paragraph in this section. I noted that the video was supported mainly by top management or lower grades of staff rather than by middle managers:-

'I have run a video on stress management for the past three days. The reaction is favourable only 2 people out of 95 complained that the video isn't helpful. Mostly young staff attended the sessions (+ few top managers). One top manager said 'I avoid stressful situations by deliberately not thinking about the problem'. Comments made by staff following video sessions on stress included words to the effect that staff in
lower grades are often put under stress by getting too much information from the top. Comment from a senior manager - "Perhaps we should be careful about how much info.[information] is cascaded downwards to junior grades". Several people (middle and lower managers) said "you should make sure our line managers are here to see these". Several [people] said they couldn’t approach their line managers with a problem "even if the door is open". Most people agreed it is best to discuss problems with a good friend or someone at work who they respected. Discussion grp at end of stress video said friend (in whom they would confide) would need "a positive attitude". Whole session quite light-hearted. People were keen to discuss openly antidotes to stress. It seems to have been a talking point in the corridors’ (13.11.91)

12.5 EVALUATING CUSTOMISED COURSES RUN AT IOS (INCLUDING PILOT SCHEMES)

Several courses customised to IOS needs were run during 1988 to 1994 including 'Time-Management' and 'Marketing'.

An example of the type of information which can be gained from questionnaires is given in Chapter 20, Tables 1-60. Some courses were run prior to my research on the training function, therefore I evaluated them mainly by post-course questionnaire. An example of a completed form is given in Appendix 12.4. I designed the questionnaire so as to evaluate the following:-

a. Reaction of participants.
b. Methods used
c. The amount of learning that has occurred.
d. Transference of newly-acquired knowledge to the job.

One participant did not complete the questionnaire. She expresses concern about her workload (Appendix 12.5). In most instances it was possible to triangulate information from ethnographic observation and from questionnaires. For example the following note from my diary reinforced information derived from questionnaires which informed me that many staff found books (given out as part of the time-management course) interesting:-
'Went to the pub .. saw M. he said that he had read some of the
time management book and [said] "it is really interesting" '
(26.06.92)

Courses in 'French business conversation' customised to IOS needs were also
evaluated. Initially the course was almost totally subsidised by IOS out later, due to
lack of Institute funds, staff were asked to pay most of the cost except for
accommodation charges. Post-course questionnaires were sent periodically to
participants. The following are extracts from my diary:-

'Numerous participants in the French course say how good it is.
One changed courses to one which is harder.(there are four
groups)' (01.11.91)

and

'Several staff have said that D. (French teacher is excellent -
they are making good progress. Also some [are] using French
[audio/video] tapes' (24.06.92).

Despite the overall view that the course was excellent, I found that the drop-out rate
was greater during 1991-1992 when the course was subsidised than during 1993-
1994 when participants themselves paid the fees.

12.5.1 Evaluating pilot schemes

I also evaluated several pilot schemes including 'Health and Fitness' and
'Interpersonal Skills'. For this I provided end-of-course questionnaires and followed
these up later with post-course questionnaires.

The Health and Fitness course was run virtually free of charge by the tutor who,
although trained to give such a course needed to enhance her skills. I put the idea of
the course to the Health and Safety Committee for review. They agreed that it should
be run:-

' T met V and myself in Pub. Said that a.m. H & S meeting
members agreed it is good to have a health course' (23.05.91)

The participants were appreciative as shown in my diary:-

'Last day of health course - we are all sorry to see it end. K.
[teacher] said she would come back to give lecture in Oct'.
(09.07.91)
Similar views were expressed in the end-of-course questionnaires from which there was a 78% response rate. In answer to the question:-

'If there are any comments about the effectiveness or appropriateness of this course that you would like to give please do so as it will be useful in the design of additional courses'

I received a variety of comments which were helpful to me as Evaluator in deciding if there should be follow-up events. These included:-

'I am sure others would benefit from this course, I was happy to participate'.

'A good course that would be beneficial to several of our more senior members of staff if it runs again'.

Other examples are given in Chapter 20.

In my role as Evaluator, I was also able to evaluate methods used during the 'Health' course. For example in response to the question 'What helped your learning', I was able to summarise comments as follows:-

<table>
<thead>
<tr>
<th>Comment</th>
<th>No. of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent/right level of tuition</td>
<td>3</td>
</tr>
<tr>
<td>Doing things together/in groups</td>
<td>2</td>
</tr>
<tr>
<td>Doing the course with people of different levels of fitness</td>
<td>2</td>
</tr>
</tbody>
</table>

Only four participants recorded that there had been any hindrance of learning. In answer to the question 'What hindered your learning' I received the following responses, only one of which was attributable to methods employed during the course:-

<table>
<thead>
<tr>
<th>Comment</th>
<th>No. of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ill with ear infection</td>
<td>1</td>
</tr>
<tr>
<td>Being on holiday for part of the course</td>
<td>2</td>
</tr>
<tr>
<td>Having to concentrate on pulse rate</td>
<td>1</td>
</tr>
</tbody>
</table>

As training Officer I designed and ran several types of 'Introductory' (one day) course for staff new to IOS. Although some sessions were successful, others were less so. Originally NERC had run these at their Headquarters but in recent years had asked each of its component Institutes to provide them. The problem was that most of the new staff were employed by IOS at the James Rennell Centre, one of the sites managed by Southampton University but team-work between the James Rennell Group and the Wormley Group was necessary.

Later, I split the Introductory courses so that only the morning session was seminar-based while the afternoon was taken up with a visit to each IOS department at IOS
Wormley. I found that new recruits enjoyed this visit and viewed it more favourably than a discussion-based course:-

Introductory course (cont) In afternoon new staff shown round labs. Several said they enjoyed this better than the morning session.(18.11.91)

12.6 MONITORING ATTENDANCE AT SEMINARS

The content of seminars at IOS embraced a wide range of subjects (see Appendices 11.3-11.4). Formal seminars were arranged by scientists on a rotation basis. Informal seminars were usually arranged by departments. In addition I organised an informal series of 'Young at Heart' seminars on general oceanography especially for less experienced staff so that they might not feel constrained in the presence of more mature staff if they wished to ask questions:-

I have set level of informal seminars as suitable for grades SSO and below - other staff are afraid to ask questions if senior staff are present (12.11.91)

I found that some seminars dealt with specialised subject areas and so, although they were open to anyone who wished to attend, in practice, participation tended to be confined to experts and students who worked in related topics. For example attendance at a broad-based seminar which covered a topic such as research in Antarctica tended to attract much interest while that on specific physical oceanography attracted fewer staff.

During 1993, one seminar organiser did raise the subject of the lack of interest in formal seminars and discussed this with me. We put the problem to the Management Team for discussion (05.01.91). Most felt that, whatever the position, seminars on a wide range of topics should continue and that staff should be encouraged to attend One manager suggested that it should be compulsory for them to attend:

'R. says [may] solve problem of lack of interest in seminars by getting a mix of more dept/gp seminars and informal seminars - says might be better to hold them at 4.00 p.m. in afternoon' - [to] wind down (06.01.93)

and:-

'M. says solve problem of lack of interest in seminars by making it essential that people go to them - needs directive from CPS [Director]' (06.01.93)
The extent to which staff attended conferences external to IOS was more difficult to evaluate. However, from discussions it seemed that senior managers attended an average of 3 conferences or meetings per year while this figure was lower for less experienced staff. Despite the fact that external seminars on management techniques were publicised to staff, few took them up.

12.7 EVALUATING JOB-EXCHANGE, MENTORING AND WORK-EXPERIENCE

At IOS although job-exchange and mentoring programmes were not formally undertaken, supervision for post-graduate students and undergraduate work-experience students was common. As training officer I had little part to play in placing and organising training for post-graduate and undergraduate students as this task was undertaken either by departments or by the Schools Liaison Officer. However, I did send questionnaires to a sample of work-experience students so as to evaluate their training and development at IOS. The majority had found their time useful (Discussed further in Part IIB). In this context, ethnographic observation was also useful as a method for evaluation as recorded from my diary:

'Saw L. [Work-experience student] today. He came to say good night. I said 'do you still like it here'; He said "Oh Yes" definitely and laughed as though he meant it.' (22.06.92)

12.8 IMPACT ON THE ORGANISATION OF STAFF DEVELOPMENT PROGRAMMES

I found that a number of factors caused difficulty in assessing benefits to the Organisation because a number of causal effects contributed which it was sometimes difficult to separate. For example, in some instances, staff had been unable to use their newly-learned skills due to sea-going or job-changes and so it was impossible to assess its impact. For example, one line-manager who was involved with overseeing research and development in his department had been unable to practice his new management skills immediately due to sea-going commitments. Another had been unable to practice his new interviewing skills as often as he had wished due to other work commitments:

'Visit to JRC. TG said that he had been on a recent selection and interviewing course but that he hadn't had much opportunity of using it.' (17.07.92)

A further problem was that an improvement in performance by individuals was not necessarily attributable to training programmes. Indeed it could have been ascribed to other sources. For example, an apparent increase in efficiency within the organisation could have been due to a variety of factors as discussed by Easterby-Smith (1986:51-53).
12.9 ASSESSING COST-EFFECTIVENESS OF EDUCATION AND TRAINING

Most organisations who sponsor education and training initiatives, quite reasonably expect that these programme in general should be reasonably cost-effective in terms of learning by individuals, and subsequent transference of skills, knowledge etc. to a given job or task. At the regular NERC local Training Officers' meetings the usefulness of evaluation strategy was usually discussed informally. For example in October 1992 items for discussion included evaluation of Joint Training Services courses (21.10.92).

When calculating the cost-benefits of various courses it was necessary to compare costs with the degree of usefulness as perceived by participants and their managers. For example in one instance one member of staff had participated in two courses of similar cost and was in a position to provide some comparative feedback:-

'[I] Discussed .. interpers [interpersonal]' skills course with PW
.. He says that R&D [Research and Development] course is not as good as I/P [Interpersonal Effectiveness] skills [courses] which are excellent (08.06.92)

A comprehensive summary of costs of the IOS staff development programme is given in Chapter 25.

12.10 COMPILING A SUMMARY REPORT ON THE RESULTS OF EVALUATION

One of the tasks of the training officer as evaluator is to present the Management Team and Board of Directors of the organisation with a comprehensive report on the cost-effectiveness of training and educational programmes. Some organisations may require this annually, others may require it less frequently. The information in Part IIB provides an example of material which could be included in such a report.

12.11 SUMMARY OF CHAPTER 12

12.11.1 Evaluation consists of a systematic collection of descriptive and judgemental information which provides organisations with information that allows them to make effective training decisions and to increase the effectiveness of their staff development programmes.

12.11.2 In my role as evaluator I received feedback about staff training and development initiatives from the IOS Management Team, trainers, course participants and/or line-managers in a variety of forms.
12.11.3 I sought to identify the impact of the staff development programme and to measure its cost-effectiveness by various methods. In practice, the procedures for evaluation were difficult to achieve in some instances.

12.11.4 In my role as evaluator I undertook evaluation at four different levels in that I assessed the reaction of participants, I assessed whether learning had occurred and whether this had been used to improve work-related skills and I examined the benefits to the organisation.

12.11.5 Procedures for evaluation included the design and distribution of end-of-course and post-course questionnaires to staff and line managers, ethnographic observation was useful in that it tended to be continuous, resulting from informal discussions with staff, trainers and tutors. Examination of IOS annual reports and other documents also proved to be useful.

12.11.6 Evaluation occurred either while training was still at the planning stage i.e. by assessing the attitudes of staff to forthcoming courses, or it was undertaken after the courses were completed. Evaluation of the total programme was undertaken towards the end of several years of an enhanced staff development programme which ran from 1988-1994.

12.11.7 Examples of tasks undertaken in my role as evaluator and described above included:- an evaluation of commercial or customised courses and also pilot schemes and work-experience for students.

12.11.8 The task of assessment of the impact on the organisation of staff-development initiatives included enquiry into publication rates of staff, the standard of publication, Health and Safety records and comparative levels of commissioned research achieved during 1988 until 1993.
CHAPTER 13

THE ROLE OF STATISTICIAN
Figure 13.1 Percentage of time spent as 'Statistician'

- Keep up to date with Information Technology: 11%
- Communicate (Reports): 11%
- Present / Analyse Statistics: 28%
- Maintain Computer Records: 50%

Based on 50 hours per year spent as 'Statistician'.
13 THE ROLE OF STATISTICIAN

13.1 INTRODUCTION

The role of Statistician is concerned with various aspects of the total staff development programme.

The roles described in this Chapter, accounted for a total of about 6% of my time (50 hours per year) as Training Officer (Figure 7.1). At least half of this time was spent in maintaining computerised records and at least another quarter in analysing and presenting statistics for annual publication and for internal reports as shown in Figure 13.1. Some of the main tasks inherent in this role, including remaining up-to-date with information technology, are given below.

13.2 REMAINING UP-TO-DATE WITH INFORMATION TECHNOLOGY

To undertake the role of Statistician, it was necessary to have at least some working knowledge of information technology. Three out of twelve Research Council Training Officers who responded to my survey also undertook this task. Basic proficiency was required in the use of computers and relevant software including electronic mail. A knowledge of data base design and basic statistics was also important. Several of the tasks involved collation of information held on a training data base and the preparation of graphs to show current trends.

13.3 MAINTAINING STAFF DEVELOPMENT RECORDS ON COMPUTER

The task of inputting and maintaining staff-development records on computer was undertaken by one-third of Research Council Training Officers who responded to my survey. One of my first priorities in the role of Statistician was to establish a way of maintaining records of training needs and training provision. Joint Training Service at NERC HQ had provided me with a software package which was run on a personal computer and which, on commencing the job as Training Officer, I had evaluated for several months. The package was run using 'ORACLE' language. Initially I used it regularly but from my point of view there were several drawbacks. First of all it was a commercially-designed package and it was not possible for me to alter it to suit the IOS requirements without incurring additional costs. Moreover it required precision input in a certain order. For example, I needed to input all names of staff and their pay or staff codes, the name of the vendor of each course and the exact date of each course before it would accept any further information about participants in given courses. Furthermore the system, although excellent in some ways, was not supported by the NERC Computing Service (NCS) staff and any training on the use of the system beyond the initial four days of training was to be supplied by the commercial firm at a cost of £400 per day. At the end of 1991, JTS and IOS were unable to pay
for any updating of software or maintenance (due to lack of funds) and so I investigated other options for maintaining records.

Meanwhile earlier in 1991, I had discussed the problem with NCS staff and we had agreed that it should be feasible for me to design a data base to be run on the IOS pre-existing ORACLE system. This had several distinct advantages. First of all, with help from NCS, I could design the data base tables so as to input data exactly in the order I required and could make daily alterations if necessary, for example, this was sometimes needed in the case of staff who dropped out of courses. Secondly and, most importantly of all, the whole system would be automatically backed up every day by NCS at no extra charge to IOS. Furthermore any of my training for running the ORACLE system would be available from NCS free of charge. Thus in 1991 I commenced with the new system which proved to be successful.

After having obtained a confidential identification code from the computer department, the first step was to set up data tables which I could use to keep a record of staff development needs. Here it was necessary to list the name of the course needed by staff, either as given in the training section of individual staff reports or as listed from my notes during my day-to-day discussions with them (see Chapter 9). It was also important to maintain computerised information on the courses staff had completed, together with dates. This information was taken from my administration records which were kept in my role as Manager of Training and Development and as Programme Administrator. In some instances, where staff had made additional arrangements to participate in vocational courses, they kept me informed of dates. Sometimes the tutors also informed me of staff who had 'dropped out'. For example the French tutor, who ran a series of 'French Conversation' classes throughout the year supplied me with a list of participants. (16.01.92).

In setting up the data base, I had to decide what information I needed to include in each table, for example, staff names, initials and grades and personal number codes (to ensure anonymity if required). A description of one of the data base tables, used for storing names of staff and courses completed, is described in Figure 13.2. The data were loaded from a word-processing package using the format as shown in Figure 13.3. The ORACLE programme language was useful in that it would allow one to produce output in any order i.e. Names, initials, or grades and would sort the records of types of course so that all similar ones could be grouped together. The programme would also allow one to sort records according to dates of courses, or to select only those undertaken in certain years (ORACLE Corporation 1989). An example of a command statement used to obtain data from a Table called 'ALLTRAIN2', which holds information about participants and the courses they had completed is given in Figure 13.4. An example of output from 'ALLTRAIN2' is given in Figure 13.5. These data could then be used to compile graphs for publication.

A further priority was to collate information from questionnaires about previous staff training which had occurred up until 1988, prior to my commencement as Training
Officer and to input this to the data base:-

'I sent a note to all staff asking them to complete a form giving me details of all their previous courses..' (14.05.91)

Up until 1988 staff training and development had been conducted mainly on an *ad hoc* basis and had comprised mainly vocational courses. In the years from 1980-1987 the numbers of staff attending courses was relatively low, even allowing for the fact that probably some staff had failed to remember all the courses in which they had participated several years beforehand.

In accordance with legal requirements it was also necessary to inform staff periodically about any computerised information which was held about them. Thus after having printed out all computerised 'training-related' information held on computer for each member of staff, I asked each person to verify it and to forward to me any amendments for updating (Appendix 13.1).
LOAD DATA
INFILE TRG.DAT.A1
RECLEN 120
INTO TABLE ALLTRAIN2
({ NAME_CODE POSITION (1:03) INTEGER EXTERNAL,
SURNAME  POSITION (04:17) CHAR,
INIT     POSITION (18:21) CHAR,
GRADE    POSITION (23:26) CHAR,
COURSE_COMPLETE  POSITION (27:55) CHAR,
DATE_FIN  POSITION (56:59) INTEGER EXTERNAL,
DATE_beg  POSITION (60:67) CHAR,
DATE_END  POSITION (68:75) CHAR,
TYPE_CODE POSITION (80:81) CHAR })

Figure 13.3 The format used to load information into the training database

select surname, init, grade
course_complete, date_fin, date_beg,
date_end, type_code from alltrain2
where date_fin between 1990 and 1993
order by date_fin, type_code,
course_complete, grade;

Figure 13.4 An example of an SQL query on the training database
13.4 PRESENTING AND ANALYSING STATISTICAL DATA

Approximately one-third of the Research Council Training Officers who responded to my survey undertook this task. It was important to be able to produce reliable figures on the amount of training and development which had occurred, either for the use of line-managers or for publication. For example line-managers often found it helpful to be provided with a training profile for individual staff when assessing career paths. The following is an extract from my diary following a meeting with one of the Management Team:-

Meeting with R. at JRC. I will supply trg history for all marine physics staff to help line managers determine trg [training] needs. (12.04.91)

and:-

R. rang today. He would like more time to consider types of trg his staff should be given. We will talk again in Jul. He would like copy of trg dbase .. (24.05.91)
In some instances there were enquiries from line-managers about individual staff:-

M asked me if B. had done Occ Speak. [Occasional Speaking] course (07.06.91)

NCS also found the information useful:-

G. [one of the NCS Training Officers] asked me about training profiles of staff for computing subjects. (31.05.91)

The Administration staff also needed this type of data when deciding on whether their staff were obtaining enough training:-

M sent me a copy of an admin letter re specialist trg of admin grades EO to SEO and asked me to inform his dept of the amt [amount] of admin trg from 1989 to the present and type of course. (30.11.91)

Once having obtained computer-based information about courses which had been undertaken by staff, it proved relatively simple to represent the data in table form or graphically. Some examples of numerical representation of the types of course completed between 1989 and 1993 and the number of places taken up are given in Table 13.1. I found that I needed to categorise courses to include: - 'Management' or 'Managing Others', 'Personal Development', Health and Safety', 'Sea Survival', 'Quality Management' and 'Vocational/Computing' because sometimes interest groups such as JTS, NERC or the trade unions required this information in categorised form.

An example of course statistics for 'Management' courses between 1990 and 1993 is given in Table 25.1, while those for 'Personal Development are given in Table 25.4

I found that the best methods for the production of graphs for publication was to use one of the many commercially-available statistical packages. Examples of graphic representation of data are given in Figures 13.6-13.8. Usually it was best to produce graphs in colour if they were to be used for overheads but in black and white for publication. In fact they were produced in colour very effectively by the publishers of the 1993/1994 IOS Annual report. However they do not photocopy well as shown in Appendix 13.2).

Other useful information on staff development statistics were regularly produced. For example, graphs showing the total number of man-days training and the cost of courses expressed as a percentage of the total salary bill (basic salary and at full economic cost and/or including overheads) are shown in Chapter 25. The total number of man-days training rose from below 400 in 1989 to more than 700 in 1991. There was a slight decrease in 1992 due to lack of funds. The total cost of courses
represent between 1.5 and 8% of the total salary bill, depending on whether the basic salary is taken into account or whether the full economic cost is included which takes into account the employers contribution to pension funds etc. The main categories of courses are shown in Figure 13.6 which shows that the amount of formal training at IOS increased rapidly during the early 1990s, (The lower figure for 1992 coincided with a period of severe economic problems.). The balance between 'Vocational/Computing', 'Management', 'Health and Safety' and 'Introductory/Retirement' courses tended to change from year to year depending on the numbers of new recruits. For example, during 1991 a large number of personal development courses (e.g. Technical Writing and Time Management) were provided for young, newly recruited staff (Figure 13.7). In 1993 emphasis was placed on providing 'Health and Safety' courses. Appraisal and Management training also increased during 1993 (Figure 13.8).
Figure 13.6  Main categories of courses undertaken by IOS staff from 1st July 1985 to 31st December 1993
Figure 13.7  The number of places taken up by IOS staff on Personal Development courses from 1st July 1985 to 31st December 1993

Places on personal development courses
1.1.85-31.12.93
Figure 13.8  The number of places taken up by IOS staff on Management courses

'Managing others' courses

Year

No of places per year

Manage. general  Staff report/update  Interviewing
Brunei R&D/Proj  Interpersonal skills  Pay seminar

218
Figure 13.9  The cost of formal courses as a percentage of the Salary Bill at IOS 1990-1993

Costs of Formal Courses as % Salaries

% salaries


--- Fees Formal Courses  --- Fees + Partic. Time
13.5 COMMUNICATING THROUGH REPORTS AND PROPOSALS THE RESULTS OF ANALYSIS AND EXPERIENCE SO AS TO INFLUENCE FUTURE TRAINING AND DEVELOPMENT ACTIVITIES

Only two out of the twelve Research Council Training Officers who responded to my survey undertook this task. Periodically I wrote reports on training undertaken at IOS together with graphs for perusal by the Director and the management Team:

Sent letter to CPS giving him stats on IOS courses 1985-91
..histograms of all courses - totals, management and personal development, finance, Health/Safety and Sea etc. (11.11.91)

In some instances reports and graphs were forwarded to NERC Headquarters:

CPS [The Director] wrote to DG (copy to me) enclosing my training report - says we see an unsatisfied need in computer trg. Explains that I am using our core curriculum Says he will run TQM .. (14.02.92)

The reports could be used by Headquarters to compare the amount of training and development initiatives undertaken by its component Institutes.

During 1992 and 1993, I produced text and graphs for eventual publication in the IOS Annual Report (see Appendix 13.2). This was made available to other government organisations and to other interest groups. In conclusion, the presentation of statistical information about staff development initiatives does not in itself provide evidence of a strong training department unless the statistics are periodically linked to evaluation data. However the statistician needs to keep managers and sponsors informed of the level of staff development initiatives undertaken. As Rothwell and Kazanas (1989;465) point out:

'Managers evaluate the HRD effort relative to its perceived contribution to fostering the values they prize in employees and realizing desired organisational goals'.

It follows that regular information from statisticians together with positive evaluative feedback are likely to influence sponsors such as Management Teams and line-managers in supporting the training department.

13.6 SUMMARY OF CHAPTER 13

13.6.1 The role of statistician accounted for approximately 8% of my time at least half of which was spent in maintaining computerised records.
13.6.2 The Training Officer needs to have a working knowledge of information technology and basic statistics if s/he is to undertake the role as Statistician. It is useful to become proficient in storing training data on a computerised data base and to be conversant with relevant software for producing graphs.

13.6.3 Information on names and dates of staff development initiatives, the names and numbers of participants and costs for courses can be stored on computer. I undertook this task either in the role of Manager of Training and Development or Programme Administrator or as Statistician.

13.6.4 Members of the Management Team, Line-managers, administrators and other staff at IOS regularly required statistical information to help them to make decisions about future training for their staff.

13.6.6 Staff Development courses took several forms i.e. 'Management-related' or 'Health and Safety' and as Statistician I had to find a way to categorise these usefully when presenting data or graphs.

13.6.6 Reports prepared by the Training Officer in the role as Statistician were publicised. This information, together with evaluation data and feedback, were likely to influence the goodwill of interest groups.
CHAPTER 14

THE ROLE OF COMMUNICATOR, COUNSELLOR, MARKETER OF TRAINING, CONSULTANT
Figure 14.1 Percentage of time spent as Communicator in non-routine matters

- Communicate with H&S Officers: 15%
- Liaise with External Organisations: 15%
- Liaise with NERC/JTS: 7%
- Work Proactively with Staff: 33%
- Liaise with Local Management: 25%
- Liaise with Schools Officer: 5%

Based on 50 hours per year spent as 'Communicator' in non-routine matters.


14.1 INTRODUCTION

As Training Officer I found the roles of Communicator, Counsellor, Marketer of Training and Consultant to be concerned largely with proactive exchange of information with interest groups. These roles were necessary to promote effectively all aspects of the training function. I consider the role of Communicator in both routine and non-routine matters to be important but particularly so in respect of the non-routine element. Thus, while acknowledging that good communication is undoubtedly paramount to the training function, I put forward the role (or subrole) of Communicator in non-routine matters as being one of the most fundamental. This is because non-routine communication tends to lead to new initiatives and to broadening of the staff development function.

While most of the roles described in this thesis fall broadly into those described by the American Society for Training and Development (McLagan 1983:11), the role of Communicator was not presented by the Society as a separate entity mainly because communication was considered to be an inherent part of most other roles. To some extent I subscribe to this view. On the other hand, aspects of Communication are included in the separate roles (defined as tasks) of training professionals as described by Pinto and Walker (1978:66-80).

I suggest that the role behaviour involved in routine communication is fundamentally different from that involved in non-routine communication in that the former requires a mainly reactive approach while the latter necessitates more proactivity. Thus in this Chapter I define 'non-routine communication' within staff-development as:-

'Written or verbal communication undertaken proactively as an addition to the more reactive communication normally practised during the daily application of routine tasks'

In effect, I describe non-routine communication as communication which involves taking an overtly proactive rather than reactive attitude to the practice of managing the training function. As Training Officer at IOS, I found that proactivity was particularly important in allowing me to remain aware of all the factors which promoted the existence of a responsive training department. Thus I put forward this role as one of the more important of those practised by Training Officers. However I acknowledge that in practice it is difficult to separate the roles of Communicator in routine matters with that of Communicator of non-routine matters.

While most of the roles described in Chapters 7 to 15 involved some degree of routine communication with staff and managers, i.e. making routine telephone calls, writing confirmatory letters about course placements, I found that non-routine...
communication accounted for approximately 6% of my time. It involved working proactively with staff so as to promote their personal and work-related development and to keep them informed of events. I also sought to respond to training-related problems experienced by individuals. In addition, I deliberately set out to meet interest groups such as members of the Management Team, line-managers and also made initial contact with external organisations so as to promote the exchange of new ideas and resources. Thus in this thesis, I put forward 'Non-routine Communicator' as an important key role of the training officer while acknowledging that the role of Communicator in routine matters, although important, none-the-less remains subsidiary.

Most of the Research Council Training Officers who responded to my survey also found the role of Communicator to be important. For example, I found that seven out of twelve worked proactively with all grades of staff advising them of new training initiatives or options in which they could participate.

Linked to the role of Communicator of non-routine matters were those of 'Marketer of Training, Consultant and Counsellor in that all required a proactive approach to the staff-development function. Because this related group of roles may also interplay with others in the training cycle I have placed them in a central position in Figure 7.0. For example, marketing of training events could result in overt identification of individual training needs either by the line-manager or the Training Officer. In another instance, proactive communication sometimes helped in the evaluation of training initiatives in that during informal discussions, staff tended to say what they really thought about courses rather than to make brief written responses to questionnaires.

In this Chapter, I present examples of non-routine communication such as liaison with NERC, JTS and with external organisations. Furthermore with respect to internal communications, I discuss examples of interaction with the Health and Safety Officers, the Schools Link Officer and Trade Union representatives. The approximate percentage of time which I allocated to my role as Communicator in non-routine matters was approximately 6% (50 hours per year) as shown in Figure 7.1. The percentage of time allocated to the various tasks inherent in that role is given in Figure 14.1. In conclusion, I found this role to be extremely valuable because it allowed me to 'keep a finger on the staff development pulse' mainly in terms of determining the current culture of the organisation and attitudes of staff.

The role of Counsellor accounted for less than 2% of my time, though I tried always to remain alert to the possible existence of staff problems, whether presented overtly or otherwise. Further aspects of counselling are discussed in Section 14.3.

The role of Marketer of Training accounted for approximately 1% of my time and was concerned mainly with informing staff of all types of training event. This is discussed further in section 14.4. I undertook the role of Consultant infrequently. This
was usually undertaken in the context of responding to enquiries from line-managers or from individuals.

14.2 COMMUNICATING WITH INTEREST GROUPS

In addition to the exchange of routine paperwork, conversations and telephone calls with personnel who were involved in any way with Staff Development, it was necessary to work proactively to provide updated information to interest groups such as staff, the Management Team, line-managers, individual staff, NERC and JTS. For example I sometimes consulted with staff from NERC Headquarters or directly with JTS about non-routine training initiatives. I also worked proactively with all grades of staff in informing them of new initiatives and in motivating them to participate in courses. Following new Health and Safety legislation it was also necessary to work closely with IOS Health and Safety Officers in deciding on content of new courses and on the methods by which staff participation could be administered. Sometimes there were questions put by trade unions to be answered.

In order to remain up-to-date with developments in the commercial world and with the large range of initiatives provided externally by commercial and government-run organisations, I found that it was important to work closely with their staff. Tasks included arranging for on- or off-site courses or seminars and sometimes negotiating for a reduction in fees.

As IOS took part in various schemes by which students from local colleges and schools received in-house work-experience, I was occasionally involved with the Schools-Link Officer in monitoring their progress.

Some examples of non-routine events in which I acted in the role of Communicator in non-routine matters are described below.

14.2.1 Liaising/consulting with NERC and JTS

In my role as local Training Officer, routine verbal or written communication with JTS included the booking of staff on courses and organising the paper work involved. JTS also regularly sent me information on dates and venues of courses and call-up (booking) procedures all of which I processed as Manager of Training and Development (Chapter 10.). In addition to this type of routine communication with JTS, I made a point of communicating about non-routine related activities. For example, I spoke to one or other of the JTS tutors or with their staff by telephone on an average of once per week. This served to keep me informed about whether they had problems in supplying IOS with courses and whether backlogs existed. They also provided me with updated information or sent reports on their activities. In the following example I note that JTS had now split its Management series of courses into four distinct parts which were to be run sequentially.
JTS sent me a copy of the JTS annual report. Every 2-3 yrs JTS reviews courses. New Management series now split into 4 parts of one week - people should attend all parts. Topics are not isolated. (21.09.92)

This was important information in that it meant that because management courses were not fully modularised, JTS required staff to participate progressively in the Management series 1 to 4. I knew from previous experience that the first course (Management 1) was relatively basic and previously several staff had stated that it was "too easy". However JTS had insisted that they should attend this prior to participation in the 'Management 2' course. Thus I knew that this approach by JTS was likely to present problems for some high-fliers who, although having had plenty of management experience, were still required to attend the basic 'Management 1' course.

My visits to JTS to discuss staff development initiatives with tutors were useful in that I was able to discuss with them, the possibility of their provision of special on-site courses at IOS and to borrow books and video-tapes. An example of a letter which I sent to a member of JTS staff following a meeting in 1992 and in which I discuss arrangements for JTS to run local courses is given in Appendix 14.1.

Occasionally JTS staff also asked if they could run pilot schemes at IOS. In this instance they made contact through the IOS Director who discussed this with me:-

'CPS [The IOS Director] sent me a copy of a letter received from R. at JTS - asked him if she could run a pilot scheme at Wormley. 6-10 people in a gp." (31.07.91)

In 1991 JTS staff wrote to say that they proposed to hold a series of regional seminars for all local Training Officers including myself and enquired whether we all supported the idea (11.10.91). In fact I did attend two meetings, one of which was held at a location near Edinburgh during February 1992. I sent a summary of this meeting to the Director at IOS so as to maintain his awareness of the training and development function. For example at the meeting JTS informed all delegates about the long waiting list for basic management training.

In my role as Training Officer, I also visited NERC Headquarters occasionally and discussed various aspects of the job with NERC staff. For example I attended several meetings of Training Officers and Personnel staff. These meetings were usually arranged by NERC, held at their Headquarters and, on most occasions, JTS representatives were also invited to attend. At these meetings all NERC Training Officers were provided with new information on the activities of the Joint Research Council Training Advisory Committee (27.05.93). Furthermore the role of JTS was regularly discussed in the context of its provision of management courses.
The meetings of local Training Officers at Headquarters always provided an excellent example of Communication in non-routine matters. It provided representatives from each Institute with the chance to air their views on a variety of subjects and presented an opportunity for JTS and NERC staff to receive feedback about course provision and administrative arrangements. Items on the agenda for discussion included subjects such as recruitment of JTS tutors, evaluation of courses, provision of senior management training and evaluation of new initiatives. Generally these meetings were very useful in promoting cooperation between Training Officers and encouraging them to exchange ideas. An example of the minutes from such a meeting is given in Appendix 14.2

Importantly the Training Officer as Communicator provided a link between NERC, JTS, component Institutes and their staff. Indeed in September 1992, the JTS Director emphasised the important link between Institutes, NERC and JTS provided by Training Officers:-

'JTS sent me a copy of the JTS annual report (cont). It states that LTOs [Local Training Officers] are a vital link between sites, Research Councils and JTS. Says essential that LTOs are given support to perform role.' (21.09.92)

During 1992, I, together with other NERC Training Officers, was invited by NERC Personnel Section to comment on the draft JTS Service agreement which was to form a contract between NERC and JTS. Under the terms of this agreement JTS were to continue to provide training services to NERC during the period I April 1993 and 31 March 1994.

With regard to contact with NERC staff, the IOS Director also occasionally met senior staff at their Headquarters in Swindon or wrote to them so as to exchange training-related information. On some occasions he requested some input from myself as Institute Training Officer. In some instances, as a Senior Manager within the NERC organisation, he sometimes volunteered IOS to take part in NERC or JTS pilot schemes. We always exchanged new information:-

'CPS [The Director] rang to discuss D.G.’s [Senior NERC Officer] letter enclosing NERC Trg Strategy as discussed at a meeting in Autumn 1990.' (12.05.91).

Occasionally, one of the NERC senior Officers wrote to all Directors of NERC Institutes requesting forecasts for annual training needs. In these instances I often supplied information: -

'Received copy of DG letter to CPs. Latter asked me to help him to assess recurring annual demand for trg. [DG] also gives nos. for the [JTS] backlog'. (14.05.91)

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Within the NERC component Institutes, the Management Team (which included the Director), project managers and line-managers had the responsibility to ensure that staff development needs were met as far as possible and to this extent they were cooperative in promoting the training function.

As Training Officer, I found that by regular communication on a wide variety of subjects, with all managers, I was able to gain their support. Indeed six out of the twelve Research Council Training Officers who responded to my survey undertook the task of liaising or communicating with local managers and two indicated that this was one of their most important and time-consuming tasks. From time to time I also discussed training initiatives with the Head of the local NCS department.

I tended to rely on project leaders and line-managers to support me in persuading their staff to attend courses. I found that most undertook this responsibility good-humouredly. One, although remaining good-humoured tended to remain passive to the whole process. One problem which repeatedly presented itself was that, although all management training was provided free of charge via JTS and NERC, IOS has had to pay for all other types of training from its government-sponsored or commissioned research receipts. Apart from funds for incidental expenses, there was no separate account held for staff development and so funds for the latter had to be released by project leaders. However, although there was an Institute-wide problem in obtaining enough funds, eventually they were usually found for courses or seminars which were considered essential by project- or line-managers.

Line-managers were also held responsible for appraising each of their staff and grading them according to their work and so they themselves regularly participated in ‘Appraisal’ or ‘Interviewing’ courses.

A further important role of line managers was to provide on-the-job training for staff in their departments. This was undertaken personally or by delegating the ‘coaching’ task to efficient and effective staff. Importantly managers also acted as liaison officers between staff in their departments informing them of new initiatives or new training requirements which had arisen as a result of the development of new technology or in response to Institute participation in new areas of work.

I found that, in the context of the above, I regularly communicated routinely with most managers on a daily basis. However, in addition I sometimes arranged meetings with them so as to raise queries, to discuss new initiatives or to exchange ideas. This type of communication in non-routine matters often yielded useful information. For example it kept me informed of Institute affairs:-
'M. told me that various staff were changing departments I needed to know this so as to determine who might pay for training.' (09.07.92)

and I also received information about funding:-

'Received a copy of a letter from R. to group heads informing them of cuts back in user support [computing on-the-job training] .. has implications for trg as more will have to be bought from outside.'05.11.91

I also visited various managers at the IOS Chilworth Site (James Rennell Centre):-

'Meeting with G. He indicated who needed i/p skills co [Interpersonal Skills course]. We talked of import [importance] of good manage. skills.He said some skills, e.g. stress manage could be got from books. R. said that he looked at body language and management books. 'No Monkeys' [Reference to delegation which we had also discussed]. Said he thought good management skills important (12.04.91)

I also kept the IOS Director informed of the more important meetings:-

'..sent CPS copy of my minutes of meeting with G. - CPS replied to say that he has lent interpers. effectiveness brochure. to D.' (13.04.91)

A copy of the minutes of this meeting (written up on my return to the Wormley site) is given in Appendix 14.3.

On another occasion one project leader provided me with valuable feedback on a new course, organised by JTS, for senior managers which had been run as a pilot scheme but which had failed after two days. In fact the participants had declined to complete the course:-

'... told me about the course that he went on which failed. He said it failed because the tutors didn’t have the right expertise' (22.02.92)

In this instance I also received useful feedback about this particular course from an independent observer who had conducted some research during that particular initiative. She had happened to visit IOS during the following week:-
'S...told me she had been 'a fly on the wall' researcher at B's senior management course. She said that the course isn't very good, that the hotel isn't up to scratch that the whole ambience hadn't felt right' (02.92)

My conversations with the Director (as my line-manager) were also useful in helping me to plan new initiatives:

'CPS/my telephone conversation (cont) CPS told me that he had met D. [from NCS] and that the latter is really keen on TQM. He also said that H. is very keen and would run it for RVS [NERC Research Vessel Base]' (16.06.92)

Following a course on 'Creative thinking' at British Petroleum, in which I had participated, the Director and I discussed its possible value to staff and agreed that it might be useful for them:

'CPS came to Hambledon for tea. We talked about the BP Creative Thinking course. I recommended it saying that it would give new staff some idea about IOS culture.'(09.04.92)

He said that this course would help staff to realise that it is good to put forward controversial ideas without being thought a fool. We agreed that, if possible we would run a pilot scheme on 'Creativity'. Unfortunately we were not able to do so prior to mid-1994, due to a variety of factors including relocation of some staff to the Southampton site.

I found that most line managers had a positive attitude to staff development initiatives:

'Received a copy of a note from R. to S. to say that it is good to see that several of his staff were taking marketing seriously' (10.6.92)

In this instance I had circulated information about marketing courses and several staff had indicated that they were interested in participating.

However, in some instances the feedback from line-managers tended to be negative. For example, in November 1991, I sent questionnaires about staff computing needs to line-managers for distribution to their staff. Several days later, one line-manager told me that three of his staff did not need to complete the questionnaire as 'they wouldn't be interested'. On a different occasion when I approached a member of the Management Team to ask him to support nominations for two of his staff to participate in JTS management courses, he stated that he wasn't sure whether to support these initiatives as the funding for them had been originally 'top-sliced' from Institute funds by NERC and that he did not agree with this principle.
In summary, conversations and notes with middle and senior managers about non-routine events were important in helping me to plan, implement and evaluate staff development initiatives.

14.2.3 Working proactively with staff

One of the most important tasks as Communicator was to work proactively to ensure that all grades of staff were made aware of new training initiatives in which they might like to participate. Eight out of twelve Research Council Training Officers who responded to my survey also undertook this task.

In addition to ensuring that new staff were routinely informed of training initiatives which were open to them, I made an effort to get out of my office so as to meet all staff, long serving and new recruits so that I got to know them all reasonably well and to ensure that they recognized that staff development initiatives could help them progress in their careers.

An important role was to provide support for staff, whatever their grade though it was more usually needed by new young staff rather than those more experienced. Indeed on at least two occasions senior staff expressed a concern to me that new staff in a given department were under some stress partly because they were inexperienced in writing papers. (e.g. 11.11.91) I responded to this information by providing a stress-management course for them.

I found that some of the long-serving staff were not aware of the type of continuing education or training which could be made available to them. G. was one such example, he rarely visited the canteen or library and shared workspace with other technical staff who also rarely participated in Institute activities including training programmes. I met G. by chance as I was crossing the car park. He had received very little training during his years at IOS and I asked him if he would like to do a basic management course. I felt that this might widen his horizons. He said that he would like to do a 'Management' course but only if it was non-residential. I suggested that he also might like to consider doing an Open University Course in a work-related technical subject. He looked surprised, replying 'Would I be allowed?' I said that I didn't see why not. He paused, then asked 'Could I do French?' (08.10.91).

G. clearly wanted to take French in preference to anything else. I wanted our chance meeting to have a successful outcome and felt that by encouraging him to take French, he might become more interested in other options. In fact his French conversation improved tremendously and this proved a catalyst in that it prompted further conversations about training initiatives.

On the other hand I had to be careful not to be too proactive about training otherwise the result could be off-putting for staff. I did not feel that I was pushing too hard except perhaps on one occasion. As I was walking down the stairs of the main
building I saw H. Initially he seemed to be a little unfriendly and said:-

'Aren't you making a big thing of courses? .. its easy to get money for management courses but what about training for the job?.. there's no money in our section'

He was referring to the fact that, as discussed above, funds for management courses were top-sliced from the IOS budget at source. Because IOS had to pay directly for vocational training courses, for example, advanced computing, it meant that there tended to be fewer nominations for management courses than vocational ones. I had just sent a questionnaire to all staff asking about their computer needs, technically vocational training). I asked:-

'Haven't you completed the questionnaire I sent you about computer training?'

H.:-

' No its not worth it we can't afford it'

I told him that I was collating information from questionnaires and would ask the Director for a special fund for computer training in the following year's budget. The next allocation of money was to be in April 1992, and I had already told the Director that we should increase computer skills as it was of major importance in vocational training. H. changed his attitude, (laughing now) he said :-

'..can you send me another form I've given the other one away..'

I agreed to do so, we parted amicably. I thought that he had probably put the first questionnaire in the waste bin. (08.11.91)

There were numerous other instances when I gained information simply by talking to staff during my daily activities at both the Wormley site and the Chilworth site. On one occasion in November 1991, I was sitting in an armchair in the reception area for a few minutes while sorting papers. C. passed by, he had been asked to participate in a residential project management course by his line manager. As an opening statement, he said, good-humouredly 'are courses really worthwhile?'. We discussed his project management course briefly. He indicated that he did not like living away from home and said that if he had to live away for a course, I was to 'make it good'. I had noticed that in his department it was often difficult to interest staff in seminars. In some instances, if they did attend they came in twos or threes but rarely alone. I asked why staff in his group were reluctant to go on courses. He said (seriously) that some people 'are frightened' of courses and went on to say that an additional factor was that some staff were genuinely busy trying to get work done. (01.11.91)
There were numerous other examples of my role as Communicator in non-routine matters in which I gained unexpected learning, following a proactive approach to the training function (see incidental learning as defined by Marsick and Watkins (1990:152)). For example in November 1991, I had a conversation with several staff at lunchtime in the local public house about a 'Project Management' course which was to be run externally several weeks later and organised jointly by NERC, Brunel University and the IOS Director. The potential participants had been given a broad outline of events for the five-day course and were unhappy that it included some talks by IOS staff who they had heard before. One asked me to find out why the Director had asked people from IOS to speak at an external course. Clearly they were unhappy about the situation. Indeed, I did ask the Director to what extent IOS staff were involved in running sessions. He indicated that they were only to speak for a total of two hours during the five days and that the full agenda had not been distributed. Thus the potential participants, having received only a limited amount of information, had 'misread the position'. When they received the full timetable they were much happier and eventually enjoyed the course. I learned that people were quick to act on limited information about contents of courses and needed to be given full details as soon as they were available.

There were also examples of attitudes of staff which I discovered as a result of informal discussions with them. One secretary had told me that one group of staff in Dept.X were 'like sheep' in that they often followed the whims of one person. Indeed I found a tendency for this to happen on two occasions when I enquired about whether they would like to participate in various types of course. If one person volunteered to participate, there tended to be other 'followers' but if one person declined so did the others in the group.(27.05.92).

In most instances attendances on courses did not result in loss of income but in one instance it could have done so. I had enquired of a senior scientist why he did not wish to participate in a course. He replied that the dates clashed with a meeting abroad for which he would have got a daily allowance for attending. He later accepted the offer of the course.

I found that where staff felt strongly about any training-related subject, I tended to hear about it from several different sources. For example during general conversations with staff, several re-iterated the view that a large amount of money was allocated to management training by NERC and comparatively little to vocational training, a concern of which I was aware and which I had discussed with the Management Team.

I found the views of scientists proved to be interesting. During a visit to the Chilworth site, I had coffee with three senior scientists. There followed a general discussion about work loads including the fact that scientists were expected to take on a relatively large proportion of commissioned research. The consensus of opinion was that scientists found it quite difficult to make a good job of being both a manager and a scientist. They suggested that, as often happens, if a scientist has to go to sea for several weeks to conduct research, there could be a management
problem back at the laboratory. (07.07.92).

In a different context one senior scientist complained that he did not have enough time to attend courses saying:-

'C. [the Director] must put science before courses'. (00.08.91)

He did not seem to understand that improved education and training might improve the science research capability, later he actively participated in training.

In another instance, a secretary (A) told me that she did not wish to participate on a residential course in 'Interactive skills' as she did not feel confident enough. I pointed out that she could attend a local one but that it was likely to be run at a level below her abilities. She said she was happy to accept this (00.10.91). Several days later she rang me to say that she was looking forward to going on the course.

On a further occasion, while at the Chilworth site, G. mentioned that staff could take on consultancy as part of the marketing process in addition to normal commissioned research. One person commented that this might involve extra work for staff without them necessarily benefitting from it (17.07.92). I felt this to be a rather negative approach to work at IOS.

When I had first commenced the job of Training Officer, I found that staff were sometimes reluctant to volunteer for courses or to overtly express their training needs. For example during October 1991, I had distributed a questionnaire to staff asking them to inform me of their computing needs. I saw O., an experienced but relatively junior computer programmer, in his office. He seemed reluctant to complete the questionnaire saying that suggestions about computer training should come from line managers rather than from staff. When I said that the Director wanted a bottom-up as well as top-down approach to management, including the assessment of training needs, he relaxed and talked about his own computing needs. During 1992 and 1993, I found that a greater proportion of staff asked me about possible training initiatives. One factor which might have exerted a positive influence was the recruitment of young scientists who tended to react positively to training events.

To summarise sections 4.2.2 and 4.2.3, it is clear that communication in the workplace has become a highly complex process. In Figure 14.2, I present a model in which the Director, Project Managers, Line Managers and staff themselves all play a part to ensure the maximum efficiency of the staff development function. The position of Training Officers is critical in that all staff must have access to them and, in return, they in turn must communicate in the most effective way with all interest groups. As shown in the model, Project managers control funds for which the Training Officer may have to bid. Line-managers appraise staff and may nominate them for training initiatives. The Training Officer works with Health and Safety Officers to ensure that staff receive the correct levels of training and with tutors to ensure smooth running of courses. Individuals need to communicate to the training
Figure 14.2 Communication pathways at IOS which are needed for the effective performance of the staff development function.
Officer their personal ambitions and in turn, receive counselling, education and training support.

As emphasised above, it is difficult to separate communication undertaken routinely with that undertaken in non-routine matters, however I found that in the latter instance, information was often provided by staff on unexpected occasions. It allowed me to gain insights not only in new ways of moving forward with training initiatives but also in obtaining a clearer understanding of staff attitudes and culture of the Institute. The role of communicator in the context of Health and Safety and Counselling of staff is discussed below.

14.2.4 Managing working relationships with Health & Safety Officers

As discussed in Chapter 8, following new legislation during 1992-1993, it was imperative that all Institute staff should receive Health and Safety Training. I adopted the role of Communicator in that I arranged several meetings with two of the Institute’s Health and Safety officers. These meetings were not routine in the sense that we were exploring possible paths for the initiation of these types of training. Four out of the twelve Research Council Training Officers Training who responded to my survey also undertook the task of managing working relationships with other staff involved with Health and Safety. I also often discussed Health and Safety matters with the Administration Department because one of their project managers tended to hold funds for this type of training and, in addition, that department were responsible for ensuring that Health and Safety Officers were informed of their general responsibilities at each site.

Occasionally I received copies of correspondence on Health and Safety matters. For instance in May 1992, I received a letter from Southampton Institute of Higher Education asking if IOS staff were interested in Maritime courses. I circulated this to senior managers and to Health and Safety Officers to obtain their comments. The outcome was that, because IOS were already offering sea-survival training and had already planned to implement a 'Safety at Sea' series of seminars, there was not felt to be a need for any further of this type of training. The position changed during 1994.

During 1992, the IOS Director asked me to attend one of the three-monthly Health and Safety meetings so that I could put forward a plan for training staff. Indeed I did present a plan which involved other staff whom I required to become trainers in Health and Safety. At the commencement of the meeting, I had no idea whether they would agree to give this type of training. In effect all eventually agreed to do so, though two people expressed some disquiet about the amount of their time this might take.
I also discussed with the administration department the possibility of arranging for one of their staff and myself to receive training so as to present 'Stress Management' Courses to Institute staff (08.07.92). We did hold a meeting with the local Health Authority representative who put forward a proposal for us to receive further training as trainers. However eventually, due to lack of funds, we abandoned this route. Eventually JTS agreed to run several very successful courses at both sites but were somewhat reluctant to train us possibly due to lack of resources.

14.2.5 Interacting/communicating with Unions

I spent only a small proportion of my time in interacting or communicating with Union representatives. This was partly because regular local meetings were held with the IOS Director who responded to most of their queries. Similarly only about half of Research Council training officers who responded to my survey undertook this task.

Usually Union representatives accepted that, at IOS the Management Team, project leaders, line managers and myself all worked together to ensure that, where possible, staff were given as much vocational training as funds would permit. There were several occasions when I had direct contact with the Union representative. For example in Appendix 14.4, I present another example of contact with the Unions. In this instance JTS had volunteered to organise for IOS, a special advanced non-residential management course for experienced staff who had not completed any type of management training. One of the Union representatives had happened to qualify for the course. In the example given, he had written to the IOS Director expressing concern that the course was to be held at a local hotel rather than on-site at IOS. He mistakenly assumed that the cost was being taken from IOS's allocation by JTS. In fact, it was being taken from a general 'pot' used for all NERC staff by JTS on a 'First come, first served basis'. Initially the Director had written a note to me asking if the arrangements could be changed (he also clearly did not understand the position). I therefore needed to justify my actions both to the Union representative and to the Director. My reply is given in Appendix 14.5 in which I give details of the events leading up to the final arrangements for the course and justify the costs involved. Eventually I received an apology from the Union representative who admitted that he had worded the latter badly and that he was not making a personal attack on me. (07.01.93)

On another occasion the Union approached me so as to get extra training provision for staff who were to leave IOS. For example in Autumn 1993, notice was given that some thirty staff might be asked to take voluntary early retirement. One Union representative approached me and asked if I would provide a special 'Pre-retirement' course for them. I agreed to negotiate with the Administration department for funds for this. Eventually I arranged for the welfare officer to run a one day course which covered subjects such as 'Money Education' - (making the most of your money) and 'Rights to social benefits' and this was paid for by the Administration department. I also agreed to arrange a 'Setting up your own business course' for January 1994.
14.2.6 Consulting and communicating with external organisations

A major task was to seek actively and maintain contact with a wide variety of organisations such as Universities and Colleges, the local Training and Enterprise Council, commercial- and government-run organisations and other training officers. One half of Research Council Training Officers who responded to my survey also undertook this task.

As discussed in Chapter 10 I contacted Surrey Training and Enterprise Council (TEC) several times and attended two of the local meetings. For example, I met G. on two occasions at her Headquarters so as to put forward the suggestion that IOS and TEC could perhaps exchange staff development resources (08.09.92)

I also exchanged useful visits with Guildford College of Technology particularly when planning to implement training to enable staff to gain National Vocational qualifications (Appendix 14.6).

I also made contact with staff at the Management School at Southampton University:-

Visited S'ton Univ. Man. Sch. Chilworth and saw A. Dep/dir Admin. A. is helpful said she could offer us courses on a fill-in basis a bit cheaper (16.08.91)

Some examples of places offered by the Management School are given Appendix 14.7.

In another instance a training officer,(R.) employed by IBM, contacted me and eventually sent several booklets on the types of course IBM offered and to which IOS staff were invited to participate on a repayment basis. I immediately presented the Director with the information, saying that I thought R. would represent a useful contact (06.11.91). This type of networking was important in helping to locate and obtain resources.

I also maintained contact with local colleges so as to be able to inform staff of the resources which might be available in terms of courses and equipment. Indeed one college represented a useful resource and some of IOS staff attended it for CAD courses. I was pleased that I had visited it, in that it sought to provide a client-orientated approach :-

Visited FTC [Farnborough technical College] - R. - trg Officer .. showed me round FTC it was very impressive [had] my own car parking space, beautiful decor, space, plants, coffee in lovely trg. restaurant. R. said her college worked hours to suit the clients and continued work 'all through the summer holidays if necessary' ..Courses included electronics, video trg, DOS CAD.(16.10.91)
14.2.7 Liaising with the local schools link officer

I did not undertake any schools link work and worked with the schools link officer mainly in helping to give work experience to students from local schools and colleges or to some undergraduates. However five of the twelve students who responded to my survey undertook the task. Occasionally I requested the school link officer to offer me a student to help out either in Biology or in Training administration. In these instances I received a Curriculum Vitae from the student concerned and usually s/he came for a short interview:--

Received copy of letter from GT College. They sent a CV for Mr PB - I have arranged for him to come and see Schools Liaison officer on Tuesday (07.01.92)

14.3 THE ROLE OF COUNSELLOR

This role was concerned with providing personal and career-related support for staff. Five out of the twelve Research Council Training Officers who responded to my survey reported that they undertook this task in the context of helping individuals to plan or develop their careers and two said that this particular task took up much of their time. Support was made available to staff whatever their grade, whether clerical, managerial or research a scientist. Wright (1991:16) reporting in 'The Higher' produced evidence that even Ph.D. students in Universities need support if they are to finish their projects. Various tasks inherent in the role are discussed in Section 14.3.1-14.3.3 below.

14.3.1 Helping individual(s) to assess personal competencies, values, and goals

I was not usually concerned with helping individuals to assess their personal competencies as this task was usually undertaken by line-managers. However on one occasion I noticed that N. a young person, who was in a relatively 'dead-end' clerical job, was not participating in any staff development initiatives. I pointed out to him that it might be wise for him to undertake some long-term training such as an Open University Course or a local BTEC course. He said he would like time to think about it but never approached myself or his line manager to discuss it further. However he eventually left the job to transfer to work nearer to his home.

14.3.2 Helping individuals to plan and develop careers

Careers counselling was undertaken mainly by those officers concerned with staff reporting, though, as a matter of routine I bore in mind, the possible requirement for counselling when assessing staff needs.

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As Woolfe et al., (1987:148-151) point out, counselling about work cannot be separated from counselling about some aspects of the personal life of staff. In respect of staff who were retiring early as a result of redundancy or relocation, I made arrangements for them to be given copies of the Training and Enterprise council leaflets which offered workshops for staff who were serious in starting their own business. In most other instances these staff indicated to me that they had already thought about their next plan of action. As Wolfe et al. (1987:148-9) emphasise counselling it is not simply a matter of giving advice on the basis of 'if I were you'. Indeed the people concerned had to decide, with some guidance, on their future goals.

With regard to female members of staff, although NERC had emphasised that women should be given equal opportunities to men there were several instances where women told me that they felt they were not progressing as fast as they would wish. In almost all instances I talked the matter through with them and usually advised them to improve their on-the-job skills or their formal qualifications. In several instances I pressed their line manager to put them on vocational or management courses.

In undertaking counselling sessions, I encouraged staff to think out their own solutions about how they could best fit into the world of work. An example of such counselling is given below:-

In May 1993 M. came into the relatively remote office where I was working temporarily typing some data into a computer (not my own office) she had obviously come especially to find me. She was upset. She told me she had failed a promotion board and that her line manager had told her beforehand she would fail. She said she had not felt confident but could give no special reason for failing. After a few minutes she said:-

' Can you get me on some courses? (17.05.91)

Implicit in her statement was that 'getting her on courses' might remedy the situation but I knew that was not necessarily so. I wanted to help her both as a colleague and as Training Officer and I thought about the situation as she spoke. Clearly she was not outstanding management material but on the other hand she had done a good secretarial job for a number of years. One drawback to promotion was that she had had more than average sick leave (justifiably). In her existing job she had to travel to meetings to take notes and sometimes to present her report to her line-manager. Coincidentally I had a vacancy on an 'Occasional speakers' (presentation skills) course during the following month. I asked her if she would like to do the course and she said she would, (17.05.91) I did not know why she had failed in gaining promotion but I explained that it would be best in the long term if she would discuss the situation with her line-manager. I promised that I would support her by asking him if she could participate in this course and possibly attend other courses at a later date. I did this for two reasons. Firstly her immediate line-manager had a reputation for being rather arrogant and relatively unapproachable to junior staff. By letting him
know that she wished to go on future courses, he could not escape the fact that she was anxious to improve herself. Secondly I thought that the presentation skills course, run by a kindly but rather military tutor, might give her more confidence in herself. A little later I wrote a letter to her immediate line-manager asking if she could go on a course. I told him I would discuss it with another of her line managers. The former eventually saw me in the corridor, thanked me for taking an interest in her and agreed that she should participate in the course (21.05.91).

In another instance some months later, S. asked me for advice. He came to my office at 5.30 one evening. He was on a five year contract which was to end within a year. He seemed depressed at the prospect of having to leave. He said (in a monotone) that he had difficulty in writing [scientific] papers and in getting his work done on time. I was already aware of this from chance comments made by his peers. He discussed the fact that the department could not afford an 'Imperial College' student to help him out, (these are usually bright young undergraduates who spend a year of their course completing work-experience with one senior (usually) permanent member of staff. We talked about ways in which he could improve the situation (he had already attended a technical writing course). I suggested that he might apply to Guildford Technical College to get a student to help him with data analysis as part of his project as he could save time in this way and also give the student some experience. He said he would discuss it with his line manager (00.08.91).

After our talk S. seemed happier and said he was continuing with his project. Although he discussed the problem with his line manager, he did not apply for a student to help him. Eventually his contract ran out and he left without completing his paper.

14.3.3 Arranging staff development programmes in response to individual needs as perceived from counselling sessions

In both of the major counselling sessions I undertook. I followed up the sessions with further discussions with staff and in one instances ensured that the individual concerned had received appropriate additional training.

14.4 THE ROLE OF MARKETER OF TRAINING AND DEVELOPMENT

This role accounted for approximately 1-2% of my time (11 hours per year) and was concerned with publicising events, motivating staff to participate in courses, sometimes using business strategies to do so. Usually I targeted only those staff employed by IOS either at the Wormley site or the Chilworth site.
14.4.1 Publicising and promoting options for staff development e.g. learning packages / programmes.

This task was undertaken by five out of twelve of the Research Council Training Officers who responded to my survey. Publicity material was distributed in the form of leaflets, posters and articles in the local newsletter as discussed below in section 14.4.2.

14.4.2 Motivating staff to engage in staff development

Motivating staff to attend training and development initiatives was achieved partly by using business strategies such as publicising courses and seminars in newsletters and by placing posters in prominent positions throughout the Institute, (Appendices 14.8-14.10). In addition I circulated mail shots which advertised commercially-run courses. For example, I circulated a booklet received from the Training Officer at IBM (Portsmouth) which listed their training courses as I had arranged with R. that IOS staff could attend these on a repayment basis if they so wished. Later the Director asked me to show it to P. (A project Manager) suggesting that it might present 'a way of stimulating [his] thought for engineering project courses' (08.11.91)

With few exceptions most scientists and technologists at IOS were prepared to participate in JTS 'Management' courses as outlined in the IOS core-curriculum. In addition some experienced Personal Secretaries requested such courses, recognizing that management training would help them in their careers. On the other hand some secretaries clearly did not perceive that such courses would help them in their career:-

I had asked K. a secretary holding a responsible position if she wished to participate, free of charge in a five-day locally-run management course which covered basic subjects such as 'negotiation' and 'delegation'. She looked surprised and declined the offer saying, 'What me, Management'? as though she felt that it was only for managers. This attitude was also true of several staff who, although not having any staff working for them directly, might have gained from such initiatives.

14.4.3 Targeting Audiences outside of ones own work unit

As Marketer of training and development, I did not target audiences from outside the workplace, however as discussed in Chapter 8 (the Role of Strategist), I did remain aware of the possibility that external organisations might wish to take advantage of the NERC system for training staff.
14.4.4 Using Business Strategies

Much of the business strategies which I employed was presented in the form of advertisements on training initiatives at each site. I found that it was important not to clutter the notice board, otherwise it was not read. The circulation of material advertising external courses from commercial companies, not only acted as a mechanism for keeping line-managers and staff up-to-date with current trends, it was used hopefully as a way to stimulate their thought.

14.5 THE ROLE OF CONSULTANT

Occasionally I acted in the role of consultant. This was usually undertaken in the context of advising line managers of the staff development options available to them, the contents of courses and the relative costs of various initiatives:-

'B. rang he wanted advice on how to find a suitable project management course for W. (20.05.91)

On two occasions two University Departments consulted IOS about their proposed post-graduate courses. In one instance the Department of Physics at a London University had put forward details of a planned course for comment. In this instance I, in turn, consulted with senior physicists at IOS and collated their comments for the University (see Appendix 14.11).

14.6 SUMMARY OF CHAPTER 14

14.6.1 In this Chapter, I have discussed the separate roles of Communicator, Counsellor, Marketer of Training and Consultant

14.6.2 I put forward the role of Communicator in non-routine matters as an important aspect of the job of the Training Officer in that a proactive outgoing approach is needed. I suggest that this approach leads to incidental learning which can leads to new ideas and initiatives. Furthermore it may reveal to the Training Officer previously unknown information on staff attitudes and on the culture of the organisation.

14.6.3 The role of Communicator in non-routine matters accounted for approximately 6% of my time. Communication with various interest groups was imperative to the success and expansion of training initiatives. A diagrammatic model is presented which emphasises the central role of the Training Officer within communication processes which occur between staff, line-managers, project managers, tutors/trainers and the Director, within a research organisation.

14.6.4 The role of Counsellor is described and some practical examples presented. I emphasise that counselling for career development cannot be easily separated from
counselling of an individual's personal life and that follow-up procedures to counselling sessions are required.

14.6.5 The role of Marketer of Training and Development is described. It was concerned with publicising events, and in motivating staff to participate in courses, sometimes using business strategies to do so.

14.6.6 I present some examples of the role of Consultant but emphasise that in some instances I needed to refer enquiries to staff with expertise in particular scientific fields.
CHAPTER 15

THE ROLE OF PROFESSIONAL SELF-DEVELOPER
15.1 INTRODUCTION

As Training Officer it was imperative to remain up-to-date with technical and professional information and to maintain an awareness of innovation in terms of learning techniques, new technology and other initiatives, knowledge of which could be useful to managers and staff. I estimate that this role took up approximately 1% of my time. It was also necessary to enhance communication and interpersonal skills and to build up good working relationships with interest groups. Seven of the twelve Research Council Training Officers who responded to my survey also considered that good personal skills were essential to the job. At least half kept up-to-date by attending seminars or conferences and regularly met with other training officers to discuss or exchange ideas for staff development.

As part of my questionnaire I asked Research Council Training Officers to select from a list of thirty-one attributes which employers had cited in advertisements those they considered to be the most important in the job of Training Officer. As shown in Chapter 7, good communication and interpersonal skills were considered to be the essential personal qualities needed. A large proportion of the Training Officers thought that it was essential to remain proactive, to show initiative, to assimilate new ideas, to maintain a high profile and to be able to think ahead.

I found that I had to remain resilient and cheerful even at times when problems were occurring, for example, when funds for training were sparse, I had to retain the confidence of staff and to look for alternative resources of training material and trainers, sometimes this required good negotiation skills, patience and determination.

Some of the tasks inherent in the role of professional self-development are given below:-

15.2 TEST AND DEVELOP THEORIES OF LEARNING IN TRAINING

As Sredl and Rothwell (1985:319) note, it is important for the HRD theoreticians to be able to build models and theories which will lead to knowledge about efficient job performance and promote advances in the HRD field. This task was related to the role of Evaluator (see Chapter 12) in that, throughout the period of research, I monitored training methods to ensure that these remained acceptable to staff and that a reasonably high proportion of learning resulted from them. I noted that most staff benefitted from group work during training sessions, though a few did not. I did not have the opportunity to test or develop new theories of learning, however I encouraged staff to take up several types of training initiative, different than those used prior to 1988. For example, I encouraged on-site pilot schemes such as a communication workshop and also a series of 'Health and Fitness' sessions. I also
encouraged the use of computer-assisted learning, and, in the computing field, promoted self-help by informing staff of other colleagues who had expertise in particular types of software. I also tended to put staff of widely different grades on given courses hopefully to encourage them to see different points of view. All of these initiatives provided me with information on staff attitudes which I could apply to learning theory.

With regard to one of the courses for senior managers run by the Joint Training Service (JTS) which had failed in that, after only two days, participants had refused to complete the course, I made the following observation after a discussion made a few days later with JTS staff in which I questioned whether there was a 'ringleader' who had a tendency to sway other participants' attitudes to the course:-

'D.[JTS tutor] visited us here at IOSDL. She said everyone at JTS is upset that their senior management course had failed [run as a pilot scheme] .. She said tutors had hardly had a chance to speak before the course had decided to quit I asked if there was one person who had swayed the group ..she said she had her suspicions' (25.02.92)

In this particular instance, I remained aware of the views of an impartial observer who had stated that the whole ambience had not felt right.

15.3 CONDUCTING RESEARCH ON STAFF TRAINING AND DEVELOPMENT INITIATIVES

I found the research undertaken in the preparation of this thesis invaluable in helping me to obtain an insight into the variety of processes basic to the planning, design, implementation and evaluation of the staff development situation. I also found it beneficial to participate in other courses as an observer. For example at the British Petroleum 'Creative Thinking' course in which I had participated as an observer during 1991, I gained experience in participating in the more unusual group work such as jointly writing a play and playing one of its characters. I also learned something about the culture of young scientists and mathematicians from British Petroleum and their positive attitude to staff development.

I used as my own role-models the two good-humoured and relaxed male and female trainers who ran the course. I learned the importance of ensuring that participants were given adequate 'oxygen breaks' and that part of the course was for them to engage in rigorous activity for approximately a half-hour per day. I particularly remember the strenuous aerobic sessions which were conducted under the watchful eye of one of the trainers who was experienced at aerobics. Some of the comments, I recorded whilst on this course are given below :-
'Went on BP 'Creative Thinking' course 3-5/4/91 (cont). The course was run from 0930 a.m. approx until about 11p.m. with frequent comfort breaks, coffee etc...there were exercise/sports 'oxygen' breaks in the afternoon for an hour or so. I found them to be beneficial. I was more wide awake. Strong element of competition eg. team work, writing plays, making parachutes, playing charades.' (05.04.91)

15.4 ATTEND SEMINARS/CONFERENCES

As Training Officer, I had the opportunity to attend the many conferences organised by Universities, government-sponsored, or commercial organisations in the United Kingdom or abroad. At least five of the twelve training Officers who responded to my survey also attended seminars and conferences, one of whom reported that it took up a relatively large proportion of time. I attended an average of three seminars per year, most of which were held within a thirty mile radius of my workplace. For example, during 1992 one was held at Southampton University Management School (see Appendix 15.1). Here the subject of the seminar, given by R. was 'Evaluation' and during the session there was much lively discussion of methodology:-

'R's seminar: .. There may be differences in evaluation in terms of.. role. It would be interesting for participants to analyse their own skills .. R. said the main objectives for courses might be different for respective Board members, managers and staff' (08.03.92)

R. suggested that, to evaluate staff development, endowment of skills in a firm might be compared from year to year and the degree of change in the skills profile assessed but that still was not proof of success of a training programme.

One of the most beneficial aspects of attendance at seminars was that I met other training professionals. For example during the seminar on evaluation of training at Southampton University Management School I met several training officers. We discussed the various methods of evaluating staff development initiatives. Exchange of information with other training officers is discussed below in Section 15.6.

15.5 KEEPING UP-TO-DATE WITH PRACTICES AND CONCEPTS FOR STAFF DEVELOPMENT

There were several very successful ways in which I was able to keep up to date with innovation in staff development. I endeavoured to watch many of the nationally televised programmes on the various methods used to promote learning. For example I recorded the comment after a BBC2 programme which had been run in June 1992:-
'You can think of a video disk as an 'exhibition'. Children given video disks. Teacher speaking [on] BBC2 said their attitude to video discs is amazing - they were really interested. now the teacher is no longer the central focus as video discs have much of the info [information] and furthermore students are sometimes more easily able to use the hardware'. (BBC2, 02.06.92).

During this programme, I also noted that video disks were considered to be cost-effective as noted by London Transport.

The brochures and mail shots, advertising staff development courses, routinely circulated by government- and commercially-sponsored organisations were a very useful source of information. Many contained descriptions of courses designed to develop professional trainers, such courses included 'Handling groups, 'Presentation skills'. An example of one such brochure is given in Appendix 15.2.

Professional journals were also an effective source of information. The NERC Joint Library Service supplied some useful articles, others were sent to me by staff. One person found a 'Springboard' course advertised in 'Good Housekeeping' in which she later participated. Undertaking this research also kept me informed of new initiatives.

15.6 REGULARLY MEET/DISCUSS/EXCHANGE IDEAS FOR STAFF DEVELOPMENT WITH OTHER TRAINING OFFICERS

Half of the Research Council Training Officers who responded to my survey also met other training officers to exchange views or discuss ideas. I maintained contact with other training professionals within NERC at local training officer meetings or with those from commercial organisations. These often presented a fruitful way of gaining new ideas or solutions to problems. Much useful information was exchanged during various meetings with other training officers from a variety of locations. For example training officer from HQ told me that it was interesting that one of his new managers had been quick in discovering that if one wanted to succeed in implementing new or different ideas then one had to get the support of middle management. (22.06.92)

On another occasion, V., one of the senior training advisors from eastern Europe, visited me at IOS, we exchanged information on the training function including useful sources of information. We discussed the practicalities of training at IOS and I showed her round the department:-

'Visit of V.. we had a good discussion and she gave me some addresses .. Comment from V. "It is good to see what is really happening rather than looking at theoretical knowledge" '(29.06.92)

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I also showed her the NERC form used for annual staff appraisal. She told me that in Germany and Denmark students attending a course have to make a report about it on their return. A further topic which we discussed was the relatively new concept of Total Quality Management (TQM). I recommended to her Oakland’s 1989 book on TQM. (29.06.92)

On another occasion, I discussed a visit to a local College with another education professional. He was also interested in their curriculum (19.10.91)

Rarely did I receive letters from trainers practising abroad, however on one occasion, I received a letter and a phone call from a consultant in Canada (20.03.92). He told me that the secret of his success in running courses for scientific Management and technological updating for senior staff was to hold courses for up to 20 participants from 3-5 different laboratories. He asked me to send him some literature on the IOS core curriculum.

On another occasion at a local seminar on Training Officer from a local commercial firm confided that he felt that staff only went on courses to please him rather than to learn something new. He commented:-

'People come to courses to please me they seem to think I’m a stand up comic' (08.03.91)

Other new initiatives which were tried at IOS, arising from an exchange of ideas was that of Psychometric testing.

During Chapters 7-15, I have presented the reader on information on the various roles of the Training Officer. These are summarised in the next Chapter, Chapter 16.

15.7 SUMMARY OF CHAPTER 15

15.7.1 In this Chapter, I have shown that it is imperative for the Training Officer to remain up-to-date with technical and professional information and to maintain an awareness of innovation in terms of learning techniques, new technology and other initiatives.

15.7.2 Good communication and interpersonal skills are considered to be the essential personal qualities needed for the job as Training Officer.

15.7.3 The work of the Theoretician is seen as being related to the role of Evaluator in that training methods were evaluated

15.7.4 On-site pilot schemes were initiated as part of the process of understanding staff-development processes and systems.
15.7.5 Participation in or observation of external courses was an efficient method of gaining experience and of seeing other points of view.

15.7.6 Exchange of ideas with other Training Professionals provided a way of obtaining information on staff attitudes external to one's own organisation

So far in Chapters 7-15, I have discussed the various roles which I undertook as Training Officer. In Part IIB (Chapters 16-30) I present an evaluation of staff development at IOS which has enabled me to assess its overall cost-effectiveness as well as my contribution as training officer to the function as a whole. I highlight factors which lead to an effective training function and discuss the changing needs of staff.
PART IIB

RESULTS
INTRODUCTION TO PART IIb (Chapters 16-30)

In the past nine Chapters I have examined the various roles which I undertook as Training Officer and described the practicalities of undertaking the roles and tasks. I have shown that training officers perform many important functions within organisations whilst maintaining a neutral stance in supporting Management Teams, line-managers and individuals.

Linked to the question of whether it is cost-effective for organisations to employ training officers one must enquire whether the whole staff development programme which they manage is broadly cost-effective in terms of organisational and staff objectives, the curriculum offered, transfer of learning, the standard and level of training provided and its cost.

In the following Chapters (16-30) I shall examine some of these questions, again using IOS and the staff-development programme which I ran as a case-study.
CHAPTER 16

INTRODUCTION AND BACKGROUND TO STAFF DEVELOPMENT AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES
16 INTRODUCTION AND BACKGROUND TO STAFF DEVELOPMENT AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES

16.1 INTRODUCTION

Within the field of Training and Development the types of traditional training courses offered and the modes of study are reasonably well understood. What is not known is the extent to which various staff development initiatives form a useful basis for the updating of information and the enhancement of personal skills by scientists, technologists and support staff. Furthermore little is known to what extent such staff development initiatives promote organisational development. In the planning of staff development it is necessary to:-

a. Decide on and define staff development objectives.
b. Implement ways of measuring those objectives.
c. Ensure that evaluative measurements are made at the right time within the training cycle.

As Rothwell and Kazanas (1989:469) emphasise, the timing of evaluation is important as it may be used in decision-making about future learning events. It should provide a link between successive stages in the staff development process. Its purpose is not only to help trainers to determine the success or otherwise of past training programmes but also to help them and other interest groups to decide on future objectives and programmes. It may also enable trainers to decide whether methods of instruction have produced desired outcomes and whether transfer of learning to the workplace has occurred.

16.2 A DEFINITION OF EVALUATION

The glossary of training terms (HMSO, 1971:9) defines evaluation as:-

'\text{the assessment of the total value of a training system}'

This may include the costs and the benefits to an organisation, rather than a simple enquiry into whether staff or organisational objectives were achieved.

Evaluation consists of a systematic collection of descriptive and judgemental data which provides organisations with information that allows them to make effective training decisions and to increase the effectiveness of their staff development programmes. It is concerned with assessment of the total value of the training or education system programme in social as well as financial terms, (see Goldstein 1980:237; Bramley 1986:3-6).

Quality in training is relative in that it relies on the definition of standard required by the organisation or the potential employer (Plant and Ryan, 1992:22-23). As
Kirkpatrick (1975:6) points out, favourable reaction to a training programme does not assure that learning has taken place. Where cost benefit analysis is involved it is necessary to gain an understanding of improvements that are brought about by staff development programmes in terms of the benefits not only to staff but also to the organisation in the use of new technology, improved efficiency and effectiveness of staff and increased output. Indeed Pepper (1984:101) points out that costs may be computed and measured against achieved objectives in a number of ways, depending on a variety of factors including organisational objectives.

If a staff development department can demonstrate that it is effective and contributes to an organisation's goals then it can increase its influence within the organisation (see Kirkpatrick, 1960:18; Warr et al 1970). But in practice the procedures for evaluation are not as simple as they first appear and, in some instances are difficult to achieve. The methodology and questions one seeks to answer when adopting evaluation procedures are discussed further in Chapter 17.

The aims of the present study are described below. Chapters which cover the given areas of information are shown in brackets:

a. To review the needs of staff, the resources available and the curriculum offered at the Institute of Oceanographic Sciences (IOS), (Chapter 18).

b. To evaluate the implementation of Training and Development at the IOS (Chapter 19).

c. To evaluate given courses (Chapter 20).

d. To evaluate methods for updating of staff and managers' skills to promote their versatility and competence (Chapter 21).

e. To evaluate relevance of course content and transfer of learning to the workplace (Chapter 22).

f. To evaluate the role of experiential learning in the workplace (Chapter 23).

g. To evaluate organisational development (Chapter 24).

h. To analyse the cost-effectiveness of individual staff development initiatives at IOS (Chapter 25).

i. To identify those factors which promote full staff participation in training events and cooperation between staff and managers (Chapter 26).

j. To identify areas of staff development which could be enhanced including those which promote staff and managerial awareness of new technology within their fields of expertise (Chapter 27).
k. To discuss staff attitudes to training and development initiatives (Chapter 28).

m. To discuss the role of Local Training Officers at component Institutes of the Natural Environment Research Council. (Chapter 28).

n. To discuss the benefits of staff Development and possible future initiatives (Chapter 29).

Meanwhile, before discussing the process of evaluation further, it seems appropriate to describe both past and recent initiatives at NERC and IOS which are relevant to this assessment of evaluation and cost-effectiveness.

### 16.3 BACKGROUND TO STAFF DEVELOPMENT INITIATIVES AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES

As discussed in Chapter 2, in 1968 the Fulton Committee of the Civil Service Government Departments, considered that management in the public service was not sufficiently professional and that more attention was needed to be given to developing management potential. Recommendations were adopted by the Whitley Committee (a Trade-union initiative). These stated that:-

a. A Natural Environment Research Council (NERC) training programme should be flexible.

b. There would be built-in processes for evaluation.

c. All training would be relevant to an officer’s individual requirements/needs and to her/his present or potential duties.

In 1974 there followed guidelines for induction, management and vocational courses. In 1981 a Training Review Committee (Natural Environment Research Council (1981) decided on a 'Training for Change' policy which, it was hoped, would develop in NERC staff an acceptance of change and enable them to develop coping strategies. It was emphasised that informal on-the-job training would complement formal courses.

The Committee acknowledged that it was difficult to measure the effectiveness of training programmes partly because post-learning changes in individual performance could be related to other variables. Furthermore recognition of such changes tended to remain subjective. A summary of the findings of the 1981 Committee included the recommendation that:-
a. Attendance at conferences and workshops should be viewed as training initiatives.

b. Performance by individuals on courses should not be assessed.

c. Evaluation of training should continue.

16.4 A NATIONAL AUDIT OFFICE REPORT ON THE TRAINING OF NON-INDUSTRIAL CIVIL SERVANTS

In 1990 the National Audit Office (NAO) published a report on the training of non-industrial Civil Servants in general. NAO found that formal courses within Civil Service Departments were of high quality and relevant to staff needs. However, it found that the quality of training data produced for monitoring purposes was very variable and that the amount of training recorded per staff member in 1988-1989 between departments ranged from 1.9 days to 5.7 days per year. This compared to a value of approximately 3.6 days per member of staff per year in the private sector. NAO concluded that future analysis of training data needed to be planned and that this should include an estimation of cost-effectiveness. It concluded that improved accountability might lead to better targeted and more effective training. (National Audit Office (1990:4-5). NAO found that private sector companies viewed validation and evaluation as a single important operation. On the other hand they usually did not devote large resources to it. Often they used business performance measures as key indicators of training impact, though some used questionnaires or interviews.

Bramham (1989:36) also found that during 1985-86 organisations within the U.K. provided an average 3.5 days per employee per year off-the-job training and a similar average of 3.0 days per employee per year on informal on-the-job training.

16.5 THE PRESENT ARRANGEMENTS FOR STAFF DEVELOPMENT AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES (IOS)

The prevalent culture at IOS during the 1980s had not supported a high-profile training regime. However Colin Summerhayes, who took over the Directorship of IOS in 1988, recognized the importance of staff development so as to enable people to reach their full potential and to enhance organisational development (OD). This is in keeping with the view that if staff improve performance and have similar objectives to that of the organisation then theoretically OD will be enhanced (see Argyris et al 1985). In 1989/91 NERC developed a training strategy which reaffirmed the link between staff development and the appraisal/promotion system. Such was the position when I commenced the job of Training Officer in 1990.
16.6 THE GOALS OF THE ORGANISATION

During 1988 IOS launched a proactive staff development and training programme which accelerated during 1989-1994. Essentially it had a future-oriented strategic approach to training in that it anticipated the type of training which might be needed in response to future changes and sought to gain the support of top and middle managers in averting potential problems in staff performance. As outlined in Chapter 2, it had several aims:-

a. To help staff to continue to improve their performance in terms of quality and quantity of output.

b. To develop people in various ways so that they would learn management and job skills.

c. To develop a 'learning organisation' (see Senge, 1990) and a learning culture.

d. To help staff to adapt to change.

e. To improve communication channels throughout the Institute.

f. To maintain a fair system of appraisal.

g. To improve Health and Safety at work.

h. To strengthen its customer base and help staff to improve presentation and marketing.

i. To increase income.

16.7 SUMMARY OF CHAPTER 16

16.7.1 Evaluation is seen as a systematic collection of descriptive and judgemental information which allows organisations to make effective training decisions.

16.7.2 The aims of the present study at the Institute of Oceanographic Sciences (IOS) are described.

16.7.3 The historical background to staff development initiatives at IOS since 1981 is described.

16.7.4 Present arrangements for staff development at IOS are discussed in the context of the promotion of staff and organisational development.
CHAPTER 17

EVALUATION; A METHODOLOGY
17 EVALUATION - A METHODOLOGY

17.1 INTRODUCTION

It is usual to consider a number of different areas when assessing the efficiency and effectiveness of a training programme. As discussed in Chapter 16, in reviewing the implementation of training and development at the Institute of Oceanographic Sciences (IOS) I sought to investigate the following:-

a. The role of the training officer, total staff-development curriculum and available resources, the methods used, the effectiveness of formal training programmes and the transfer of learning to the workplace.
b. The cost-effectiveness of the staff development programme.
c. Organisational development
d. Potential areas of improvement in terms of professional updating and increased interpersonal effectiveness, communication and team-work in staff.
e. The appraisal system.
f. Benefits of staff development programmes to staff and to the organisation
g. Whether a change towards a learning culture had occurred.
h. The value of experiential learning in the workplace.

17.2 WHAT IS EVALUATION

Evaluation may include reactions of participants and their managers, whether achievement of objectives had occurred and benefits to the organisation. Burgoyne and Singh (1977:17) stress the importance of adopting a clear and understandable strategy for evaluation.

Various researchers suggest a whole range of methods for evaluating training programmes. Catalanello and KirkPatrick (1968: 260) in summarising the 'state of the art' in evaluation suggest that the there are four steps which comprise the process:-

a. Reaction of participants (i.e. how they react to a given initiative)
b. Whether learning has occurred (for example, changes in skills or knowledge).
c. Behaviour of individuals, (i.e. behaviour in undertaking a task.

d. Results of training programmes (defined at individual or organisational level.

However these authors conclude that there may be differences between organisations which make it difficult to obtain accurate and comparable outcomes. Furthermore it is often impossible to prove that an improvement in performance, knowledge or skills occurred solely in response to a given course or other type of learning event. For example an increase in efficiency may be due to other factors such as interest shown by line managers in putting forward staff to training schemes. Moreover it is not always possible to test for transfer of learning. For example staff may not have had the opportunity to practice newly-learned skills.

In some instances increased training may be easily measured in terms of increased productivity. In other examples e.g. management training, the benefits to the organisation or to its staff may not be recognised immediately. There are other examples where training can improve safety in the workplace and where it is a legal requirement for it to be provided but there may be no direct outcome except lack of accidents.

Hamblin (1974:33) proposes broadly similar strategies for evaluation to those of Catalanello and KirkPatrick (1968), (i.e. assessment of :- reaction, learning, job behaviour, organisational development). He suggests that an assessment of costs and benefits also may be made). Pepper (1984:101) emphasises that costs may be measured against achieved objectives in a number of ways. He emphasises that the main rule is that training professionals should:-

'understand the physical and organisational processes and activities’ (p.101)

as fixed costs represent only a part of the picture.

Blanshard and Montgomery (1978:2-14) conclude that evaluation can be effective but that it must be planned, relevant, objective, verifiable and needs the cooperation of all participants and that it should highlight strengths and weaknesses, accomplishments and shortfalls. They consider that it should be:-

'practicable and capable of being carried out without turning the organisation upside down..(p.3)

It is expensive in terms of time and effort to collect data on the benefits of various staff development programmes so this has to be undertaken efficiently without involving the staff concerned in completing over-long questionnaires or involving them in long drawn out discussions.
Moreover methods for evaluation are problematic in that results may be somewhat subjective unless some measures are taken to reduce this such as obtaining information from a variety of sources, (see Whitelaw, 1972; Hamblin, 1974). Some of the well-documented difficulties in obtaining useful evaluative data are summarised below:–

a. Making measurements or obtaining information at the appropriate time.

b. Obtaining quantifiable data.

c. Remaining objective when assessing quantitative and qualitative data.

d. There may be no set standards against which to measure a given staff development initiative

e. For non-routine tasks such as managerial tasks, the variety of factors which influence job-behaviour may make it difficult for an evaluator to isolate the effect of training.

f. The use of control groups often disrupt staff activities and 'control group' staff often resent not being offered training.

g. Evaluation itself may cause behaviour changes.

h. End-of-course questionnaires may provide only a simplistic account of the course.

However, as Blanshard and Montgomery (1978:14) conclude, evaluation can never be perfect but that it may reduce error inherent in subjective opinion.

With regard to 'end-of-course' questionnaires, at a seminar which I attended at Southampton University Management School during 1992, several people said that this type of questionnaire was a waste of time and did not contribute anything to the process, others felt that they provided some value at a very simplistic level

Thus at best, evaluation should be derived from a combination of quantitative, qualitative information and data obtained from a number of sources including ethnographic observation, questionnaires and organisational business success, (see Whitelaw, 1972).

17.3 METHODS OF EVALUATION

I have used various methods for evaluating the staff development programme at IOS but have concentrated on obtaining opinions from participants themselves either by recording verbal comments, or by analysing questionnaires and evaluation sheets.
At IOS, end-of-course questionnaires were usually given out towards the end of most courses by the course tutor or trainer (see Appendix 12.1). As Training Officer, I also sent out questionnaires either to all participants or to a sample of participants six months to a year after various course had been completed so as to assess whether they had been able to transfer newly learned material to their work or leisure (see Appendix 12.2). In addition NERC Establishments Division allowed me access to their summary of evaluation sheets that they had sent out as a follow-up to JTS courses (Appendix 17.1). Thus I was able to compare the latter with information obtained from questionnaires sent to IOS staff where relevant.

I was also able to collect information and comments from the staff and their line managers during routine activities and unstructured interviews and discussions with staff at IOS. Examples include details derived from two separate questionnaires about computer needs and staff expertise in computing (Appendix 17.2). Post-work experience questionnaires were also sent to work-experience students (Appendix 17.3).

In summary I have evaluated the staff development function in terms of method, relevance and cost-effectiveness by adopting several different approaches as follows:

a. Analysing 'End-of-course questionnaires'. Obtaining feedback from given initiatives by collating and analysing post-course questionnaires.

b. Collating ethnographic/discussion data amassed during my daily activities as Training Officer at IOS between 1991 and 1993 inclusive, notably by collating formal and informal comments (verbal or written) from staff, tutors or line managers.

c. Comparing responses given in IOS Questionnaires with those supplied by NERC or the Joint Training Service.

d. Estimating costs from records held at IOS, NERC, NCS or JTS

Costs were assessed under the following headings (put forward by Pepper 1984):

a. Establishment costs e.g., salaries and staff overheads e.g. pension contributions, the cost of accommodation and services such as heating and cleaning. This included salaries and accommodation costs not only for training staff and consultants but also other staff and managers in the organisation who acted as trainers/speakers/planners from time-to-time.

b. Marginal expenditure. This may be described as costs, additional to the above incurred for the use of external resources. Examples include:- fees for external
courses or lectures, hotel accommodation, travel and subsistence fees for staff participating in external courses, books and other resources e.g. video training films.

Interference costs i.e. those costs which occur due to a reduction in output, as a result of staff participating in courses, were not assessed as it was virtually impossible to calculate them.

Ethnographic data and written and verbal comments from staff have also proved useful in providing additional data on courses as recorded in Chapters

17.4 SUMMARY OF CHAPTER 17

17.4.1 A description of the aspects of the IOS staff development programme to be evaluated is given. This includes the total staff-development curriculum, available resources, the methods used, the relevance of formal training programmes and the transfer of learning to the workplace.

17.4.2 The benefits of professional updating and increased interpersonal effectiveness on organisational development is also the subject of this enquiry.

17.4.3 Problems of measurement are highlighted and ascribed to a variety of factors including subjectivity and the absence of prescribed standards.

17.4.4 Methods of Evaluation are outlined and include ethnographic approaches, questionnaires and discussion.
CHAPTER 18

NEEDS OF STAFF
AND
RESOURCES AVAILABLE
AT THE
INSTITUTE OF OCEANOGRAPHIC
SCIENCES (IOS)
18 NEEDS OF STAFF AND RESOURCES AVAILABLE AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES (IOS)

18.1 INTRODUCTION

One of the first priorities when embarking on a staff development programme is to give individuals the opportunity to decide on the vocational, managerial and developmental needs which will help them in their careers. Clearly opportunities offered are linked to the resources available.

18.2 NEEDS ANALYSES

Training and Development needs may be assessed in a variety of ways but could be divided into the following:

a. **Organisational** needs: i.e. those which follow from the requirement of groups of staff to improve output, implement new technologies or to improve marketing or needs arising from European Community Health and Safety initiatives.

b. **Individual** needs, i.e. those which arise when individuals change to different tasks or jobs or need to improve their personal, managerial or vocational skills, for example computing or report writing.

I calculate that, out of the 1100 places on courses filled during 1991 to 1993, approximately 50% were provided as a result of organisational needs, 26% were provided as a result of discussions with staff and line-managers and 24% were provided in response to requests on annual staff appraisal forms.

All staff development needs were assessed from the following main sources:

a. Discussions with the Director and/or Management Team.

b. Discussions with staff and line-managers.

c. Annual Staff Reports (ASRs) training section.

d. Questionnaires

e. JTS analysis of needs.

Discussions with top management were about organisational needs rather than individual needs. For example, in Autumn 1992 following discussions with several staff about the need for increased Health and Safety Training we started looking into...
some options. In 1993 we discussed training needs arising from relocation of the Institute to Southampton University.

There were other examples of initiatives needed to improve the organisation as a whole which come from the staff themselves. At the end of one video session on management topics (1990), some staff had indicated that there was a need for improved communication within IOS. After discussions with various members of the management Team we decided to remedy this where possible. First of all we decided to run a pilot workshop (1991) on 'the line manager as a communicator' (February 1991) and secondly we circulated the Industrial Society booklet on 'Communication' to all staff. Furthermore, in May 1991, the Director sent a note to all staff asking them to suggest ways of improving communication.

Although about 24% of information about staff training and development needs arise from an analysis of the training section of annual staff reports, at least another 26% arise from discussions with staff and line managers. On-the-job training needs were sometimes entered on ASRs, though most of the needs expressed on ASRs were for formal courses. Generally there is good agreement on the perceived needs as defined by staff themselves and by their Reporting or Countersigning Officers. In some instances the latter suggest training initiatives from which the individual might profit.

Agreement between staff and their line managers about training needs occur in approximately 99% of instances as recorded on ASR training sections, though in some 20% of cases, the reporting officers/line manager suggests that at least one more training initiative should be added. Only in 1% of occurrences do line managers totally disagree with staff.

As Training Officer I also obtained information on staff needs by sending out questionnaires to them (see Appendix 17.2)

On one occasion (1991) the Joint Training Service visited IOS to advise us on needs for less experienced administration staff, many of whom were reluctant to attend residential courses. A member of JTS staff conducted a needs analysis for nine junior administration staff early in 1991. She met most staff for ten minutes or so each to discuss their work, their past experience and their needs. She indicated to me that most were not especially keen to undertake training. Furthermore by 1992, JTS had not come up with any firm offers of suitable courses and so for several of these staff I provided local courses as requested e.g. basic computing, word-processing. Several also expressed an interest in National Vocational Qualifications (NVQs).

Table 18.1 showing how needs were assessed during 1991-1993 is given below.
Table 18.1  How staff needs were assessed during 1991-1993

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussions with Management Team about Organisational needs (Arising from policy decisions)</td>
<td>50 %</td>
</tr>
<tr>
<td>Discussions with staff/line-managers or as a result of publicising places</td>
<td>26 %</td>
</tr>
<tr>
<td>Annual Appraisal Forms (Staff reports)</td>
<td>24 %</td>
</tr>
</tbody>
</table>

(Total number of places offered = 1100)

There was good agreement between the needs of staff as perceived by themselves and their line managers (see Table 18.2)

Table 18.2  A comparison of agreement between needs of staff

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total No. of places requested by staff</td>
<td>100</td>
<td>117</td>
</tr>
<tr>
<td>Average No. requested per head</td>
<td>0.68</td>
<td>0.81</td>
</tr>
<tr>
<td>No. of courses over which there was disagreement between staff and Reporting Officer.</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

The present dual system of assessing needs works well, though it is emphasised that such recording on ASRs is but one method by which needs are communicated. Generally during 1991-1993 there have been relatively few discussions with line managers on whether any given initiative might fulfil a training need so as to improve performance. Usually, if a course has been successful for any one member of their staff, the word soon gets around and so, where relevant, line managers tended to nominate others for it. However they sometimes telephone me to consult about course content, cost and location. When I commenced the job of Training Officer in 1990, staff tended to be unaware that staff development initiatives could help them in 'getting on' in their career. This was particularly true of the 'Management' series which was made available to all non-industrial staff. However following the NERC...
1992 staff notice about its training strategy and the proactive role of myself and line managers in promoting training, staff tended to expect training and sometimes mentioned its link to appraisal. The present position is that new staff expect to receive training to enhance their career prospects.

18.3 RESOURCES AVAILABLE AT IOS

IOS has two main sites. One is situated at Wormley Surrey, another at the Southampton University Research Park at Chilworth. Several Staff are housed at a site close to the Rutherford Appleton Laboratory at Hook, Oxfordshire.

Accommodation

Accommodation for training includes a total of two conference rooms with audio/visual equipment, several flip charts, overhead projectors and film projectors. At each site there are also one or two rooms suitable for seminars. Thus IOS is well-equipped.

Staff and Students

Several staff are willing to assist with training others in such areas as computing. Several others regularly give talks on Health and Safety or arrangements for appraisal.

During the 1980’s college, undergraduate and post-graduate students had always been offered places at IOS so as to gain work-experience. This trend continued into the 1990’s and, as the work-load increased during the past three years, students have been given more responsibility in undertaking elementary and advanced research work, depending on their qualifications.

Funds

Non-JTS/NERC- sponsored training is usually paid from IOS funds. Apart from a small fund of approximately £1-2k per year for day-to-day training essentials such as refreshments for courses and expenses of the Training Officer, all costs for training are payable by project managers from Institute funds. This raises problems because this often means that there is direct competition for funding between training needs and those of the research project. During 1992 funding was particularly scarce and so some vocational courses had to be postponed and Management 1 courses held on a non-residential basis so as to save on travelling expenses.

Loan of video-tapes

These were either hired from reputable companies or loaned from the NERC Computing Service or JTS free of charge. On several occasions I visited JTS at the
Swindon Office and found it useful to search through their book and video library so as to beg and borrow, for a few weeks whatever seemed useful. Most commercial companies were willing to allow me to borrow tapes for preview.

18.4 PROVISION OF TRAINING

Provision for staff development initiatives stem for several sources:-

a. The Natural Environment Research Council Contracts and Finance departments

b. The Natural Environment Research Council Health and Safety Advisor

c. The Joint Training Service

d. NERC Computing Service

e. Local sources including commercial- and government-sponsored Institutes, Colleges and Universities. During 1993, Surrey Training and Enterprise Council also provided some training initiatives.

These sources of training are discussed below:-

Natural Environment Research Council (NERC)

In 1989 NERC developed a draft document on staff development/training strategy which, when published, was to inform staff of their opportunities with regard to staff development. It reaffirmed the link between staff development and the appraisal/promotion system (The full document is shown in Appendix 8.1)

NERC works with several other Research Councils including the Agricultural and Food Research Council and Science and Engineering Research Council in arranging for the Joint Training Service (JTS) to provide management-based training for its staff. It provides a proportion of the funding for JTS mainly by top-slicing from the allocation of funds to component Institutes. NERC further ensures that staff at its Headquarters and at component Institutes are given the opportunity to participate in their due allocation of training initiatives.

Local Training Officers, based at component Institutes form a link between NERC, the research Institutes and the Joint Training service, arranging for staff to participate in courses, finalising arrangements and sometimes attending meetings at several sites for exchange of ideas and information. The various roles of local training officers is discussed fully Chapter 7 of this thesis.
NERC Headquarters provides several different levels of 'Finance' and 'Contracts' courses some of which are provided through local training officers, others of which are 'open' mainly to administration staff. These include courses on finance spreadsheets. Establishments seminars are also held. These provide administration staff with a useful basis for coaching scientists and technologists 'on-the-job' in the use of financial spreadsheets though many have received separate training in financial matters at IOS. However there tends to be waiting lists for these types of courses. Indeed 'contracts' courses are held only at the rate of one per year or less.

NERC also provides pre-retirement courses for staff over the age of fifty-five years, though these are not for younger staff who are leaving due to redundancy.

In addition during 1991 and 1992, NERC provided a limited amount of funding so as to allow senior managers to participate in senior management and project management courses. This proved to be very successful in persuading senior managers to attend courses which would be of benefit to them and their teams.

**Joint Training Service**

The Joint Training Service (JTS), set up in 1982, provides a core programme of management training to the Agriculture and Food, Economic and Social, Science and Engineering and Natural Environment Research Councils (AFRC, ESRC, SERC, NERC). It provides several different types of core course in Appraisal, Management, project Management, Presentational skills, Interviewing and Pre-retirement as shown in Appendix 18.1.

Courses are reviewed regularly and are discussed with all interested groups such as the Joint Research Councils' Training Advisory Committee, NERC and other Research Councils.

Recently JTS has become aware that some staff find it difficult to attend the more usual residential courses and have taken steps to provide several non-residential courses. These were run at IOS during 1990-1993 and although some staff would have preferred to attend residential courses, others found it useful not to have to stay away from their homes.

Expenditure by JTS for 1990-1992 was on average £525K and rose to over £760k during 1993. In some instances JTS have retained the right to implement cancellation charges in the case of staff who drop out of courses without a valid reason. However as IOS has adopted a substitution policy whereby staff who drop-out have to find a replacement, these charges have not been implemented at the Institute.

As the JTS Management courses have now run over several years, JTS is in the process of negotiating for an agreement with Sheffield Business School and other
Bodies concerned with the Management Charter Initiative, so that staff who have undertaken the whole series of Management courses may receive accreditation towards formal management qualification.

Generally there were very few difficulties with administration arrangements for booking courses through JTS from mid-1993 onwards. Prior to that time there had been some difficulties in booking courses due to the JTS backlogs. There was hardly ever any problem in asking staff to complete the nomination forms which had to be signed and sent to JTS by myself and the appropriate line-manager.

The Joint Training Service staff have been very involved in helping to maintain the high training profile at IOS. One member of JTS staff is usually appointed to take care of IOS interests, others make regular visits to IOS to provide training. On two occasions during the past three years difficulties in getting dates for courses were resolved by a visit to JTS.

Generally JTS have provided IOS with excellent service particularly during 1992 and 1993.

**NERC Computing Service**

The NERC Computing Service (NCS) is a separately operating system, funded from NERC funds, but with a department at each Institute. Each of the Institutes was awarded an annual cost allocation. For example the following is an extract from the NCS Journal 'NERC Computing' March 1991:4 :-

"Throughout the year.. we present each Institute with a summary of the cost allocations during that month.. we give the Institutes the charge [cost allocation] but the Institutes do not give NCS any money in return .. it is a cost allocation ..not a request for money, since NCS have already been funded [by NERC] .." 

The role of NCS is to ensure that all the computing systems at the Institute function to a given standard and that computer users e.g. scientists and technologists are provided with support in their daily work in developing and running programmes. In addition NCS provides a few formal courses and also computer-assisted learning disks for basic Personal Computer and spreadsheet training. I (together with NCS staff) estimate that at IOS, the NERC Computing Service spends approximately one-half a man-year per year in providing on-the-job computer training for staff. In addition the NCS training Officer provides a supply of computer-assisted learning disks in a range of options on loan to IOS free of charge. As the NCS training Officer stated in "NERC Computing" 1991:8 :-
'the rate of change in computing has made this [new training policy] imperative. NCS must keep ahead of the latest developments so it can deploy technology to NERC's benefit. It is equally important that users of this technology are aware of what it can do and are both competent and confident.'

There exists some tension between NCS and IOS staff in that staff expect NCS to provide training in new computer systems and software, to negotiate with software companies for site licences, advise on buying new equipment, as well as providing some on-the-job training as well as operating the system and providing day-to-day support. Thus a tremendous amount is expected of the present permanent staff of three.

As Training Officer, I routinely saw the member of NCS staff concerned mainly with day-to-day support. Although always cheerful she often said that was concerned that she was unable to give all staff the support they needed. On several occasions when I saw her, the telephone rang and she had to tell staff that due to pressure of work she was unable to help them with their computing problem at the time but that she would help them later in the day when there was time available.

Most other courses are provided by component Institutes directly from their funds.

18.5 ON-THE-JOB TRAINING

Usually line managers ensure that training in work skills occur at the work desk or bench'. Furthermore there is ample evidence that individual staff help colleagues to develop technical and computing skills on-the-job. Aspects of experiential learning will be discussed further in Chapter 23.

Other sources of training

Almost all other courses have been sponsored by IOS and are discussed in the next Chapter together with the IOS Core Curriculum.

18.6 SUMMARY AND CONCLUSIONS

18.6.1 The NERC policy of positive career management for all staff is being applied at IOS.

18.6.2 The present system of analysing the needs of staff by formal and informal discussion between the Training Officer, the Management team, line-managers and individual staff works well. It is emphasised that the annual staff report is but one method for assessing needs. Needs analysis should remain an ongoing process throughout the year.
18.6.3 Individual staff themselves often know precisely their vocational training needs, though they tend to be less clear about personal development or managerial needs.

18.6.4 The Joint training service provide a very useful and wide range of management training for senior and middle managers.

18.6.5 The NERC Computing Service (NCS) offers excellent support and some on-the-job training. There is some tension created in that staff expect NCS to provide more computing support or training courses than it is able to offer. The NCS computer-assisted-learning disks are a valuable source of learning material.

18.6.6 Efforts should continue in managing the careers of staff in lower grades some of whom tend to remain unaware of the benefits of staff development initiatives. Some female members of staff tend to remain unsure of the way in which they would like to see their career develop and need some counselling from line-managers on this aspect.
CHAPTER 19

A REVIEW OF THE TYPES OF TRAINING OFFERED AND THE IMPLEMENTATION OF TRAINING AND DEVELOPMENT AT IOS
19 A REVIEW OF THE TYPES OF TRAINING OFFERED AND THE IMPLEMENTATION OF TRAINING AND DEVELOPMENT AT IOS

19.1 INTRODUCTION

19.2 THE TRAINING CULTURE AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES (IOS)

During 1988/1989 it was apparent from discussions with staff, line managers and the Management Team and from historical records that there was a lack of a 'training' culture at IOS particularly with regard to the older staff. It is thought that this had stemmed from a previous lack of interest in training by both staff and management and by somewhat of an 'elitist' view held by some previous senior managers that only a selected few people should receive training. However since 1988 gradually the staff and managers' interest in taking up opportunities for training has greatly increased as shown by the take-up of places on courses. However there are still a few areas where managers have not encouraged their staff to take up training opportunities.

19.3 THE IOS CORE CURRICULUM

A core curriculum is provided mainly for young scientists most of whom have entered into oceanographic research straight from University. For first year staff it includes an Introductory course, and further courses in Presentational Skills, Technical Writing and Time-Management together with a basic sea-survival course for sea-goers. During their second and third year most new staff can expect to undertake courses in Management 1 and 2 of the JTS Management series. (see Appendix 19.1). It is current NERC policy that all Reporting Officers and Countersigning Officers should participate in Staff Reporting and Appraisal Interviewing courses and that staff should receive training in procedures for appraisal. Senior managers are expected to participate in Senior management training.

The implementation of vocational and computer training is the responsibility of line managers, though they are able to consult with the Training Officer about possible options.

19.4 MANAGEMENT TRAINING

Most of the management training at IOS is organised and run by the Joint Training Service (JTS). A list of JTS Management courses is given in Appendix 19.2 together with the total numbers of courses offered for all the sponsoring Research Councils including NERC. A programme of courses from April 1992 until March
1993 is given in Appendix 19.3. The course aims, objectives and content for 'Management for Senior Grades' is given in Appendix 19.4 while the course content and time tables for each of the Management series 1-4 is given in Appendix 19.5 and 19.6 respectively. The Management 2 course is concerned with the effect of group behaviour and with the development of team-working and team-training and generally new young IOS staff find this most helpful. The relatively few staff who are in non-managerial positions are encouraged to attend the JTS run 'Development for Non-managerial Grades' (Appendix 19.7)

Staff Reporting, and Appraisal Interviewing (Appendix 19.8-19.9) are important initiatives provided by JTS and NERC staff in helping to make line-managers and countersigning officers aware of the need to standardise marking on staff reports. The objectives for the 'Staff Reporting' course is to ensure that participants understand the purposes and principles of the appraisal system so that a common standard of reporting can be established. The aim is to make a full and fair assessment of 'jobholders' performances and promotability and to ensure that they know what is expected of them. During 1993 with the advent of a new appraisal system based on 'Management by objectives' there was every indication that at IOS all Officers who appraise staff had received updated information. However there is a need during 1994 to continue to hold an updating seminar every year just prior to completion of staff reports to ensure that Reporting Officers report to the same standards. Staff who are not Reporting officers also received training during 1993 with the advent of the new appraisal system. Some of the latter initiatives were presented by NERC and some by IOS staff to augment JTS training (The aims, objectives and content of the JTS course are given in Appendix 19.10)

Approximately 90% of staff have received training in the new appraisal system. JTS are currently arranging for further refresher courses to be made available locally for all staff. The IOS policy of 'Open Reporting' seems to have been implemented throughout the Institute. There have been several suggestions from staff that a two-way reporting system should apply whereby staff are able to comment on their line-managers. This may present a step forward in improving communication channels at IOS.

In 1990/91 JTS ran two pilot Project Management courses. Following the evaluation of these courses a working group was formed with representatives from three Research Councils. The working group met on two occasions and a modified course has recently been designed, taking into account the comments and views of the working group and the experience gained by JTS in running the pilot courses. The current JTS Project Management Course has been developed for middle managers (Appendix 19.11) though at present it does not include computing aspects and so the seven IOS staff in need of basic project management have found it more beneficial to undertake a computer-based, commercially-run 'Microsoft Project' course (during 1994).
Several staff have participated in the JTS 'Recruitment and Selection Interviewing', the aims, objective, and content of which are shown in Appendix 19.12.

The senior management training which has been offered by organisations other than JTS has proved to be useful. Five staff have now attended the 'Inter-personal Effectiveness Workshop' run by a London University and most have found it useful (A description of the course is given in Appendix 19.13. Several senior managers from IOS and NERC have taken advantage of the IOS/NERC/University-run course for Senior Project Managers which has been run during 1991 and 1992 at Urchfont Manor. The course aims are given in Appendix 19.14). Several senior managers have also attended a University-run course 'Directing and Managing R and D', a description of which is given in Appendix 19.15)

It is estimated that at least 70% of all IOS staff have received some form of management training. In addition during 1991 and 1992 all staff were encouraged to attend the several video-based training sessions on basic management skills which were run on several occasions. An example of one such programme is given in Appendix 19.16).

19.5 VOCATIONAL COURSES

These include those in Information Technology such as basic computer training, spreadsheets, and word-processing. Other initiatives are more technically oriented and include welding, salinometry, fluid dynamics and oceanography. Several staff are now taking post-graduate courses in the latter whilst others have completed Open University degree courses. Computer-based project Management courses have been introduced at IOS during early 1994 and complement the non-computer based rather more elementary programme offered by JTS. With regard to technical training for engineers the Rutherford Appleton Laboratory have been approached about the possibility of IOS staff participating in their project management course for engineers. Initially their training officer has agreed that IOS might be able to participate in future but at present there are no plans to hold any.

External courses in Advanced Computing techniques are expensive and so this tends to inhibit staff applying for them. The Rutherford Appleton Laboratory sometimes offers such courses and staff should continue to apply for them where feasible.

Elementary computing courses are readily available from local colleges or commercial companies. Various NERC Departments also currently provide Finance and Contracts courses.

Long courses run by local Colleges and Universities which IOS staff attended during 1990-1993 include the following:-
b. Degree Courses e.g. Sciences, (Open University).
c. Post-Graduate courses in Oceanography (Southampton and Reading Universities).


19.6 COURSES TO ENHANCE PERSONAL DEVELOPMENT

Personal development courses include:-

b. Technical Writing which is aimed mainly at scientific writing. Course objectives, method and content are given in Appendix 19.17.
c. Report Writing.
d. Presentation skills/Occasional Speaking which is provided mainly to give scientists and technologists practice in presenting papers at conferences.
e. Advanced Reading techniques.
f. Writing minutes of meetings.
g. How to run a meeting.
h. French Conversation (aimed to improve conversation during business-related events).
i. Some marketing seminars were provided on-site by IOS staff, others were sponsored by JTS in conjunction with the McNeil Robertson partnership, a firm of marketing consultants.
j. Stress Management courses were run periodically at IOS to augment the JTS training.

19.7 HEALTH AND SAFETY COURSES AND SEMINARS

During 1991, these consisted of first aid, fire safety, health/fitness and sea survival but during 1993 these were extended to include manual lifting, office security, safety at sea, safe working with visual display units, COSHH regulations and radiological protection. The responsibility of line-managers in ensuring that health and safety
practices are undertaken by staff is also stressed.

19.8 OTHER COURSES

All types of course included in the curriculum for IOS staff and run on-site are shown in Table 19.1 together with average costs.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Average No.</th>
<th>Costs per Days</th>
<th>Costs per Place</th>
<th>Costs per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Microsoft Word</td>
<td>1</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>1</td>
<td>120</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Business French conversation</td>
<td>4</td>
<td>75</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Communication Workshop (pilot)</td>
<td>0.5</td>
<td>15</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Contracts workshop*</td>
<td>1</td>
<td>400</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>DBase (version 3 or 4)</td>
<td>1</td>
<td>125</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>Desk-top Publishing</td>
<td>1</td>
<td>80</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>DOS (CAL - NCS)</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Excel</td>
<td>0.5</td>
<td>100</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>FISh (Finance System Spreadsheets)</td>
<td>1</td>
<td>80</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Health and Fitness</td>
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<td>Health and Safety</td>
<td>1</td>
<td>60</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>1</td>
<td>25</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Interviewing (Countersign.Offrs.)</td>
<td>1.5</td>
<td>200</td>
<td>130</td>
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<tr>
<td>Introductory course</td>
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<td>15</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Lotus Spreadsheets (CAL)</td>
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<td>10</td>
<td>10</td>
<td></td>
</tr>
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<td>400</td>
<td>80</td>
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</tr>
<tr>
<td>Management 1 (advanced)</td>
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<td>400</td>
<td>80</td>
<td></td>
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<tr>
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<td>100</td>
<td>200</td>
<td></td>
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<tr>
<td>Marketing (NERC/Staff)</td>
<td>0.5</td>
<td>100</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Microsoft Project</td>
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<td>250</td>
<td>125</td>
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<tr>
<td>Microsoft Word (CAL)</td>
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<td></td>
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<tr>
<td>Microsoft Word (BBT)</td>
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<td>150</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>MS-DOS</td>
<td>1</td>
<td>150</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>MSA (Finance System)</td>
<td>0.5</td>
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<td>120</td>
<td></td>
</tr>
<tr>
<td>Occasional Speaking</td>
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<td>180</td>
<td>90</td>
<td></td>
</tr>
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<td>ORACLE Data Bases (CAL)</td>
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<td>10</td>
<td></td>
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<td>Pre-retirement</td>
<td>3</td>
<td>470</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>Presentation Skills *</td>
<td>3</td>
<td>200</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Project Management (snr staff)</td>
<td>5</td>
<td>850</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>Report Writing</td>
<td>2</td>
<td>200</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Running Meetings/Leading Discuss.</td>
<td>1</td>
<td>170</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>Selection/Promotion Interviewing *</td>
<td>2</td>
<td>160</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Staff Reporting</td>
<td>1</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Staff Reporting update *</td>
<td>0.5</td>
<td>30</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Stress and Health</td>
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<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Stress Management</td>
<td>1</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Technical Writing for Scient.</td>
<td>3</td>
<td>220</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Technical Writing for Scient. (AFRC)</td>
<td>3</td>
<td>90</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Time-management</td>
<td>0.75</td>
<td>65</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>Unix for beginners *</td>
<td>2</td>
<td>55</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Unix/C</td>
<td>1</td>
<td>100</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Welding</td>
<td>2</td>
<td>200</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Word for Windows</td>
<td>1</td>
<td>150</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Word Processing (various)</td>
<td>1</td>
<td>150</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

Average cost per day = £92

19.9 OTHER SOURCES OF TRAINING

Other initiatives which IOS provided during 1990-1993 involved introductory courses for new staff. Pre-retirement courses tend to be needed at the rate of two per year except more recently when relocation and redundancy packages have resulted in
several staff retiring prematurely. Special courses in 'Stress Management', 'Pre-retirement' and 'Health and Fitness' have been run for them.

Workshops

IOS has piloted two non-residential workshops as follows:- 'Communication and facilitation skills for line-managers' and 'Interpersonal skills' (for junior grades). JTS has also provided workshops covering the subjects of 'Assertiveness' and 'Stress Management'.

Video-based Management seminars

During 1991 and 1992 informal video-based sessions were run to enhance management-awareness in staff. These included subjects in Leadership, delegation, body language, public speaking and stress management. These were well-attended and were particularly useful in that these sessions provided a forum for discussion by staff across departments. Staff aired their views and concerns on a variety of topics including stress at work, problems in communication with colleagues or line managers etc. Problems in keeping up to date with the progress of IOS research projects other than their own were also discussed. During 1993, the time allocated to these management seminars has been taken up with Health and Safety-awareness seminars which were implemented as a result of European Union legislation.

Computer-assisted learning (CAL)

The CAL disks provided on loan by NCS have proved to be extremely useful in supplementing other types of computer-based training. Subjects covered include 'Lotus 123', 'Unix', 'Excel', 'Microsoft Word', 'Microsoft Windows', 'MS-DOS' and 'ORACLE databases'. One difficulty is that staff tend to keep these for long periods of time, with the result that others did not get maximum use from them.

Computing self-help groups

Information from questionnaires aimed to evaluate staff computing expertise at IOS has been collated and distributed by myself and NCS to all staff via the computer network (see Appendix 23.1). The amount of computing expertise at IOS is remarkable and several staff volunteered to teach others. Several staff have benefitted from this initiative but not as many as expected. Steps have been taken to remind staff of this option.

Table 19.2 Provides a list of short courses run off-site and the average cost per place and per day:-
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Average No.</th>
<th>Costs per</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Days duration</td>
<td>Place</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autocad 5.0</td>
<td>5.0</td>
<td>150</td>
</tr>
<tr>
<td>Basic Sea Survival</td>
<td>1.5</td>
<td>75</td>
</tr>
<tr>
<td>Contracts *</td>
<td>3.0</td>
<td>550</td>
</tr>
<tr>
<td>DBase IV</td>
<td>1.0</td>
<td>75</td>
</tr>
<tr>
<td>Desk Top Publishing</td>
<td>0.5</td>
<td>25</td>
</tr>
<tr>
<td>Development for Junior Grades *</td>
<td>5.0</td>
<td>750</td>
</tr>
<tr>
<td>Finance</td>
<td>2.0</td>
<td>400</td>
</tr>
<tr>
<td>Fluid Dynamics</td>
<td>5.0</td>
<td>500</td>
</tr>
<tr>
<td>Interactive Skills *</td>
<td>5.0</td>
<td>800</td>
</tr>
<tr>
<td>Interpersonal Effectiveness</td>
<td>4.0</td>
<td>1100</td>
</tr>
<tr>
<td>Management 1 *</td>
<td>5.0</td>
<td>750</td>
</tr>
<tr>
<td>Management 2 *</td>
<td>5.0</td>
<td>750</td>
</tr>
<tr>
<td>Management 3 *</td>
<td>5.0</td>
<td>770</td>
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<tr>
<td>Management for Senior Grades *</td>
<td>10.0</td>
<td>1600</td>
</tr>
<tr>
<td>Managing and Directing Research and Development</td>
<td>5.0</td>
<td>1100</td>
</tr>
<tr>
<td>Microsoft Word</td>
<td>1.0</td>
<td>140</td>
</tr>
<tr>
<td>Pre-retirement *</td>
<td>3.0</td>
<td>470</td>
</tr>
<tr>
<td>Project Management (snr)</td>
<td>5.0</td>
<td>800</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>2.0</td>
<td>150</td>
</tr>
<tr>
<td>Secretarial seminar</td>
<td>1.0</td>
<td>110</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>2.5</td>
<td>180</td>
</tr>
<tr>
<td>Welfare *</td>
<td>5.0</td>
<td>550</td>
</tr>
<tr>
<td>Writing proposals</td>
<td>1.0</td>
<td>140</td>
</tr>
</tbody>
</table>

Average cost per day = £142

A summary of the number of places on courses during 1985-1993 is given in Chapter 13, Figure 13.6. The total number of places on 'Management' and Personal Development' are given in Figures 13.7 and 13.8 respectively.

19.10 THE SEMINAR PROGRAMME

Internal and external seminars and conferences provide a useful means by which scientists and technologists exchange and update their ideas and information. The present number of informal and formal seminars seems to be about right because many staff, particularly sea-goers have difficulties in balancing the time spent at sea with that spent at off-site conferences or meetings, or that needed to undertake their research. Where seminars are presented on specialised topics difficulties are sometimes experienced in persuading staff in other disciplines to attend. This can be done but it requires a large deal of effort on the part of the seminar organiser.

Informal seminars seem to be popular with less experienced staff. During 1991/1992, the informal 'Young at Heart' seminars which were deliberately produced so as to promote the interest of lower grades of staff were very successful. However it was also noticed that several senior staff (who were not invited to these) also tended to 'drop in'.

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19.11 SUMMARY AND CONCLUSIONS

19.11.1 At IOS staff are given a very broad curriculum from which to choose. Ideally they should work their way through a core curriculum.

19.11.2 The Joint Training Service provide a very wide range of management training for senior and middle managers and at the present time the moderately long waiting lists do not present a problem.

19.11.3 At present there are no JTS-based refresher courses specially designed for senior or middle managers. Management training run by external organisations for senior managers is relatively expensive. Funds have to be provided from IOS funds and so this discourages requests to attend.

19.11.4 External courses in Advanced Computing techniques are expensive and so this tends to inhibit staff applying for them. The Rutherford Appleton Laboratory sometimes offers such courses and staff should continue to apply for them where feasible. More elementary computing courses are readily available from local colleges or commercial companies.

19.11.5 The IOS seminar programmes seem to be set at the right level. Formal and informal seminars should continue to be run.
CHAPTER 20

EVALUATION DATA
FOR
GIVEN STAFF DEVELOPMENT
INITIATIVES
20.1 INTRODUCTION

This chapter provides an overview of staff opinions on many of the courses in which they have participated. The first section deals with an independent valuation (at a simplistic level) of the Joint Training Service management series undertaken by NERC. Basically post-course questionnaires were sent to all staff asking them to provide a numerical rating of JTS courses. In some instances comments were written on questionnaires and a summary of these is presented. In section 20.3. A summary is given on the opinions of IOS staff, derived from questionnaires, on over 60 courses which were run during 1990-1993. In the final part of this chapter an overview is provided which also incorporates evaluation data gleaned from discussions with staff.

20.2 AN INDEPENDENT EVALUATION OF JOINT TRAINING SERVICE MANAGEMENT COURSES

NERC carried out an evaluation of JTS management courses by sending out simple questionnaires to all participants of courses from its various Institutes during 1993. On a scale of 1 (excellent) to 5 (very poor) on average most courses received a grade of 2 to 3. Results for January to June 1993 are shown below in Table 20.1

<table>
<thead>
<tr>
<th>Table 20.1</th>
<th>Results of a NERC evaluation of JTS courses January to December 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of the course</strong></td>
<td><strong>Scores</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Jan-Jun 1993</strong></td>
</tr>
<tr>
<td><strong>Management 1</strong></td>
<td><em>(37 attended)</em></td>
</tr>
<tr>
<td>Organisation</td>
<td>2.30</td>
</tr>
<tr>
<td>Course content</td>
<td>2.32</td>
</tr>
<tr>
<td>Presentation</td>
<td>2.27</td>
</tr>
<tr>
<td>Relevance</td>
<td>2.78</td>
</tr>
<tr>
<td>Venue</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.38</td>
</tr>
<tr>
<td><strong>Management 2</strong></td>
<td><em>(21 attended)</em></td>
</tr>
<tr>
<td>Organisation</td>
<td>2.10</td>
</tr>
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<td>Course content</td>
<td>2.14</td>
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<tr>
<td>Presentation</td>
<td>2.14</td>
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<tr>
<td>Relevance</td>
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</tr>
<tr>
<td>Venue</td>
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</tr>
<tr>
<td><strong>Average</strong></td>
<td>2.32</td>
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</table>

Continued...
<table>
<thead>
<tr>
<th>Title of the course</th>
<th>Scores</th>
<th>Jan-June 1993</th>
<th>Jul-Dec 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management 3</td>
<td></td>
<td>2.00</td>
<td>1.67</td>
</tr>
<tr>
<td>Organisation</td>
<td></td>
<td>2.00</td>
<td>1.83</td>
</tr>
<tr>
<td>Course content</td>
<td></td>
<td>2.00</td>
<td>1.83</td>
</tr>
<tr>
<td>Relevance</td>
<td></td>
<td>1.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Venue</td>
<td></td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>1.80</td>
<td>2.30</td>
</tr>
<tr>
<td>Stress Management</td>
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</tr>
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<td>Organisation</td>
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<td>2.40</td>
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</tr>
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<td>Course content</td>
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</tr>
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<td>Relevance</td>
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</tr>
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<td>Venue</td>
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<td>Average</td>
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<td>Assertiveness Workshop</td>
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<td>Course content</td>
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<td>2.00</td>
</tr>
<tr>
<td>Relevance</td>
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<td>3.40</td>
<td>2.00</td>
</tr>
<tr>
<td>Venue</td>
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<td>3.20</td>
<td>3.00</td>
</tr>
<tr>
<td>Average</td>
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<td>Development Course for Non-managerial Grades</td>
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<td>1.67</td>
</tr>
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<td>Organisation</td>
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<td>1.50</td>
<td>2.00</td>
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<td>Course content</td>
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<td>2.67</td>
</tr>
<tr>
<td>Relevance</td>
<td></td>
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<td>2.33</td>
</tr>
<tr>
<td>Venue</td>
<td></td>
<td>1.50</td>
<td>1.00</td>
</tr>
<tr>
<td>Average</td>
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<td>1.93</td>
</tr>
<tr>
<td>Management for Senior Grades</td>
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<td>2.40</td>
<td>2.30</td>
</tr>
<tr>
<td>Organisation</td>
<td></td>
<td>2.30</td>
<td>2.30</td>
</tr>
<tr>
<td>Course content</td>
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</tr>
<tr>
<td>Relevance</td>
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<td>2.30</td>
</tr>
<tr>
<td>Venue</td>
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<td>2.30</td>
</tr>
<tr>
<td>Average</td>
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<tr>
<td>Selection and Promotion Interviewing</td>
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<td>Organisation</td>
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</tr>
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</tr>
<tr>
<td>Relevance</td>
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<td>2.30</td>
</tr>
<tr>
<td>Venue</td>
<td></td>
<td>2.50</td>
<td>2.30</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2.25</td>
<td>2.30</td>
</tr>
</tbody>
</table>
Only approximately 6% of participants wrote comments on the returned questionnaires:

Comments written by participants are shown in Table 20.2

<table>
<thead>
<tr>
<th>Table 20.2 Summary of comments written on NERC 1993 returned questionnaires from a variety of NERC Institutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management 1 (residential)</strong></td>
</tr>
<tr>
<td>More emphasis should be placed on self-management</td>
</tr>
<tr>
<td>Could include project management</td>
</tr>
<tr>
<td>Course provides a good ‘toolbox’ for new managers</td>
</tr>
<tr>
<td>Pace of course too slow</td>
</tr>
<tr>
<td>Organisation during course was fine.</td>
</tr>
<tr>
<td>Venue was fine</td>
</tr>
<tr>
<td>Health and safety video long and tedious</td>
</tr>
<tr>
<td>Overall the course was well presented</td>
</tr>
<tr>
<td>A great deal of ground was covered</td>
</tr>
<tr>
<td>Management ‘project’ at the end of course was not beneficial</td>
</tr>
<tr>
<td>Would have liked at least an introduction to Stress.</td>
</tr>
<tr>
<td>Organisation was good</td>
</tr>
<tr>
<td>Final exercise completely badly organised and explained</td>
</tr>
<tr>
<td>The course programme book should have an index/references</td>
</tr>
<tr>
<td>I enjoyed the course</td>
</tr>
<tr>
<td>The course did not explore how Unions can help (BAS)</td>
</tr>
<tr>
<td>Would have been better if some attendees were properly selected</td>
</tr>
<tr>
<td>Course lacked i. Project management/Stress Management</td>
</tr>
<tr>
<td>‘Moving the Institute’ role play left many not sure what to do,</td>
</tr>
<tr>
<td>Pre-course information now dreadful</td>
</tr>
<tr>
<td>Benefitted doing course with people not from my Institute</td>
</tr>
<tr>
<td>Benefitted as residential course</td>
</tr>
<tr>
<td><strong>Management 1 (non-residential)</strong></td>
</tr>
<tr>
<td>Too many colleagues together from same Institute</td>
</tr>
<tr>
<td>Residential course would have been more beneficial</td>
</tr>
<tr>
<td>Enjoyed course</td>
</tr>
<tr>
<td>Interesting course though not very relevant to my situation.</td>
</tr>
<tr>
<td>Would benefit by shortening by one or two days</td>
</tr>
<tr>
<td>The course was well run</td>
</tr>
<tr>
<td>The working day could have been longer</td>
</tr>
<tr>
<td>Relevance and content are well-balanced</td>
</tr>
<tr>
<td>Course notes were poor</td>
</tr>
<tr>
<td>Needed better ratio of higher to lower grades</td>
</tr>
<tr>
<td><strong>Management 2</strong></td>
</tr>
<tr>
<td>There was a very good mix of people made the course enjoyable</td>
</tr>
<tr>
<td>Venue too far away</td>
</tr>
<tr>
<td>Would have liked more structure to the week</td>
</tr>
<tr>
<td>Difficult to apply in the ‘real world’ back in the office</td>
</tr>
<tr>
<td>Especially liked teamwork roles and negotiating skills</td>
</tr>
<tr>
<td>Not able to apply very directly as I don’t manage.</td>
</tr>
<tr>
<td>The rest of the team within which I work stays the same</td>
</tr>
<tr>
<td>Needed more time to assimilate information being given</td>
</tr>
<tr>
<td>Learning hampered by fact course was non-residential</td>
</tr>
<tr>
<td>Need more interaction between groups/individuals</td>
</tr>
<tr>
<td>Too many long periods of silence</td>
</tr>
<tr>
<td>A re-cap on some aspects of Management 1 would have been useful</td>
</tr>
<tr>
<td>The course was excellent theoretically.</td>
</tr>
<tr>
<td>If the management doesn’t use the same set of rules it is irrelevant, my line managers is worst have seen [not IOS]</td>
</tr>
<tr>
<td>Continued...</td>
</tr>
</tbody>
</table>
Table 20.2 Summary of comments written on NERC 1993 returned questionnaires from a variety of NERC Institutes

<table>
<thead>
<tr>
<th>Management 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course was very informative and provides a good basis 1</td>
</tr>
<tr>
<td>Not sure about the opportunity to use the information 1</td>
</tr>
<tr>
<td>Enjoyed course 1</td>
</tr>
<tr>
<td>At office not enough time available to absorb the lessons 1</td>
</tr>
<tr>
<td>The course highlighted some of my personal weaknesses 1</td>
</tr>
<tr>
<td>I felt more confident in addressing personal management issues 1</td>
</tr>
<tr>
<td>Applying the principles/procedures which I learnt on course 1</td>
</tr>
<tr>
<td>Better if had been residential 1</td>
</tr>
<tr>
<td>I found this a very enjoyable and challenging course. 1</td>
</tr>
<tr>
<td>It was a great let-down to return to work and see how the Civil service is actually managed 1</td>
</tr>
<tr>
<td>Do not change things too much - Is working well 1</td>
</tr>
<tr>
<td>The pace of the course could have been faster. 1</td>
</tr>
<tr>
<td>No need for the endless inquests on exercises 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stress Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly relevant subject but not applicable 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assertiveness Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed courses 1</td>
</tr>
<tr>
<td>Very useful course. I have used what I have learnt 1</td>
</tr>
<tr>
<td>Un satisfactory to have so many personnel from the same section 1</td>
</tr>
<tr>
<td>Very little was added to the assertiveness part of Management 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development Course for Non-managerial Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 of the 3 course leaders were excellent, the third lamentable 1</td>
</tr>
<tr>
<td>Course very good and helpful with career development. 1</td>
</tr>
<tr>
<td>Had to wait a long time to get accepted on to the course 1</td>
</tr>
<tr>
<td>Hotel proved a good venue for the course 1</td>
</tr>
<tr>
<td>Venue difficult to get to 1</td>
</tr>
<tr>
<td>It would be nice to have all of the details well in advance 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management for Senior Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Still too early to say if this has made a major difference 1</td>
</tr>
<tr>
<td>I am sure that the course took too long 1</td>
</tr>
<tr>
<td>Unclear as to the relevance of some of course 1</td>
</tr>
<tr>
<td>A pity that all managers have not attended such a course. 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Selection and Promotion Interviewing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course papers incomplete 1</td>
</tr>
<tr>
<td>The mock interviews were very good and realistic 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The best NERC course I have been on. 1</td>
</tr>
<tr>
<td>Staff should be encouraged to attend 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentation Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low marks for 'organisation' 1</td>
</tr>
<tr>
<td>Good course which I enjoyed. 1</td>
</tr>
<tr>
<td>Could be improved if more scientifically orientated 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful reinforcement of previous experience 1</td>
</tr>
<tr>
<td>Course did not cover the changes in FTP being introduced 1</td>
</tr>
<tr>
<td>Course information was sent very late 1</td>
</tr>
<tr>
<td>In practice the course was based on perceptions of reporting policy different from that practised at BGS at present 1</td>
</tr>
<tr>
<td>Distractions inevitably occur when a training course is held in an attendees place of work. 1</td>
</tr>
<tr>
<td>The courses were extremely beneficial 1</td>
</tr>
<tr>
<td>May I suggest that possible refresher courses are held every 3-5 [yrs] after initial training 1</td>
</tr>
<tr>
<td>The course proved useful in completing ASRs this year. 1</td>
</tr>
</tbody>
</table>

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Conclusions

The variety of comments indicate that participants had a wide range of perceptions of these courses. Clearly staff sometimes feel that it is difficult to apply their new learning back at work. Non-residential courses taken with colleagues are unpopular. However, the scoring for organisation, course content, presentation, relevance, and venue, for non-residential courses, are only a little different from scores for residential ones, all having a mean of between 2 and 3 for management courses.

20.3 EVALUATION OF COURSES RUN FOR IOS STAFF

Courses in which IOS staff participated were divisible into the following:

a. Management Courses. These consisted of JTS courses including:

- 'Management for Senior grades'
- 'Management series' (1-3)
- 'Assertiveness'
- 'Staff Reporting'
- 'Appraisal Interviewing'
- 'Interactive skills'/ 'Development for non-managerial grades'.

It also included non-JTS courses run at IOS:

- 'Interpersonal effectiveness'
- 'Directing and Managing Research and Development',
- 'Project Management' (for senior staff)
- 'Microsoft Project' (software)

b. Vocational Courses. These courses were related to specific vocational or computer training and included the following:

- 'Atomic Spectrophotometry'
- 'Basic Accounts'
- 'Boat-Handling'
- 'BTEC' (Engineering/electronics)
- 'CFC Concentrations'
- 'Contracts'
- 'Dbase' (spreadsheets)
- 'Excel' (spreadsheets)
- 'Financial accruals'
- 'FISM' (Financial Spreadsheets)
- 'Geological Information Systems' (GIS)
c. **Personal Development courses**

These courses included:

- 'French Conversation'
- 'How to run a meeting'
- 'Interpersonal skills (for non-managerial staff)'
- 'Introduction to IOS'
- 'Marketing'
- 'Pre-retirement' (NERC/JTS)
- 'Presentation skills/Occasional speaking'
- 'Report Writing'
- 'Stress Management (run by JTS)'
- 'Technical Writing'
- 'Time management'
- 'Welfare'
- 'Writing Proposals'

d. **Health and Safety Courses**

- 'First Aid'
- 'Fire Safety'
- 'Health and Fitness'
- 'Health and Safety seminars'
- 'Sea Survival'

Evaluation data as provided by staff for given courses are summarised below in Tables 20.3-20.63 (One Table for each of the main types of course).
I MANAGEMENT COURSES

Due to the JTS backlog for the Management 1 course during 1991 and because of the IOS lack of funds during 1992/1993, JTS ran the Management 1 course on a non-residential basis at IOS during 1991 and on two other occasions at local hotels during 1993. All Management 2 and 3 courses were run on a residential basis.

Management for Senior Grades

Many senior staff had attended this course during the 1980's and it was generally considered to be of value. Recent summary data is shown in Table 20.3. Overall conclusions are given below

<table>
<thead>
<tr>
<th>Table 20.3</th>
<th>Evaluation data for Management for Senior Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course (residential -1990)</td>
</tr>
<tr>
<td>III IOS</td>
<td>Post-course questionnaire</td>
</tr>
<tr>
<td>75% sample</td>
<td>2 participants</td>
</tr>
<tr>
<td>100% response</td>
<td>2 *</td>
</tr>
<tr>
<td>Q1.</td>
<td>Was the course content relevant and why?</td>
</tr>
<tr>
<td></td>
<td>Yes 2</td>
</tr>
<tr>
<td>Q2.</td>
<td>Have you had the opportunity of putting into practice what you learned on the course? If so can you tell us what it was?</td>
</tr>
<tr>
<td></td>
<td>Yes 2 : a. Time- management, decision-making, staff organisation</td>
</tr>
<tr>
<td></td>
<td>b. A wide range of interactive situations</td>
</tr>
<tr>
<td>Q3.</td>
<td>Were the training methods appropriate</td>
</tr>
<tr>
<td></td>
<td>Yes 2</td>
</tr>
<tr>
<td></td>
<td>No -</td>
</tr>
<tr>
<td>Q4.</td>
<td>What areas could be introduced or improved</td>
</tr>
<tr>
<td></td>
<td>a. Two weeks is overly long - scope of course could be limited</td>
</tr>
<tr>
<td></td>
<td>b. Less videos</td>
</tr>
<tr>
<td>Q5.</td>
<td>Any other comments?</td>
</tr>
<tr>
<td></td>
<td>'Another shorter meeting [needed] 1 year after to see how much we had forgotten and did not use'</td>
</tr>
</tbody>
</table>
|             | 'Good for becoming more aware of how personal interactions proceed and can be controlled (manipulated?) - if we all practised what we learned we would be paragons of virtue.'

Conclusions - Management for Senior Grades

Methods were appropriate
Content was relevant

General Comments:- This was considered to be a worthwhile course from which staff benefitted. They were able to transfer their new learning to the workplace. However the two weeks
Verbal Comments:

duration of the course was considered to be too long. There is no provision for periodic refresher courses. Two people told me that this course was well worthwhile.
Management 1 (advanced) 1993

This was a non-residential course held at a local hotel for long-serving experienced IOS Wormley staff who had previously not attended any type of Management course. It incorporated Management 1 with elements of Management 2 and 3.

<table>
<thead>
<tr>
<th>Table 20.4 Evaluation data for Management 1 advanced course (non-residential advanced-1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. OTS Post-course questionnaire</strong></td>
</tr>
<tr>
<td>100% sample = 12 response rate = 42%</td>
</tr>
<tr>
<td>Participant</td>
</tr>
<tr>
<td>Organisation</td>
</tr>
<tr>
<td>Course content</td>
</tr>
<tr>
<td>Presentation</td>
</tr>
<tr>
<td>Relevance</td>
</tr>
<tr>
<td>Venue</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
<tr>
<td>a. 'I am sure residential would be more beneficial although it was not strictly relevant to me I thoroughly enjoyed it.'</td>
</tr>
<tr>
<td>b. 'The course was well-run and very enjoyable.'</td>
</tr>
<tr>
<td>c. 'The working day could have been longer. Was it necessary to have 2 tutors full-time on the course?'</td>
</tr>
<tr>
<td>d. 'As I am likely to be made redundant NERC won't benefit - but I hope I will'</td>
</tr>
<tr>
<td>e. 'Relevance and content were well-balanced ..course notes were poor ..Balance of staff would have achieved more from course if there had been a better ratio of higher to lower grades'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II IOS Post-course questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>70% sample = 8 50% response = 4 participants</td>
</tr>
<tr>
<td>Q1. Since completing the course have you found it to be useful in your work or leisure?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>a. Helped to get to know people on course better</td>
</tr>
<tr>
<td>b. Better understanding of others feelings</td>
</tr>
<tr>
<td>Not answered</td>
</tr>
<tr>
<td>Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation, e.g. Business, family friends</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Not answered</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

Continued...
Table 20.4 Evaluation data for Management 1 advanced course (non-residential advanced-1993)

...continued

Q4. To what extent do you think that IOS/NERC benefits from its staff attending these courses:
   a. to a large extent - 2
   b. to a moderate extent 2 (1 individual was of the opinion that this course may not help some people as ‘many at IOS will not change’)

Q5. List the 3 most important things you learned during the course
   Items listed included:
   Useful to know the type of training that NERC Managers receive 1
   Organisational structures 1
   Listen 1
   Reward 1
   Communicate 2
   Organise 1
   Check facts before planning 1

Q6. What helped/hindered learning
   Helped
   Relaxed atmosphere 2
   Away from work 1
   Hindered
   Course notes poor 1
   Being with people from same Institute 1

Q7. What do you think about the balance of topics covered:
   Very good 1
   Good/OK 2
   Too many items 1

Q8. Have you other comments you would like to make:
   ‘I question the wisdom of making management courses mandatory for all staff’ [IOS makes it mandatory for scientists and technologists]
   ‘course should be with members of a mixed organisational background’ - allows for different ideas from different cultures
   ‘I thoroughly enjoyed the course ...difficult, as a group secretary to persuade your group members to change their ways and streamline the system’
   ‘Course well organised and presented .. but not very relevant to my needs’

Conclusions Management 1 advanced course

Balance of topics was good
Methods/Presentation were appropriate
Content was relevant
Comments:- Course notes were copious and not indexed. The relaxed atmosphere was conducive to work but some participants would have preferred a residential course and a mix of people from other organisations. This would have been difficult to achieve as the course content was specifically designed for IOS staff. The JTS questionnaire showed that course score was similar to other NERC Management 1 courses. The learning was applied at work by approximately half of respondents.
Management 1 Residential 1992-1993

This was Part 1 of the Management Series run by JTS

<table>
<thead>
<tr>
<th>Table 20.5</th>
<th>Evaluation data for Management 1 course (residential - 1993)</th>
</tr>
</thead>
</table>

I. JTS Post-course questionnaire

100% sample 7
100% response
(Score 1 = excellent 5 = very poor)

<table>
<thead>
<tr>
<th>Participant</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>Mean scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2.1</td>
<td>2.32 3.14</td>
</tr>
<tr>
<td>Course content</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2.4</td>
<td>2.32 3.14</td>
</tr>
<tr>
<td>Presentation</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3.3</td>
<td>2.78 3.29</td>
</tr>
<tr>
<td>Relevance</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1.7</td>
<td>2.22 2.71</td>
</tr>
</tbody>
</table>

- c. 'Management project at end of course not particularly beneficial ..'
- d. 'Organisation good as it got you into different groups but final exercise badly organised and explained'

II IOS Post-course questionnaire

70% sample 5
40% response 2

Q1. Since completing the course have you found it to be useful in your work or leisure?
   Yes 2
   No -

Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues?
   Yes 2:
   a. Logbook useful when writing ASR's
   b. Understanding management awareness of own weakness...

Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation, e.g. Business, family friends
   Yes 1 Counselling/communication skills
   Not answered 1

Q4. To what extent do you think that IOS/NERC benefits from its staff attending these courses:
   a. to a large extent - 1
   b. to a moderate extent 1

Q5. List the 3 most important things you learned during the course
   Items listed included:
   - Management skills required 1
   - Getting into good habits 1
   - Brainstorming 1
   - Planning 1
   - Motivation 1

Continued...
### Conclusions Management 1 residential courses 1992-93

**Balance of topics** was good  
**Methods/Presentation** were appropriate  
**Content** was relevant  
**Learning** was used at work  

**Comments:** Project given as part of the course was not explained well. JTS questionnaire showed that course score was similar to other NERC Management 1 courses

---

**Table 20.5  Evaluation data for Management 1 course (residential - 1993)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Helped/ Hindered Learning</th>
<th>Venue</th>
<th>Positive atmosphere</th>
<th>Not having a management position helped in my understanding of future management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helped</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hindered</td>
<td></td>
<td>Nil</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q6. What helped/hindered learning  

Q7. What do you think about the balance of topics covered:  

Good/OK  2  

Q8. Have you other comments you would like to make:  

Nil
Management 1 course (Mainly for BAS Base Commanders)

Young Post-graduates were invited to attend this residential course - 2 attended from IOS.

<table>
<thead>
<tr>
<th>Table 20.6 Evaluation data for Management 1 course (residential) For BAS Base Commanders- 1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 participants</td>
</tr>
<tr>
<td>IOS Post-course questionnaire</td>
</tr>
<tr>
<td>100% sample</td>
</tr>
<tr>
<td>50% response</td>
</tr>
<tr>
<td>Q1. Since completing the course have you found it to be useful in your work or leisure?</td>
</tr>
<tr>
<td>Yes 1</td>
</tr>
<tr>
<td>Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues</td>
</tr>
<tr>
<td>Yes 1 - Generally applied</td>
</tr>
<tr>
<td>Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation, e.g. Business, family friends</td>
</tr>
<tr>
<td>Yes 1 - With industrial/university colleagues - project management</td>
</tr>
<tr>
<td>Q4. To what extent do you think that IOS/NERC benefits from its staff attending these courses:</td>
</tr>
<tr>
<td>a. to a large extent 1</td>
</tr>
<tr>
<td>Q5. List the 3 most important things you learned during the course</td>
</tr>
<tr>
<td>Items listed included-</td>
</tr>
<tr>
<td>Diplomacy 1</td>
</tr>
<tr>
<td>Overcoming personal problems 1</td>
</tr>
<tr>
<td>Reason and logic applied to emotional situations. 1</td>
</tr>
<tr>
<td>Q6. What helped/hindered learning</td>
</tr>
<tr>
<td>Helped Tutors and Colleagues 1</td>
</tr>
<tr>
<td>Hindered Work from [IOS] base that needed to be done during the week's course 1</td>
</tr>
<tr>
<td>Q7. What do you think about the balance of topics covered:</td>
</tr>
<tr>
<td>Very Good 1</td>
</tr>
<tr>
<td>Q8. Have you other comments you would like to make:</td>
</tr>
<tr>
<td>&quot;Excellent course that was neither patronising nor superficial - run by intelligent people on an egalitarian basis - we were learning by exploring the problems ourselves.&quot;</td>
</tr>
</tbody>
</table>

Conclusions - Management 1 (BAS - for Base Commanders)

Balance of topics. Good
Methods/Presentation. Appropriate
Content. Relevant
Comments:- The learning was applied at work by one of the two respondents who thought this to be an excellent course

One of these basic courses was run on a non-residential basis local to IOS during 1991 partly because some staff were reluctant to participate in any type of training and partly because the Joint Training Service had a huge backlog of Management 1 training to undertake.

<table>
<thead>
<tr>
<th>Table 20.7 Evaluation data for Management 1 course (non residential) 1991-1993 (JTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 participants (response 100%)</td>
</tr>
<tr>
<td>1. End-of-course Questionnaires</td>
</tr>
<tr>
<td>Q1 - objectives of participants</td>
</tr>
<tr>
<td>Q2. Were objectives achieved?</td>
</tr>
<tr>
<td>Yes 10</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
<tr>
<td>Q3. List the three most important things you learned during the course</td>
</tr>
<tr>
<td>a. That the task is not the only objective 1</td>
</tr>
<tr>
<td>b. To give regular feedback and listen carefully to other peoples' views 1</td>
</tr>
<tr>
<td>c. Working in a group needs structure 1</td>
</tr>
<tr>
<td>d. Decision-making often involves outside factions which need to be taken into consideration 1</td>
</tr>
<tr>
<td>e. Body language helps communication 1</td>
</tr>
<tr>
<td>f. Problem-solving 2</td>
</tr>
<tr>
<td>g. In training and coaching planning and preparation are important 1</td>
</tr>
<tr>
<td>h. Delegation 3</td>
</tr>
<tr>
<td>i. How to improve motivation of staff 3</td>
</tr>
<tr>
<td>j. Communication 3</td>
</tr>
<tr>
<td>k. Motivation 2</td>
</tr>
<tr>
<td>l. The importance of encouraging feedback 2</td>
</tr>
<tr>
<td>m. Assertiveness 2</td>
</tr>
<tr>
<td>n. To understand that management is a two-way process 1</td>
</tr>
<tr>
<td>Q4a. What helped your learning on the course</td>
</tr>
<tr>
<td>a. Examples of theories being put into practice 1</td>
</tr>
<tr>
<td>b. Lively teaching by tutors 1</td>
</tr>
<tr>
<td>c. No outside interruptions 3</td>
</tr>
<tr>
<td>d. The diary review system 1</td>
</tr>
<tr>
<td>e. Working with both colleagues and strangers 2</td>
</tr>
<tr>
<td>f. Knowing that other people have similar responses to mine 1</td>
</tr>
<tr>
<td>g. Holding the course at IOSDL 1</td>
</tr>
<tr>
<td>h. Group discussion 1</td>
</tr>
<tr>
<td>i. Visual representation 1</td>
</tr>
<tr>
<td>j. Practical exercises 2</td>
</tr>
<tr>
<td>k. Plenty of communication 1</td>
</tr>
<tr>
<td>l. Getting out of theories on paper 1</td>
</tr>
<tr>
<td>m. Friendly people 1</td>
</tr>
<tr>
<td>Q4b. What hindered your learning on the course</td>
</tr>
<tr>
<td>a. I didn't manage anyone so I applied things to my boss 1</td>
</tr>
<tr>
<td>b. Lack of time - one would get more on a residential course 3</td>
</tr>
<tr>
<td>c. Everyone from same Institute 2</td>
</tr>
<tr>
<td>d. Participants lack of confidence/shyness 2</td>
</tr>
<tr>
<td>e. Taking notes on lap (informal setting - no tables) 1</td>
</tr>
<tr>
<td>f. Too intensive 1</td>
</tr>
<tr>
<td>g. Group too large 1</td>
</tr>
<tr>
<td>h. Course not suitable for all those involved 1</td>
</tr>
<tr>
<td>i. Some subjects seem to ramble (woolly) - e.g. assertiveness 2</td>
</tr>
<tr>
<td>j. Pace slow 1</td>
</tr>
<tr>
<td>k. John Cleese videos 1</td>
</tr>
</tbody>
</table>

Continued.
Q5. Comments on effectiveness/appropriateness of the course?

'Neither of my two managers (R.O. and C.O.) have been on this course - wouldn’t it be better to put SSOs (as PSOs) through it before starting on lower grades?'

'More emphasis on our present managers to going on these management courses, then implementing what they have learned, if necessary by having 6 monthly check-ups and feed back from the staff they manage.'

'The skills covered in the first three days of the course are basic life skills which could have been covered faster .. possibly a shorter course for experienced course members or skip management 1 altogether'.

II. Post-course questionnaire

100 percent sample
No. of replies 8 (60 % response)

Q1. Was the course relevant

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Partly</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Q2. What was not relevant

<table>
<thead>
<tr>
<th></th>
<th>a.</th>
<th>b.</th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>People Management (participant did not manage people)</td>
<td>Most of it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Q3. Have you had the opportunity of putting into practice what you learned on the course? if so can you tell us what it was?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>a.</th>
<th>b.</th>
<th>c.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delegation upwards</td>
<td>Greater awareness of how managers operate</td>
<td>‘Training’ work-experience students</td>
<td>Team approach</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q4. Were the training methods used appropriate?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>with reservations</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>a.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Too much time discussing topics in small groups</td>
<td>Difficult to imagine 'practice' situations - it was only 'make believe'</td>
<td>Gave participants a chance to test the theory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q5. What areas (if any) could be improved or introduced?

<table>
<thead>
<tr>
<th>Answered</th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>a.</th>
<th>b.</th>
<th>c.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Don’t hold at IOS again too many distractions or opportunities to miss something</td>
<td>‘course on IOS site worked well but, it was necessary to disperse to rather remote locations when groups split up’</td>
<td>‘videos used tended to relate to manufacturing industry with rigid, well understood hierarchy - unlike a research laboratory’</td>
<td>‘A ‘work’ or ‘project’ management course would be useful..’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 20.7  Evaluation data for Management 1 course (non residential) 1991-1993 (JTS)

<table>
<thead>
<tr>
<th>Q6.</th>
<th>Any other comments ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>'A smaller group would have made the 'presentations' easier for the inexperienced speaker</td>
</tr>
<tr>
<td>b.</td>
<td>'I found writing using my lap as a table uncomfortable'</td>
</tr>
<tr>
<td>c.</td>
<td>A very useful course</td>
</tr>
<tr>
<td>d.</td>
<td>'I found the course interesting at the time but given the likely gap between taking the course and getting anyone to manage I will have forgotten most of it. It is also interesting to note that none of my supervisors had been on the course.</td>
</tr>
<tr>
<td>e.</td>
<td>'Altho'(sic) a little of the course was informative it is not the type I would attend again because so much seemed to be just plain common sense'</td>
</tr>
<tr>
<td>f.</td>
<td>'Many of the aspects of the course were really teaching us how to manage oneself - communication was stressed. Much of the knowledge is normally gained with experience of life in general. The younger members of the course seemed to get more out of it. For older members much of the time seemed wasted - merely emphasizing what one already knew. The most useful part of the course was Dr. Summerhayes' talk on the 'well-found' laboratory. In over a year at IOSDL I had not heard it explained before.'</td>
</tr>
</tbody>
</table>

### Conclusions Management 1 non-residential course 1991

- **Balance of topics.** Good
- **Methods/Presentation.** Appropriate. Pace of course was thought to be slow
- **Content.** Relevant
- **Transfer of learning** to work was applied by approximately half of respondents

**Comments:** Some staff liked the non-residential course, others would have liked it to be residential. Several staff said they felt that their own managers should have received more management training. Some staff felt that it was irrelevant because they did not have others to manage. Several missed the point that the course was also about managing oneself. The relaxed atmosphere helped learning but some participants would have preferred a mix of people from other organisations. JTS questionnaire showed that course score was similar to other NERC Management 1 courses.
Management 1 course (non-residential Chilworth Manor)

A second Management 1 course was run at Chilworth Manor during 1993 in response to the recruitment of some twelve bright young staff who were likely to benefit from early attendance of Management 1 as a preparation for early attendance of Management 2 which covers team/group work).

| Table 20.8 Evaluation data for Management 1 course (non residential) Chilworth Manor 1993 |
|---------------------------------|---------------------------------|
| **I. JTS Post-course questionnaire** | 13 participants 56% response |
| Participant | a | b | c | d | e | f | g | Mean |
| Organisation | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 5 | 2.4 |
| Course content | 2 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 2.7 |
| Presentation | 2 | 3 | 2 | 2 | 3 | 2 | 4 | 2 | 2.6 |
| Relevance | 2 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3.5 |
| Venue | 3 | 3 | 5 | 2 | 2 | 2 | 5 | 3 | 3.3 |
| **II IOS Post-course questionnaire** | 70% sample | 9 | 44% response | 4 |
| Q1. Since completing the course have you found it to be useful in your work or leisure? | 3 | 1 |
| Yes | 3 |
| No | 1 |
| Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues? | 2 :- a. Take appraisal more seriously b. Make better use of secretarial support c. Turn away requests for carrying out work which would not make the best use of time |
| Yes | 2 |
| No | 2 |
| Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation, e.g. Business, family friends | 3 |
| No | 3 |
| Not answered | 1 |
| Q4. To what extent do you think that IOS/NERC benefits from its staff attending these courses? a. to a large extent - b. to a moderate extent 4 c. Not at all |
| Q5. List the 3 most important things you learned during the course |
| Items listed included- |
| Problem solving | 1 |
| Assertiveness | 1 |
| Value of admin staff | 1 |
| To listen | 1 |
| It's easy to make mistakes | 1 |
| Managers require proper training | 1 |
| Q6. What helped/hindered learning |
| Helped | Stress-free approach | 1 |
| Positive atmosphere | 1 |
| Hindered | Non-residential course | 2 |
| Staff from same institute | 1 |
| Topics could have been covered quicker | 1 |
Table 20.8 Evaluation data for Management 1 course (non residential)
Chilworth Manor 1993

...continued

Q7. What do you think about the balance of topics covered:--

Too much theory 1
Themes not interesting 1
O.K. 1
Not answered 2

Q8. Have you other comments you would like to make:--

'The tutor was only presenting one approach to management without any alternatives - it was also very basic'
'The written material provided was boring. It did not inspire me to read through before attending'
'Bad idea to have non-residential course with all from one institute'
'Course tutors had poor control .. people needed pulling back on track'
'Poor timing of course - SOC announcement' [Relocation of staff was announced during the course - NERC announcement]
'Less board-work [need] more practical approach - worked problems'

Conclusions Management 1 course Chilworth Manor

Balance of topics. Possibly too much theory and not enough practical work.
Methods/Presentation. were appropriate

Comments:- Most staff found the course to be relevant. Course coincided with announcement of relocation to Southampton University. Participants would have liked more problem-solving. Most would have preferred a residential course with others from different locations. However they might have found the pace slow and furthermore would not have been able to attend/book a management 2 course as early as they have. The scoring on the JTS questionnaire was marginally lower than for other Management 1 residential courses at that time (Spring) with a score of 2.9 against 2.4 but not lower than the score of 3.05 for similar but residential courses undertaken by NERC staff later in the year. Learning was applied at work by approximately half of respondents.
Management 2 course (Residential) 1991/2

Several IOS staff attended these courses from 1991-1993. During 1992 the format was altered by JTS and Management 2 changed from a two-week course to 2/1 week courses (redesignated -Management 2 and Management 3)

<table>
<thead>
<tr>
<th>Table 20.9 Evaluation data for Management 2 course (residential 1991-1992)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III IOS Post-course questionnaire</td>
</tr>
<tr>
<td>70% sample</td>
</tr>
<tr>
<td>50% response</td>
</tr>
<tr>
<td>2 participants</td>
</tr>
<tr>
<td>Q1. Was course relevant to your future role</td>
</tr>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course?</td>
</tr>
<tr>
<td>Yes 1</td>
</tr>
<tr>
<td>Maybe 1</td>
</tr>
<tr>
<td>Q3. Which aspects of the course were not relevant?</td>
</tr>
<tr>
<td>Comments listed:</td>
</tr>
<tr>
<td>Process groups did not work well</td>
</tr>
<tr>
<td>Very little - some loss of direction on course</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate?</td>
</tr>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td>Q5. What areas, if any, could be introduced or improved?</td>
</tr>
<tr>
<td>Less process groups</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Q6. Any other comments:</td>
</tr>
<tr>
<td>Slow to start with but needed to be as the members needed to get to know each other</td>
</tr>
<tr>
<td>2 week course too long - weekly course in 2 parts would be fine.</td>
</tr>
</tbody>
</table>

Please see Table 20.10 for Management 2 evaluation data for 1992-93
Table 20.10  Evaluation data for Management 2 course (Residential)  
1992-1993

I. JTS Post-course questionnaire
100% sample  6
response rate  16%

<table>
<thead>
<tr>
<th>Participant</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation</td>
<td>5</td>
</tr>
<tr>
<td>Course content</td>
<td>4</td>
</tr>
<tr>
<td>Presentation</td>
<td>5</td>
</tr>
<tr>
<td>Relevance</td>
<td>4</td>
</tr>
<tr>
<td>Venue</td>
<td>4</td>
</tr>
</tbody>
</table>

a.  ‘.. especially liked teamwork roles and negotiating skills.. useful in  
general terms but not able to apply directly as I don’t manage. The  
rest of the team within which I work stays the same. We need a course  
which whole project team could attend.’

II IOS Post-course questionnaire
70% sample  12
75% response  8

Q1. Since completing the course have you found it to be useful in your work or  
leisure?

| Yes |  6 |
| No  |  1 |

Q2. Can you give work-related instances when the course has helped you in your  
day-to-day contacts with your staff or your line-managers or colleagues

<table>
<thead>
<tr>
<th>Yes</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Helpful in giving feedback to line-manager</td>
</tr>
<tr>
<td>b.</td>
<td>Helped to get the best out of student</td>
</tr>
<tr>
<td>c.</td>
<td>Conscious of ‘people roles’ in groups</td>
</tr>
<tr>
<td>d.</td>
<td>Team- meetings</td>
</tr>
<tr>
<td>e.</td>
<td>Interpretation of body language</td>
</tr>
<tr>
<td>f.</td>
<td>Successfull meetings</td>
</tr>
</tbody>
</table>

| No  |  1 |
| Not answered |  1 |

Q3. Can you give instances when the course has helped you in your contacts with  
people outside of the organisation, e.g. Business, family friends

| Yes |  2 |
| No  |  2 |
| Not answered |  4 |

Q4. To what extent do you think that IOS/NERC benefits from its staff attending  
these courses:

| a.  | to a large extent |  3 |
| b.  | to a moderate extent |  3 |
| c.  | Not at all |  2 |
| Not answered |  2 |

Q5. List the 3 most important things you learned during the course

Items listed included-

- Better at management than previously thought
- Team work
- Assessment
- Negotiation
- Group problems
- Vulnerability
- Excessive dependence by people on formal authority
- A good mixer and roles to play
- Openness
- Confidence
- Awareness
- Individuality in a group
- Don’t let things simmer if unhappy
- Listen more
- Prepare for meetings

Continued...
Table 20.10 Evaluation data for Management 2 course (Residential) 1992-1993

...continued

Q6. What helped/hindered learning

Helped
- Supportive atmosphere  2
- Being away from it all  1
- Informality  1
- Good venue  1

Hindered
- Over-familiarity with others on course after 3 days  3
- Lack of testing or reinforcement  1
- Time-wasted on procedural matters  1
- Insufficient time to read background material  1

Q7. What do you think about the balance of topics covered? -

- Very Good  1
- OK/Good  3
- Complete  1
- Not answered  3

Q8. Have you other comments you would like to make? -

I don't think these courses should be given to people who are neither young (say <25) nor newly recruited ... resources expended would be better devoted to technical courses, presentations, report writing and languages.

Conclusions Management 2 courses 1991-1993

Balance of topics. O.K. Wide range of topics

Methods/Presentation. Appropriate but one participant questioned the use of process groups

Comments:- Most participants found the course to be relevant and useful in their work and transfer of learning to the workplace occurred. They listed a wide range of subjects learned, linked to team or group work. One person felt that, in some instances, funds would have been better allocated to technical courses.
Management 3 courses

Several staff attended these on a residential basis having completed a management 2 course a year or so earlier.

Table 20.11 Evaluation data for Management 3 (residential -1993/4)

<table>
<thead>
<tr>
<th>Participant</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>Mean (M3 NERC Mean) (1-6/93 - 7-12/93)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Course content</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Presentation</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Relevance</td>
<td>2</td>
<td>2/3</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Venue</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2.3</td>
</tr>
</tbody>
</table>

II I0S Post-course questionnaire

70% sample | 4
70% response | 3 participants

Q1. Since completing the course have you found it to be useful in your work or leisure?
   Yes | 2
   No | -
   Not answered | 1

Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues?
   Yes | 3
   a. Basic Management Psychology
   b. Dealing with change
   c. Recognise that good communications are essential

Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation, e.g. Business, family friends
   No | 3

Q4. To what extent do you think that I0S/NERC benefits from its staff attending these courses?
   a. to a large extent | -
   b. to a moderate extent | 3
   c. Not at all | -

Q5. List the 3 most important things you learned during the course

Items listed included:

- How to manage conflict
- How to manage change
- Good communication
- The need to innovate
- Management structure
- NERC isn't listening to advice of its own courses

Continued...
Table 20.11  Evaluation data for Management 3 (residential -1993/4)

<table>
<thead>
<tr>
<th>Q6.</th>
<th>What helped/hindered learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helped</td>
<td>Venue/hotel 2</td>
</tr>
<tr>
<td></td>
<td>Friendly atmosphere 1</td>
</tr>
<tr>
<td></td>
<td>Good tutors 1</td>
</tr>
<tr>
<td></td>
<td>Knowing course members (from Management 2) 1</td>
</tr>
<tr>
<td>Hindered</td>
<td>Covered much of Management 1 and 2 in some ways</td>
</tr>
</tbody>
</table>

Q7. What do you think about the balance of topics covered: -

| Good/OK | 1 |
| Not answered | 2 |

Q8. Have you other comments you would like to make: -

Management 3 is not as useful as M1 and M2 although it does a good job in identifying management styles. Real benefits would be felt when attendee was him/herself actually in a management position, below that the course serves to identify problems in managers you cannot change.

Conclusions Management 3 courses

Balance of topics. Thought to be adequate but one person commented that it overlapped too much with Management 1 and 2.

Methods/Presentation. were good

Comments:- Most respondents found the course to be relevant and useful in their work though it seems that they benefitted more from Management 2. One person commented that the course serves to identify problems that the Manager cannot change (not elaborated).
JTS Assertiveness Course

This course was run on-site at IOS (Hambledon) in 1993.

Table 20.12 Evaluation data on Assertiveness Course (1993)

<table>
<thead>
<tr>
<th>Questionnaire sent to 8 participants</th>
<th>40% response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Since completing the course have you found it to be useful in your work or leisure?</td>
<td></td>
</tr>
<tr>
<td>a. 'Yes learning how to state your ideas clearly in a team or with the line-management'</td>
<td></td>
</tr>
<tr>
<td>b. 'Yes I can be assertive without causing offence more often than before'</td>
<td></td>
</tr>
<tr>
<td>c. 'Yes'</td>
<td></td>
</tr>
<tr>
<td>Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues</td>
<td></td>
</tr>
<tr>
<td>a. 'I think about the other person more and then try to make a fair comment neither giving in nor running over someone else'</td>
<td></td>
</tr>
<tr>
<td>b. 'Stating how you would like your research to develop'</td>
<td></td>
</tr>
<tr>
<td>c. 'I can delegate unpleasant tasks in a firm but friendly way which I might not have done to avoid confrontation'</td>
<td></td>
</tr>
<tr>
<td>Q3. Can you give instances when the course has helped you in your contacts with people outside the organisation? e.g. Business matters, family, friends.</td>
<td></td>
</tr>
<tr>
<td>a. 'Better at dealing with people on the phone and in shops'</td>
<td></td>
</tr>
<tr>
<td>b. 'I am told occasionally I can be bossy so I try to think back to the course i.e. I'm OK! are they OK??..'</td>
<td></td>
</tr>
<tr>
<td>Q4. To what extent do you think that IOS/NERC benefits from these courses?</td>
<td></td>
</tr>
<tr>
<td>To a large extent</td>
<td>1</td>
</tr>
<tr>
<td>To a moderate extent</td>
<td>2</td>
</tr>
<tr>
<td>Q5. List the three most important things you learned during the course</td>
<td></td>
</tr>
<tr>
<td>a. 'Can't quantify'</td>
<td></td>
</tr>
<tr>
<td>b. 'How the way we say things affects other people's behaviour/body language/increasing self-confidence.'</td>
<td></td>
</tr>
<tr>
<td>Not answered</td>
<td>1</td>
</tr>
<tr>
<td>Q6. What helped or hindered your learning on the course</td>
<td></td>
</tr>
<tr>
<td>Helped: Good teaching/tutor</td>
<td>2</td>
</tr>
<tr>
<td>Hindered: Not enough time</td>
<td>1</td>
</tr>
<tr>
<td>Q7. What do you think about the balance of topics covered?</td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>1</td>
</tr>
<tr>
<td>Good</td>
<td>2</td>
</tr>
</tbody>
</table>

Conclusions Assertiveness Course (JTS)

Balance of topics. Good
Methods/Presentation. Good

Comments: Most respondents found the course to be relevant but would have liked more time. Learning was applied at work. This might have been better run as a residential course.
Table 20.13  Evaluation data from Reporting Officer course (1990)

<table>
<thead>
<tr>
<th>IOS Post-course Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample 7</td>
</tr>
<tr>
<td>Response 35% 2</td>
</tr>
<tr>
<td><strong>Q1. Was the course relevant to your future role and why</strong></td>
</tr>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td><strong>Q2. Have you had the opportunity of putting into practice what you learned on the course?</strong></td>
</tr>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td><strong>Q3. Which aspects were not relevant</strong></td>
</tr>
<tr>
<td>Nil 1</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
<tr>
<td><strong>Q4. Where the training methods used on the course appropriate?</strong></td>
</tr>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td><strong>Q5. What areas, if any could be introduced or improved with regard to :-</strong></td>
</tr>
<tr>
<td>a. content?  Perhaps a broader view 1</td>
</tr>
<tr>
<td>b. Training methods?</td>
</tr>
<tr>
<td>c. Administration of the course? Location good (at IOSDL) Time could have been longer to allow more tuition 1</td>
</tr>
<tr>
<td><strong>Q6. Any other comments</strong></td>
</tr>
<tr>
<td>'I feel that there was a very wide variation in reporting standards by the participants'</td>
</tr>
</tbody>
</table>

Conclusions Reporting Officer Course 1990

**Methods/Presentation.** Appropriate  
**Content.** Relevant  
**Comments:** Participants felt that there was a wide variation in reporting standards by participants.
# Reporting Officer course 1994

## Table 20.14 Evaluation data from Reporting Officer course (1994)

### JTS end-of-course evaluation

**Comments:**

a. 'A very good course. Most important when reporting systems are being changed'.
b. 'Worthwhile and useful course'

### IOS Post-course Evaluation

<table>
<thead>
<tr>
<th>Sample</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Q1.** Since completing the course, have you found it to be useful in your work or leisure (please give reasons) their potential in terms of the following:— (please give examples)

Yes | 3 |

**Q2.** Please give two or three specific instances when the course has helped you in your work

| a. Helped in understanding of Report Officer’s attitude | 1 |
| b. Helped to structure the Forward Job Plan | 2 |

**Q3.** List the three most important things you learned during the course

- Understanding of role and forward job plan | 1 |
- Fair markings on ASRs | 1 |
- Importance of staff reporting | 1 |
- How to give feedback | 1 |
- Flexibility of Forward Job plan | 1 |

**Q4.** What helped or hindered your learning during the course

**Helped:**
- Small group discussion | 1 |
- Input of one of admin.staff | 1 |
- Course notes | 1 |
- Tuition | 1 |

**Hindered:**
- Nil

**Q5.** What do you think about the balance of topics covered

- O.K./Reasonable/Good | 3 |

**Q6.** To what extent do you think that IOS benefits from its staff attending courses (please give reasons)

| a. To a great extent | 2 |
| b. To a moderate extent | 1 |

**Q7.** Have you any other comments you would like to make about the course

- 'Course useful for explaining the ASR system'

## Conclusions Reporting Officer Course 1994

**Balance of topics.** Good

**Methods/Presentation.** were appropriate

**Content.** Relevant

**Comments:** Most participants found this to be a useful and worthwhile course.
Table 20.15 Evaluation data on Job Appraisal Interviewing 1990

<table>
<thead>
<tr>
<th>IOS Post-course Evaluation</th>
<th>1 respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Was the course relevant to your future role and why</td>
<td>Yes 1</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course?</td>
<td>Yes 1</td>
</tr>
<tr>
<td>Q3. Which aspects were not relevant</td>
<td>Nil 1</td>
</tr>
<tr>
<td>Q4. Where the training methods used on the course appropriate?</td>
<td>Yes 1</td>
</tr>
<tr>
<td>Q5. What areas, if any could be introduced or improved with regard to:</td>
<td></td>
</tr>
<tr>
<td>a. content? )</td>
<td>None</td>
</tr>
<tr>
<td>b. Training methods? )</td>
<td>None</td>
</tr>
<tr>
<td>c. Administration of the course?</td>
<td>None</td>
</tr>
<tr>
<td>Q6. Any other comments</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Conclusions - Job Appraisal Interviewing

Balance of topics. Good
Methods/Presentation. Appropriate
Content. Relevant
Comments:- Not enough written feedback on this course to say whether it is useful. **Verbal comments** suggest that staff found this course to be useful.
Interactive skills

Two members of staff attended this course but it has now been discontinued by JTS and its content is incorporated into the Management series.

Table 20.16 Evaluation data on Interactive Skills courses (1991)

<table>
<thead>
<tr>
<th>2 participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
</tr>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td>Q2. What was not relevant</td>
</tr>
<tr>
<td>'I wouldn't say any of the course was not relevant. The question is whether it is effective.</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
<tr>
<td>Q3. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
</tr>
<tr>
<td>a. I have only put it into practice in a negative way, in the sense of forming an opinion of what the problems are not'</td>
</tr>
<tr>
<td>b. General improvement in communications - I hope</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
</tr>
<tr>
<td>a. 'I have serious doubts about the effectiveness and appropriateness of the informal process groups, at least as applied on this course. I suspect the original two-week course may have been more effective. Are these groups still regarded as effective industrial training?'.</td>
</tr>
<tr>
<td>b. 'Yes- fun but with a purpose 1</td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
</tr>
<tr>
<td>a. /not answered</td>
</tr>
<tr>
<td>b. I think it is inadvisable to make people give presentations without any prior training or guidance. On the course I attended it had a very negative effect on some individuals with pre-existing problems in giving presentations'.</td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
</tr>
<tr>
<td>Only one comment:-</td>
</tr>
<tr>
<td>'I have to say that I found this course very disturbing and unsettling. though it is possible that these feelings might have been resolved more satisfactorily and constructively in a two-week course.</td>
</tr>
</tbody>
</table>

Conclusions Interactive skills

Balance of topics. Questionable
Methods/Presentation. were appropriate.
Content. was relevant
Comments:- One participant questioned the use of process groups and found the course unsettling and disturbing.
Interpersonal Effectiveness

Table 20.17a Evaluation data on Interpersonal Effectiveness (1991)

Survey of 75% participants = 3
66% response = 2

Q1. Was the course content relevant to you future role, and if so why?
   a. 'Yes. It helped me to understand people and their attitudes. How to deal with them'
   b. Not answered = 1

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   a. 'Yes. I now know how to cope with people under stress'
   b. Not answered

Q3. Which aspects of the work were not relevant?
   a. None
   b. Not answered

Q4. Were the training methods used on the course appropriate?
   a. 'Excellent - much of the science behind peoples behaviour was given'
   b. Not answered

Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods c. General administration of the course?
   a. 'Training methods superb'
   b. Not answered

Q6. Any other comments?
   a. The course was excellent. Only criticism is the need for follow-up day. This perhaps needed more content over 2 days
   b. It was expensive. It repeated stuff I had done before in other courses. I read the main course book 20 years ago. It was entertaining. It was poor value for money. It told us what the problems were but not how to solve them.

Table 20.17b Evaluation data on Interpersonal Effectiveness (1994)

Q1. Since completing the course, have you found it to be useful in your work or leisure
   a. 'Yes in many ways
   b. 'Yes - better stress management and people management'

Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff line-managers or colleagues?
   a. 'made me more effective in dealing with people...'
   b. Giving/taking criticism

Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation?
   a. 'Better coping with stress at work means a more relaxed home life
   b. Not answered

Q4. To what extent do you think that IOS/NERC benefits from its staff attending these courses?
   To a large extent = 2

Q5. List the three most important things you remembered during the course:
   a. How to be more positive. How to say no. How to get what I want = 1
   b. Stress management. People management

Q6. What helped or hindered your learning during the course?
   Helped
   a. Friendly atmosphere with like-minded colleagues
   b. Tutor excellent

Continued...
Conclusions Interpersonal Effectiveness

Balance of topics. Excellent-Good
Methods/Presentation. Excellent-Good

Comments:- Most participants found this course to be excellent and recommended to others. One participant found that he already knew some of the material and so questioned its value.

Verbal comments:- One participant said that this course compares favourably with the JTS Management 1 course. She said that some of the content is similar but that the subject matter is presented more forcefully. Another participant found it helpful and recommended it for a colleague, another had thoroughly enjoyed it and was putting it into practice.
Directing and Managing research and Development

Several senior staff attended this course on a residential basis.

Table 20.18 Evaluation data on Directing and Managing Research and Development

Survey of 70% participants = 8
50% response = 4

Q1. Was the course content relevant to your future role, and if so why?
   Yes 1
   No 1

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   Yes 1
   No 1

Q3. Which aspects of the work were not relevant?
   a. 'Over-emphasis on job-evaluation'
   b. 'Industrial R and D - size and scale of IOS projects different'

Q4. Were the training methods used on the course appropriate?
   a. 'Fairly limited - mostly lectures'
   b. 'Good mixture of lectures, discussions, group workshop. Some overheads dated'.

Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods c. General administration of the course?
   a. Content - 'Many of concepts in certain areas of the course came from research at XX - a wider picture would have been more helpful .. updated viewgraphs and more use of colour.'

Q6. Any other comments?
   a. 'I find it hard to remember much about the course a year later'
   b. 'Mixture of participants 50% NERC, 50% other, discussions became NERC oriented, and with dissatisfaction a major item. Several of the other participants were very senior and I got the feeling that there were too many NERC people on the course'.

Table 20.18b Evaluation data on Directing and Managing Research and Development (1991-2)

Q1. Since completing the course, have you found it to be useful in your work or leisure
   a. 'Not much - went to sea immediately after course so never got the chance to implement it immediately'
   b. Not answered

Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff line-managers or colleagues
   No 1
   Not answered 1

Continued...
Table 20.18  Evaluation data on Directing and Managing Research and Development

...continued

Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation
   No 1
   Not answered 1

Q4. To what extent do you think that IOS/NHERC benefits from its staff attending these courses
   To a slight extent 1
   Not answered 1

Q5. List the three most important things you remembered during the course:
   - Time-span concept 1
   - Job descriptions 1
   - Need to balance quality versus payment 1

Q6. What helped or hindered your learning during the course
   - Can’t remember 1
   - Not answered 1

Q7. What do you think about the balance of topics covered
   - O.K. 1
   - Not answered 1

Q8. Have you any other comments you would like to make about the course?
   a. Not answered 1
   b. This was a particularly un-memorable course. I remember vaguely that I was not uninterested at the time. But at this distance I can recall almost nothing of the detail. If there have been tangible benefits they have been totally subliminal and I am afraid I am unable to answer the questionnaire.

Conclusions Directing and Managing R and D

Balance of topics. Mixed response from participants
Methods/Presentation. Mixed response to training methods
Verbal comments:- Some participants found this course to be excellent and recommended that others should attend. Others were critical of content and methods. Yet others could hardly remember it several months later.
Table 20.19 Evaluation data on Project Management course (IOS/Brunel)

8 Participants - 50% response

Q1. Since completing the course have you found it to be useful in your work or leisure
   Not answered 2
   No - I cannot recall consciously using anything taught during the course
   Yes - I found the course interesting and it made me reflect on the way I manage my work

Q2. Can you give work related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues
   I have become more organised in planning work. Focusing on building people into project plans early in product development.
   Not answered 3

Q3. Can you give instances when the course has helped you in your contacts with people outside of the organisation e.g. Business matters, family, friends
   Not relevant

Q4. To what extent do you think that IOS/NERC benefits from these courses.
   To a large extent 1 (comment - it opens the eyes of participants to other ways of viewing tasks, reducing stereo-typed approach, allowing choice of solution ‘tools’)  
   To a moderate extent 1
   Not at all 1
   Not answered 1

Q5. List the three most important things you learned during the course
   Consideration of staff through good communication; requirement for clear plans and milestones. 1
   Not answered 3

Q6. What helped or hindered your learning during the course?
   Helped - mixture of participants’ background  
   Residential course
   Hindered - Perhaps too intensive (sic) more depth required to make topics useful
   Not answered 3

Q7. What do you think about the balance of topics covered?
   Gave a good overview of topics I had not previously considered, also helped confirm beliefs I had in certain management areas.
   Not answered 3

Q8. Have you any other comments you would like to make about the course?
   Training of this subject should be broadened to allow more staff to benefit, this will help the organisation’s overall culture.
   The course was better than the Management for senior grades (JTS) - I would recommend it.
Conclusions Project Management

Balance of topics. Mixed response from participants
Methods/Presentation. Mixed response
Verbal Comments:- There were widely differing responses by participants. Some found the course to be extremely helpful, others did not find it useful.
Microsoft Project

This course (based on software) was run during 1994 to augment the 1992/1993 theoretical project management course.

<table>
<thead>
<tr>
<th>Table 20.20 Evaluation data on Microsoft Project course (1994)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70% sample</td>
</tr>
<tr>
<td>20% response rate</td>
</tr>
</tbody>
</table>

**Q1.** Since completing the course, have you found it to be useful in your work or leisure?

'As I am at the start of two different projects with a group of people, the ability to clearly communicate the project's timeliness has proved effective.'

**Q2.** Were there parts of the course which you did not find useful?

'All courses give different amounts to different people, depending on their knowledge base at the start of the course. Therefore the earlier stages I found slow and some of the later stages difficult. However I believe the course was well-balanced to our needs at IOS.'

**Q3.** List the three most important things you learned during the course.

'How Microsoft strategy works with their software themes. New parts of the software. Most important the knowledge level of other people on the course, i.e. knowing who to turn to for help.'

**Q4.** What helped or hindered your learning during the course?

Helped: Small group

Hindered: 'Time, another 1/2 day'

**Q5.** What do you think about the balance of topics covered?

'Very well balanced to the needs of IOS.'

**Q6.** To what extent do you think that IOS/NERSC benefits from its staff attending these courses?

'To a great extent.'

**Q7.** Have you any other comments you would like to make about the course?

'As projects have shorter time-scales we need to be clear as to our expectations of one another. Project is an excellent aid for this purpose. If there were courses on WORD, EXCEL etc. then I would be more productive, not wasting time scrambling around the menus. I rate myself as computer-literate, so I believe I would benefit, therefore the potential increase in efficiency at IOS is large.'

'This type of course requires a large input of personal effort for success.'

**Conclusions Microsoft Project**

**Balance of topics.** Well-balanced

**Methods/Presentation.** Excellent

**Verbal comments:** Most respondents found the course to be excellent and relevant and applicable to their work. Transfer of learning occurred.
II VOCATIONAL COURSES

Atomic Spectrophotometry

Table 20.21 Evaluation data on course Atomic Absorption Spectrophotometry
(I participant)

<table>
<thead>
<tr>
<th>Q1.</th>
<th>Was the course content relevant to your future role, and if so why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1 'useful training'</td>
</tr>
<tr>
<td>Q2.</td>
<td>Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Q3.</td>
<td>Which aspects of the work were not relevant?</td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Q4.</td>
<td>Were the training methods used on the course appropriate?</td>
</tr>
<tr>
<td>Yes</td>
<td>'excellent' 1</td>
</tr>
<tr>
<td>Q5.</td>
<td>What areas, if any, could be introduced or improved, with regard to a. Content, B. Training Methods C. General administration of the course?</td>
</tr>
<tr>
<td>Not answered</td>
<td></td>
</tr>
<tr>
<td>Q6.</td>
<td>Any other comments?</td>
</tr>
<tr>
<td>'This course came free with AA [equipment] was v good value..'</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions - Atomic Spectrophotometry

Methods. Appropriate
Content. Relevant
General Comments: This free course was useful.
### Table 20.22 Evaluation data on Basic Accounts Course (1993)

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Since completing the course, have you found it to be useful in your work or leisure</td>
<td>‘I feel more confident on finance-related matters although I cannot say there are any specific examples’</td>
</tr>
<tr>
<td>Q2. Were there parts of the course which you did not find useful?</td>
<td>‘I found it to be all of relevance’</td>
</tr>
<tr>
<td>Q3. List the three most important things you learned during the course</td>
<td>How the monies are allocated, Different accounting terminology, More MSA knowledge</td>
</tr>
<tr>
<td>Q4. What helped or hindered your learning during the course</td>
<td>Helped: ‘Having people from different Institutes ... a variety of views... more idea of what others do’</td>
</tr>
<tr>
<td></td>
<td>Hindered: ‘Not long enough ... 3 days rather than 2 would be better’</td>
</tr>
<tr>
<td>Q5. What do you think about the balance of topics covered</td>
<td>Not answered</td>
</tr>
<tr>
<td>Q6. To what extent do you think that IOS/NERC benefits from its staff attending these courses</td>
<td>To a moderate extent 1</td>
</tr>
<tr>
<td>Q8. Have you any other comments you would like to make about the course?</td>
<td>Nil</td>
</tr>
</tbody>
</table>

### Conclusions - Basic Accounts

**Methods.** Appropriate  
**Content.** Relevant  
**General Comments:** The participant found it useful to meet others from different institutes to exchange views.
Table 20.23  Evaluation data on Small-boat-handling course

Survey of 100% participants = 4
50% response = 2

Q1. Was the course content relevant to you future role, and if so why?
Yes 2
No -

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
Yes 1
No 1

Q3. Which aspects of the work were not relevant?
None 2

Q4. Were the training methods used on the course appropriate?
Yes 2
  ‘mixture of practical and theory was good’

Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods c. General administration of the course?
None 1
  comment ‘more practical ..inclusion of a night exercise’ 1

Q6. Any other comments?
‘an excellent course, essential for anyone involved with work from small boats’

Conclusions - Boat-Handling

Topics. could have included a night exercise
Methods. Appropriate
Content. Relevant
General Comments:-- Written and verbal comment suggest that this was an
excellent course.
BTEC (Engineering/electronics)

<table>
<thead>
<tr>
<th>Table 20.24 Evaluation data on BTEC course</th>
</tr>
</thead>
<tbody>
<tr>
<td>One participant</td>
</tr>
<tr>
<td>Q1. Was the course content relevant to your future role, and if so why?</td>
</tr>
<tr>
<td>Yes 1 ‘very relevant...’</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
</tr>
<tr>
<td>Yes 1</td>
</tr>
<tr>
<td>Q3. Which aspects of the work were not relevant?</td>
</tr>
<tr>
<td>‘Topics on Industry and Society’</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate?</td>
</tr>
<tr>
<td>Yes 1</td>
</tr>
<tr>
<td>Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods, c. General administration of the course?</td>
</tr>
<tr>
<td>‘Occasional outside speaker to give a talk on electronics</td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
</tr>
<tr>
<td>Nil</td>
</tr>
</tbody>
</table>

Conclusions - BTEC (Engineering/electronics)

Balance of topics. Good
Methods. Appropriate
Content. Relevant
General Comments:- Transfer of learning to the workplace occurred.
CFC Concentrations

Table 20.25 Evaluation data on CFC Concentration course (1993)

<table>
<thead>
<tr>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Since completing the course, have you found it to be useful in your work or leisure</td>
</tr>
<tr>
<td>'I could not have done [cruise] D201 without it neither would I be going on D213'</td>
</tr>
<tr>
<td>Q2. Were there parts of the course which you did not find useful?</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Q3. List the three most important things you learned during the course</td>
</tr>
<tr>
<td>'Measurement technique'</td>
</tr>
<tr>
<td>'Need to be meticulous'</td>
</tr>
<tr>
<td>'How not to damage the equipment'</td>
</tr>
<tr>
<td>Q4. What helped or hindered your learning during the course</td>
</tr>
<tr>
<td>Helped: 'Large wealth of background knowledge held by S.'</td>
</tr>
<tr>
<td>Hindered: 'S. was tired and not of his best some of the time'</td>
</tr>
<tr>
<td>Q5. What do you think about the balance of topics covered</td>
</tr>
<tr>
<td>Fine</td>
</tr>
<tr>
<td>Q6. To what extent do you think that IOS/NERC benefits from its staff attending these courses</td>
</tr>
<tr>
<td>To a great extent 1</td>
</tr>
<tr>
<td>Q7. Have you any other comments you would like to make about the course?</td>
</tr>
<tr>
<td>Nil</td>
</tr>
</tbody>
</table>

Conclusions - CFC Concentrations

Balance of topics. Fine
Methods. Appropriate
Content. Relevant
General Comments:- A very useful course put to good use.
Contracts

Table 20.26 Evaluation data on Contracts course (1991)

<table>
<thead>
<tr>
<th>Q1.</th>
<th>Was the course relevant and if so why.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'It was essential to my post as Finance Officer'</td>
</tr>
<tr>
<td>Q2.</td>
<td>Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
</tr>
<tr>
<td></td>
<td>'All aspects of contracts work'</td>
</tr>
<tr>
<td>Q3.</td>
<td>What was not relevant</td>
</tr>
<tr>
<td></td>
<td>Not answered</td>
</tr>
<tr>
<td>Q4.</td>
<td>Were the training methods used on the course appropriate</td>
</tr>
<tr>
<td></td>
<td>Not answered</td>
</tr>
<tr>
<td>Q5.</td>
<td>What areas (if any) could be introduced or improved?</td>
</tr>
<tr>
<td></td>
<td>Not answered</td>
</tr>
<tr>
<td>Q6.</td>
<td>Any other comments?</td>
</tr>
<tr>
<td></td>
<td>'Should be a computing course for all the finance staff and those staff who order large quantities of equipment. Senior management would also benefit from attendance.'</td>
</tr>
</tbody>
</table>

Conclusions - Contracts

Topics: Mixed response from participants
Methods: Appropriate
Content: Relevant
General Comments: A very good course -essential for contract work.
Dbase IV (spreadsheets) 1991

Table 20.27 Evaluation data on Dbase IV (intermediate - June 1991)

<table>
<thead>
<tr>
<th>Q1. Was the course content relevant to your future role, and if so why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes - 'very much'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Yes - I learned to manipulate the data in a variety of ways..'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3. Which aspects of the work were not relevant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q4. Were the training methods used on the course appropriate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Yes, it was 1 to 1 and she was willing to cover anything I wanted..'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods, c. General administration of the course?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not answered</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6. Any other comments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Overall I was very impressed. Extremely useful course'</td>
</tr>
</tbody>
</table>

Conclusions - Dbase (spreadsheets)

Content. Relevant
General Comments:- A useful course.
Dbase (spreadsheets) 1993

Table 20.28  Evaluation data on DBASE course (1993)

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Since completing the course, have you found it to be useful in your work or leisure?</td>
<td></td>
</tr>
<tr>
<td>a. 'Found the course very limited'</td>
<td></td>
</tr>
<tr>
<td>Q2. Were there parts of the course which you did not find useful?</td>
<td>Not answered</td>
</tr>
<tr>
<td>Q3. List the three most important things you learned during the course</td>
<td>Not answered</td>
</tr>
<tr>
<td>Q4. What helped or hindered your learning during the course</td>
<td></td>
</tr>
<tr>
<td>Hindered 'Sharing course with people at different stages'</td>
<td>1</td>
</tr>
<tr>
<td>Q5. What do you think about the balance of topics covered</td>
<td>Not answered</td>
</tr>
<tr>
<td>Q6. To what extent do you think that IOS/NERC benefits from its staff attending these courses?</td>
<td>Not answered</td>
</tr>
<tr>
<td>Q7. Have you any other comments you would like to make about the course?</td>
<td></td>
</tr>
<tr>
<td>'I found the one-day course very limited. I have just done a word for windows course over 10 weeks evening classes which I found more beneficial'</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions - Dbase 1993

Content, Relevant
General Comments:- This one-day course was intensive and a longer-term less intensive course might have been more beneficial.
Excel (spreadsheets)

Table 20.29  Evaluation data on EXCEL course (1993)

| Q1. Since completing the course, have you found it to be useful in your work or leisure |
| Q2. Were there parts of the course which you did not find useful? |
| Q3. List the three most important things you learned during the course |
| Q4. What helped or hindered your learning during the course |
| Q5. What do you think about the balance of topics covered |
| Q6. To what extent do you think that XOS/NERC benefits from its staff attending these courses |
| Q7. Have you any other comments you would like to make about the course? |

| 100% sample | 3 |
| 33% response | 1 |
| Q1. | Since completing the course, have you found it to be useful in your work or leisure |
| a. | 'Not really: the microsoft manual has been more useful' |
| Q2. | Were there parts of the course which you did not find useful? |
| Very basic |
| Q3. List the three most important things you learned during the course |
| 'None that I did not know before' |
| Q4. What helped or hindered your learning during the course |
| Hindered | Not answered | 1 |
| Q5. What do you think about the balance of topics covered |
| Not answered | 1 |
| Q6. To what extent do you think that XOS/NERC benefits from its staff attending these courses |
| To a moderate extent | 1 |
| Q7. Have you any other comments you would like to make about the course? |

Conclusions - Excel (spreadsheets)

Content. Relevant to only two out of the three participants

General Comments:- Verbal comments from two participants suggested that they benefitted from the course. One participant did not benefit at all because he felt that the course was too basic.
Financial accruals

Table 20.30 Evaluation data on Finance Accruals course (1994)

| Q1. Since completing the course, have you found it to be useful in your work or leisure |
| Not yet |
| Q2. Were there parts of the course which you did not find useful? |
| This was a very large group of mixed ability. I had difficulty keeping up at times |
| Q3. List the three most important things you learned during the course |
| Not answered |
| Q4. What helped or hindered your learning during the course |
| Not answered |
| Q5. What do you think about the balance of topics covered |
| Not answered |
| Q6. To what extent do you think that IOS/NERC benefits from its staff attending these courses |
| To a moderate extent 1 |
| Q7. Have you any other comments you would like to make about the course? |
| Nil |

Conclusions - Financial accruals

General Comments:- The IOS participant on this NERC course had difficulty in keeping up with the large mixed ability group.
FISM (Financial Spreadsheets)

Table 20.31 Evaluation data on FISM course (1992)

<table>
<thead>
<tr>
<th>Q1.</th>
<th>Since completing the course, have you found it to be useful in your work or leisure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a.  'Can't remember much but it covered old ground for me'</td>
</tr>
<tr>
<td></td>
<td>b.  'Very useful'</td>
</tr>
<tr>
<td></td>
<td>c.  'Checking up monthly balances'</td>
</tr>
<tr>
<td></td>
<td>d.  'Yes I get far more of the information I want from FISM now without a lot of</td>
</tr>
<tr>
<td></td>
<td>gross'</td>
</tr>
<tr>
<td></td>
<td>e.  'We are not on the network... have had no need to, use it...'</td>
</tr>
<tr>
<td></td>
<td>f.  'No'</td>
</tr>
<tr>
<td></td>
<td>g.  'Yes I now use FISM if MSA is down or busy'</td>
</tr>
<tr>
<td></td>
<td>h.  'Unfortunately I have not had cause to use FISM system at all</td>
</tr>
<tr>
<td></td>
<td>i.  'I use FISM regularly to keep track of project expenditure. MSA is and was a</td>
</tr>
<tr>
<td></td>
<td>very unfriendly and cumbersome system. The training made it possible for me to</td>
</tr>
<tr>
<td></td>
<td>use the system last year'</td>
</tr>
</tbody>
</table>

Q2. Were there parts of the course which you did not find useful?

<table>
<thead>
<tr>
<th></th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Q3. List the three most important things you learned during the course

<table>
<thead>
<tr>
<th></th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'Background knowledge'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'How to get a balance in a project'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'What the codes mean'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'Contact names for future queries'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Q4. What helped or hindered your learning during the course

<table>
<thead>
<tr>
<th></th>
<th>Helped</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'Plenty of practical examples...'</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Hindered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'Too many people around monitors'</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'Silly system, inadequate time, my own lack of enthusiasm'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Q5. What do you think about the balance of topics covered

<table>
<thead>
<tr>
<th></th>
<th>O.K.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Q6. To what extent do you think that IOS/HERC benefits from its staff attending these courses

<table>
<thead>
<tr>
<th></th>
<th>To a great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>To a moderate extent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Q8. Have you any other comments you would like to make about the course?

<table>
<thead>
<tr>
<th></th>
<th>'I would like further training'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'The examples given in the literature handed out have been very helpful'</td>
</tr>
</tbody>
</table>

|     | 'Most relevant courses I've been on have been excellent. This particular one I just was |
|-----|asked to go to find out what goes on and it wasn't really relevant to my work' |

Conclusions - FISM (Financial Spreadsheets)

Methods. Most staff did not comment on these

Content. Relevant

General Comments:- Participants had mixed needs. Some used FISM regularly, others went to the course just to maintain an awareness of its basic operation. Transfer of learning occurred in many of those participants who regularly used the FISM system.
Table 20.32 Evaluation data on Advanced GIS (June 1990)

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Was the course content relevant to your future role, and if so why?</td>
<td>'Yes at the time of the course but not later due to software changes'</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
<td>No [due to new software]</td>
</tr>
<tr>
<td>Q3. Which aspects of the work were not relevant?</td>
<td></td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate?</td>
<td>Yes</td>
</tr>
<tr>
<td>Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods c. General administration of the course?</td>
<td>'..Course lacked direction..good [training methods]</td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
<td>'No longer relevant for current software'</td>
</tr>
</tbody>
</table>

Conclusions - Geological Information Systems (GIS)

Topics. Course lacked direction
Methods. were appropriate
General Comments:- Content was not relevant some time later due to change of software.
Table 20.33 Evaluation data on MSA General Ledger (1993)

| Q1. Since completing the course, have you found it to be useful in your work or leisure? |
| 'I am now a more confident user of MSA. The notes and hand-outs are good ref material.' |
| Q2. Were there parts of the course which you did not find useful? |
| 'It was a while between the course and actually putting it into practice .. this is not good.' |
| Q3. List the three most important things you learned during the course |
| 'Different screens to use' |
| 'Relevance of the system on a day-to-day basis' |
| 'It is good to meet the experts and know who to contact if in trouble' |
| Q4. What helped or hindered your learning during the course |
| Helped: Not answered |
| Hindered: 'It was very much a crash course. We did not have a lot of time to practise what we learned.' |
| Q5. What do you think about the balance of topics covered |
| Not answered |
| Q6. To what extent do you think that IOS/WERC benefits from its staff attending these courses |
| To a great extent 1 |
| Q8. Have you any other comments you would like to make about the course? |
| Nil |

Conclusions - MSA General Ledger

Methods. Fair
Content. Relevant
General Comments: This course was intensive but staff were not given much time for practising. Course notes were useful reference material.
Table 20.34  Evaluation data on Microsoft Windows courses (1991)

2 participants

Q1. Was the course relevant and if so why.
   Yes  2  (windows on PC; evaluation of windows environment)

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   No  1
   'Most useful part of course was getting windows properly installed.'

Q3. What was not relevant

Q4. Were the training methods used on the course appropriate
   Too much time taken sorting out installation problems

Q5. What areas (if any) could be introduced or improved?
   'Only the [Computer] program'

Q6. Any other comments?
   B. is an excellent and very helpful instructor. I recommend we use her more.
   'Need NCS help to add communications program into Windows.'

Conclusions - Microsoft Windows

Methods. Appropriate
Content. Relevant

General Comments: There were difficulties in installing the software which the Instructor was able to overcome. This was useful but took up much of the time.
## Evaluation data on MS-DOS courses (1991)

<table>
<thead>
<tr>
<th>Q1. Was the course relevant and if so why.</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Yes enables me to do some small but helpful things with DOS'</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q2. Have you had the opportunity of putting into practice what you learned on the course? if so could you tell us what it was?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Yes handling files directories etc.'</td>
</tr>
<tr>
<td>'Not really. The DOS SHELL in version 4 is adequate for most users, but a few basic tips were learned'.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3. What was not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q4. Were the training methods used on the course appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q5. What areas (if any) could be introduced or improved?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Would have been better in another more private location - caused some disruption to other people in the office'.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6. Any other comments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Probably would have got the same knowledge from a well-written basic guide to DOS'</td>
</tr>
<tr>
<td>'Several more were involved in the course and because others had greater need of instruction than I, I only had a short time with the instructor. This was O.K. and I did pick up some useful tips. There is of course nothing like putting them into practice.</td>
</tr>
</tbody>
</table>

### Conclusions - MS-DOS (Basic Computing)

**Methods.** Appropriate  
**Content.** Relevant  
**General Comments:** This course was undertaken in the participants' office. Would have preferred a location away from the office.
Table 20.36 Evaluation data on MS-DOS courses (1993)

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Since completing the course, have you found it to be useful in your work or leisure?</td>
<td></td>
</tr>
<tr>
<td>a. 'It has given me a very basic feel for finding my way around a PC keyboard.'</td>
<td></td>
</tr>
<tr>
<td>b. 'Have been too busy to use.'</td>
<td></td>
</tr>
<tr>
<td>Q2. Were there parts of the course which you did not find useful?</td>
<td>No 2</td>
</tr>
<tr>
<td>Q3. List the three most important things you learned during the course</td>
<td>'Terms in computing' 1 'Basics of computing' 1 'Hands-on training' 1 'That you need to continually use a PC in order to become proficient' 1</td>
</tr>
<tr>
<td>Q4. What helped or hindered your learning during the course?</td>
<td>Helped 'Excellent teacher' 1 Not answered 1</td>
</tr>
<tr>
<td>Hindered Not answered 2</td>
<td></td>
</tr>
<tr>
<td>Q5. What do you think about the balance of topics covered?</td>
<td>'Very Good' 1 Not answered 1</td>
</tr>
<tr>
<td>Q6. To what extent do you think that IOS/NERC benefits from its staff attending these courses?</td>
<td>To great extent 1 To a moderate extent 1</td>
</tr>
<tr>
<td>Q7. Have you any other comments you would like to make about the course?</td>
<td>Nil.</td>
</tr>
</tbody>
</table>

Conclusions - MS-DOS (Basic Computing 1993)

Topics Very Good
Methods. Appropriate
Content. Relevant
General Comments:- One participant benefitted from the course back at work. The other did not have time to apply it.
Open University (science-based courses)

Table 20.37a Open University s203 Biology Form and Function -(1991)

(one participant)

Q1. Was the course content relevant to you future role, and if so why?
   Yes

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   Not answered

Q3. Which aspects of the work were not relevant?
   Human biology

Q4. Were the training methods used on the course appropriate?
   [Not exactly] 'Very difficult to keep up with course if sea trips come at the wrong time - especially if tutors don't allow extensions for TMA.'

Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods c. General administration of the course?
   'Some way of getting CMAs marked if due in while at sea. Managing to read up, and answer assignments while working 12 hour shifts is very difficult.'

Q6. Any other comments?
   No

Table 20.37b Open University s102 Science Foundation -(1990)

(one participant)

Q1. Was the course content relevant to you future role, and if so why?
   No 'But required/recommended for higher level courses'

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   No '..only as a basis for 1991 [OU] course'

Q3. Which aspects of the work were not relevant?
   '..Marine biology content very low'

Q4. Were the training methods used on the course appropriate?
   'No - Pitched at too low..seemed patronising'

Q5. What areas, if any, could be introduced or improved, with regard to a. Content, b. Training Methods c. General administration of the course?
   [system now changed] 'Only one foundation course now required ..higher level one could be tried'

Q6. Any other comments?
   'I don't really see what use my gaining a degree will be to the Institute .. it takes up my work time, has little associated with my job and just means that at the end of it I am more likely to be able to change jobs to my benefit ..I believe that more technical oriented courses would be of more use to the department..As pressure for spaces or cruises increases it would help if all gear used by us could be deployed by us - such training could be done inside the Institute ..'

Conclusions - Open University' (science-based courses)

Methods. Inappropriate for sea-goers as assignments had to be sent at specific times. Content. was not always relevant

General Comments:- One participant questions its value long-term and suggests that more technically oriented courses would have been of more use to the department.

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Table 20.38  Evaluation data on Software Engineering course (1991)

1 Participant

Q1. Was the course relevant and if so why.
   Essential for Autosub and important for me as a project coordinator

Q2. Have you had the opportunity of putting into practice what you learned on the course? if so could you tell us what it was?
   Management software is being developed using this...as coordinator I need to know and approve methods of approach."

Q3. What was not relevant
   None

Q4. Were the training methods used on the course appropriate
   Yes

Q5. What areas (if any) could be introduced or improved?
   O.K.

Q6. Any other comments?
   O.K.

Conclusions -Software Engineering 1991

Methods. Appropriate
Content. Relevant
General Comments:- The one participant considered that this course was essential to his project.
Software Engineering 1993

Table 20.39 Evaluation data on MSC. course in engineering software (1993)

1 participant

Q1. Since completing the course, have you found it to be useful in your work or leisure
   Yes 1

Q2. Were there parts of the course which you did not find useful?
   '...75% useful'

Q3. List the three most important things you learned during the course
   'Real time systems design; Digital signal processing; How little I knew'

Q4. What helped or hindered your learning during the course
   Helped: '...High quality of course material and lectures'
   Hindered: 'Occasional bad lectures'

Q5. What do you think about the balance of topics covered
   O.K. 1

Q6. To what extent do you think that IOS/HERC benefits from its staff attending these courses
   To a moderate extent 1

Q7. Have you any other comments you would like to make about the course?
   'This type of course requires a large input of personal effort for success.'

Conclusions -Software Engineering

Methods. Generally good
Content. Relevant
General Comments:- The participant suggests that a large amount of personal effort is required on this course.

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Refrigeration

Table 20.40 Evaluation data on Refrigeration course (1991)

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
<td>'Mainly when I was part of the workshop group.'</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
<td>'Yes four times at sea, air condition units broke down, once at Wormley, repair of chillers for J.'</td>
</tr>
<tr>
<td>Q3. What was not relevant</td>
<td>None</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
<td>Good</td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
<td>'In-house at Wormley if possible'</td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
<td>Very good I would recommend course for workshop group</td>
</tr>
</tbody>
</table>

Conclusions - Refrigeration

Methods. Appropriate
Content. Relevant
General Comments:- Transfer of learning occurred. This was a useful course.
## Secretarial seminars

### Table 20.41 Evaluation data on Secretarial Seminar (1991)

<table>
<thead>
<tr>
<th>Q1. Was the course relevant and if so why.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The course was well presented but I don't think I learnt anything new</td>
</tr>
<tr>
<td>b. 'Yes'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</th>
</tr>
</thead>
<tbody>
<tr>
<td>'No' 1</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3. What was not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 'Most of the course'</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q4. Were the training methods used on the course appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>'No' 1</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q5. What areas (if any) could be introduced or improved?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
</tr>
<tr>
<td>a. 'I was hoping to pick up some organisational skill but the content of this course was mostly common-sense ideas that we put into practice anyway. The course was well-presented and made a big point involving everyone in group sessions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine 1</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6. Any other comments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 'Probably more suitable for secretaries working with one or two bosses'</td>
</tr>
</tbody>
</table>

### Conclusions - Secretarial seminars

Methods were appropriate
Content was relevant but generally common-sense ideas.

General Comments:- Secretaries may not gain directly from these courses or seminars but attendance allows them opportunities to exchange views with others.
### Welding

**Table 20.42 Evaluation data on Welding courses (1991)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? if so could you tell us what it was?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Not answered</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q3. What was not relevant</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
<td>'All aspects of the course were good and well-presented 'A very good course'</td>
<td></td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
<td>Nil</td>
<td></td>
</tr>
</tbody>
</table>

**Conclusions -Welding**

**Methods.** Appropriate  
**Content.** Relevant  
**General Comments:** A good course.
Word Processing 1991

<table>
<thead>
<tr>
<th>Table 20.43 Evaluation data on Word Processing courses basic and advanced in-house (1991)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% survey</td>
</tr>
<tr>
<td>80% response</td>
</tr>
</tbody>
</table>

Q1. Was the course content relevant to your future role and if so why?
- a. 'The course was relevant to present role, to improve my understanding of MS Word 4.'
- b. 'Yes to get more from W.P. package'
- c. 'Yes I am using Displaywrite 4 software at present but had not had proper training in the beginning'
- d. 'Yes it covered tables, equations, columns, and clarified many things of which I was previously unsure'
- e. 'Yes we requested training in areas that were relevant to our work'
- f. 'Yes'
- g. 'Yes tailored to our requirements'
- h. 'Should I obtain an IBM wordprocessor then it will be useful but I feel that I have forgotten most of what I learned.'
- i. 'Yes - It answered queries I had on various aspects of using word'

Q2. Have you had the opportunity of putting into practice what you learned on the course?
- Yes 8
- No 1

Q3. Which aspects of the course were not relevant
- None 9

Q4. Were the training methods used on the course appropriate
- Yes 9

Q5. Which areas of the course could be introduced or improved with regard to:
- a. Content
- b. Training methods used
- c. General administration of the course e.g. total package, time, location.
- None given 7
- 'I would have like a little longer to practice with tutor.'
- Didn't receive updated course literature as promised 2

Q6. Any other comments
- a. 'There are still some elements of word which [I] will need some help in'
- b. 'I think the course was excellent and very useful'
- c. 'Very good course - a must for an Apple Mac user for Word Processing'
- d. 'Excellent training as on a one-to-one basis and covered points relevant to my requirements'
- e. 'I feel I have probably covered most aspects of MS Word 4 but would be interested in Pagemaker.'

Conclusions - Word processing 1991

Methods. Appropriate but more time for practice was needed.
Content. Relevant
General Comments:- Courses are excellent for most participants. Verbal comment. Most secretaries were quick to praise the tutor who was efficient.
Word Processing 1993

| Table 20.44 Evaluation data on Word Processing courses basic and advanced in-house (1993) |
|---|---|
| 100% survey | 4 participants |
| 75% response | 3 participants |

Q1. Since completing the course, have you found it to be useful in your work. Can you give work-related instances where the course has helped you in your day-to-day activities.

a. 'I have found the course useful but have since started using Microsoft Word for Windows which I am teaching myself.

b. I did find it useful at the time but I now use 'Word for Windows'.

c. 'Yes'

Q2. Were there parts of the course which you did not find useful?

No: 1
DOS: 1
Not answered: 1

Q3. List the three most important things you learned during the course

Not answered: 2
To use mouse: 1

Q4. What helped or hindered your learning during the course

Helped: Not answered
Hindered: 'Lack of time': 1
'[Learning] DOS': 1
Not answered: 1

Q5. What do you think about the balance of topics covered

Quite good but needed more time: 1
Not answered: 2

Q6. To what extent do you think that XOS/KERC benefits from its staff attending these courses

To a great extent: 2
Not answered: 1

Q7. Have you any other comments you would like to make about the course?

'I felt it a little difficult having the tutor dividing her time between rooms. Would have liked a room altogether and to start at the same point at the same time.'

'Too much to take in in one session as a total beginner this is probably me!

Conclusions - Word processing 1993

Topics. Quite good
Content. Relevant
General Comments:-
Tutor divided her time between 2 adjacent working areas and although the course was useful participants might have benefitted more from more intensive one-to-one teaching.
Table 20.45 Evaluation data on UNIX course in-house (1993)

<table>
<thead>
<tr>
<th>Q.</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Since completing the course, have you found it to be useful in your work or leisure</td>
</tr>
<tr>
<td></td>
<td>a. 'Not very useful'</td>
</tr>
<tr>
<td>2.</td>
<td>Were there parts of the course which you did not find useful?</td>
</tr>
<tr>
<td></td>
<td>'Not well focused on our needs as engineers... geared towards programming rather than occasional use as a platform for technically-based software'</td>
</tr>
<tr>
<td>3.</td>
<td>List the three most important things you learned during the course</td>
</tr>
<tr>
<td></td>
<td>'Avoid Unix'</td>
</tr>
<tr>
<td>4.</td>
<td>What helped or hindered your learning during the course</td>
</tr>
<tr>
<td></td>
<td>Hindered: 'Tutor was not available all the time'</td>
</tr>
<tr>
<td>5.</td>
<td>What do you think about the balance of topics covered</td>
</tr>
<tr>
<td></td>
<td>Not answered 1</td>
</tr>
<tr>
<td>6.</td>
<td>To what extent do you think that IOS/NERC benefits from its staff attending these courses</td>
</tr>
<tr>
<td></td>
<td>To a moderate extent 1</td>
</tr>
<tr>
<td>7.</td>
<td>Have you any other comments you would like to make about the course?</td>
</tr>
<tr>
<td></td>
<td>'Would have been better if tutor had come to us and seen what we are using the equipment for... also better if he had had an engineering background rather than a programming background'</td>
</tr>
</tbody>
</table>

Conclusions - Unix 1993

Content. Not totally relevant. The participant required basic and also some specialised knowledge.

General Comments:- It would have been better if the tutor had visited the participant at the workplace.
III PERSONAL DEVELOPMENT COURSES

French Conversation

Table 20.46  Evaluation data on French Conversation course- 1991

Survey of 70% participants = 10
60 % response = 6

Q1. Was the course content relevant to you future role, and if so why?
   Yes  5
   No   -
   Probably  1

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   Yes  1
   No   1
   Not answered  4

Q3. Which aspects of the work were not relevant?
   None  5
   Not answered  1

Q4. Were the training methods used on the course appropriate?
   Yes  4
   No   2

Q5. What areas, if any, could be introduced or improved, with regard to a. Content, B. Training Methods c. General administration of the course?
   a. ‘Took up too much time (several hours homework each week)’
   b. ‘A single text book [needed] at start of the course...teacher was not well organised...she usually forgot to bring tape or recorder’
   c. ‘...there were too many xeroxed pages from the text book..’

Q6. Any other comments?
   a. ‘Generally I thought the course was well-organised and enthusiastically taught’
   b. ‘I am pleased with the course..’

Conclusions - French Conversation

Methods. Appropriate - oral plus written work
Content. Very relevant
General Comments:- Most written and verbal comments suggest that this course is excellent. Staff even pay for themselves so as to attend. However it is time-consuming and staff cannot always get homework done.
How to run a meeting

Table 20.47 Evaluation data on Course "How to run a meeting" (1991)

<table>
<thead>
<tr>
<th>Questionnaire to 6 participants</th>
<th>50% response = 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
<td></td>
</tr>
<tr>
<td>a. 'Some now as [I] attend several meetings. Mainly later (more likely re Southampton'</td>
<td></td>
</tr>
<tr>
<td>b. 'Yes much of my work involves discussion with CR [Commissioned Research] project leaders anf finance section staff... meeting participation is important'</td>
<td></td>
</tr>
<tr>
<td>c. '..Because it gave structure and understanding of many meetings I attend'</td>
<td></td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? if so could you tell us what it was?</td>
<td></td>
</tr>
<tr>
<td>a. 'Not really - minor points only'</td>
<td></td>
</tr>
<tr>
<td>b. 'Not yet but next week and am acting as Chair [person] at the LWC [Local Witley Council] meeting so hope to put the experience into practice'</td>
<td></td>
</tr>
<tr>
<td>c. 'I ran a meeting within the group shortly after the course'</td>
<td></td>
</tr>
<tr>
<td>Q3. What was not relevant</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>2</td>
</tr>
<tr>
<td>Not answered</td>
<td>1</td>
</tr>
<tr>
<td>a. 'probably gained from looking at several aspects of meetings..'</td>
<td></td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
<td></td>
</tr>
<tr>
<td>a. 'Fine, it was a pity there was not more time to prepare presentations'</td>
<td></td>
</tr>
<tr>
<td>b. 'Yes'</td>
<td></td>
</tr>
<tr>
<td>c. 'Yes good mix between theory and practice'</td>
<td></td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td></td>
</tr>
<tr>
<td>a. 'More new ideas to try out'</td>
<td>Not answered 2</td>
</tr>
<tr>
<td>Training methods</td>
<td>'Fine' 1</td>
</tr>
<tr>
<td>General Administration</td>
<td>Not answered 2</td>
</tr>
<tr>
<td>a. 'Perhaps one day not long enough...only some participants had chance to chair a mock meeting'</td>
<td></td>
</tr>
<tr>
<td>b. '.. in future people should be warned to prepare a subject for presentation ..'</td>
<td></td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
<td></td>
</tr>
<tr>
<td>a. 'Tutor good..'</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions - How to run a meeting

Topics. A good mix of theory and practice
Methods. Appropriate
Content. Very relevant
General Comments:- Most participants had not used the information but verbal and written responses suggest that the course was useful and that when the opportunity arises the information will be used at work.
Interpersonal skills (for non-managerial staff)

Table 20.48 Evaluation data on course 'Interpersonal skills (IOS version 1991)

End-of-course assessment
5 Participants

Q1. If there are any comments about the effectiveness or appropriateness of this course that you would like to give please do so as it will be useful in the design of additional courses
a. 'The role-play element is of vital importance in this type of course. However it is very difficult to simulate realistic environments. I feel people try to compromise far more than they would in real-life. If you were to introduce a situation where there is definitely no right or wrong way to deal with the problem or introduce a topical debate, something that people feel strongly enough about so as to invoke a candid response (sic)'
b. 'The role-play exercises were very appropriate and enjoyable. It would have been more effective had I not known my partner so well'
c. 'More role-play/action may help people remember points .. a short video would have been useful'
d. 'I think it's a good idea as you did to have a mixed cross-section of personnel at these courses'
e. 'The course .. would have been more effective if it lasted longer ..therefore 2 days +.'

Q2. What were your objectives for this course.

a. 'To gauge how effective my interpersonal skills are'
b. 'More effective communication'
c. 'To deal better with stressful situations at work (and outside)'
d. 'To learn more about communication within the workplace'
e. 'To gain more confidence in dealing with people'

Q3. To what extent were your objectives achieved

a. 'Satisfactorily'
b. 'Totally'
c. 'To some extent'
d. 'Difficult to ascertain - I did not know what to expect'

Q4. List the three most important things you learned during the course.

To really think about how I'm saying something. Be approachable 2
To study other people in order to gauge their real feelings 2
Listening 2
Relating to others 1
To Communicating 2
Learning questioning skills 2
Learning to be assertive 2
Body Language 1
Understanding others 1

Q5. What helped or hindered your learning on the course

Helped
Role-playing 2
Hand-outs 1
Woman Tutor 1
Walk at Lunchtime 1
Practical help shown 1
Demonstration of skills 1

Hindered
Not enough time 2
One group was slow to start (open up) 1
Too much listening to do 1
About right 5

Q7. Did you find the course useful

Yes 5

Additional comments:-

a. 'I realise this was a 'Pilot' for me there was a little too much listening I was `saturated by mid-afternoon' ..couldn't take any more. Maybe a few more visual aids or role-plays to break up the day or 2x 1/2 days.

b. 'The course tutor came across as someone who had a very profound feel for this subject. She also was an excellent speaker.'
Table 20.48  Evaluation data on course 'Interpersonal skills (IOS version 1991')

...Continued

Post-course assessment

40% response

Q1. Since completing the course have you found it to be useful in your work or leisure?
   a. 'I think so'
   b. 'Not answered'

Q2. Can you give work-related instances when the course has helped you in your day-to-day
    contacts with your staff or your line-managers or colleagues
   'It has helped in as much as it provides a proven awareness to be able to adapt to
    changing circumstances'
   Not answered 1

Q3. Can you give instances when the course has helped you in your contacts with people outside
    the organisation? e.g. Business matters, family, friends.
   'When I have been expected to do a job which I may not be at all proficient at'
   Not answered 1

Q4. To what extent do you think that IOS/NERC benefits from these courses?
   To a large extent 1
   To a moderate extent 1

Q5. List the three most important things you learned during the course
   'Know your rights and stand up for them'
   'To be aware that other people's jobs are not necessarily easy and to be more
    accommodating...'

Q6. What helped or hindered your learning on the course
   Helped 'Relaxed atmosphere'
   'Being 'forced' into role-play - helps confidence'
   Hindered '..Embarrassed and shy about role-play'

Q7. What do you think about the balance of topics covered
   Good/O.K. 1
   Not answered 1

Q8. Have you other comments you would like to make about the course
   Like most of the courses run at IOSDL I feel that it is (sic) well-presented and helpful
   in its approach

Conclusions - Interpersonal skills

Topics. Too much information for some staff
Methods. were appropriate possibly a little more practical work needed
Content. Relevant
General Comments:- A very wide range of topics were discussed during the
   course. Participants remembered them several months later. An excellent tutor. Comment from a participant?
   'she really knows what she is doing'.
Introduction to IOS

Table 20.49 Evaluation data on Introductory Course 1991

<table>
<thead>
<tr>
<th>Post-course assessment</th>
<th>10 participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>% response</td>
<td>5</td>
</tr>
</tbody>
</table>

Q1. If there are any comments about the effectiveness or appropriateness of this course that you would like to give please do so as it will be useful in the design of additional courses

a. 'This course would have been valuable within 2 weeks of joining JRC. After 7 months I had already picked up most of the things covered. Could be given in 1/2 day instead of one day'.
b. 'Could have been given a little earlier on'.
c. 'Some subjects had to be 'skimmed over' due to lack of time - when I would like to have one into more depth'.
d. Much of Admin/finance, Health and Safety not appropriate for Rennell centre staff. Smaller groups would have been easier for visits to departments. Much of admin/finance could be explained 1 to 1 at start of employment.'

Q2. What were your objectives for this course.

1. To try to gain a background/setup to IOS 2
2. Aspects of research 1
3. To know the activities of NERC and IOSDL 1
4. Not answered 2

Q3. To what extent were your objectives achieved

1. 'Very well..'
2. 'Quite good'
3. 'Almost fully would have liked visit to Biology'
4. 'Fully'
5. Not answered 1

Q4. List the three most important things you learned during the course.

1. IOS is helping to fund itself with contract work
2. Which people do what
3. The purpose of it all
4. Means of achieving commissioned research
5. History of IOS and how it evolved
6. The consultancy structure
7. Library facilities
8. IOSDL Finance
9. General scientific activities
10. Info. about NERC and IOS

Q5. What helped or hindered your learning on the course

1. Helped Frequent change of talkers 1
2. Hindered Stuffiness of Conference room at JRC 1
3. Course too long 1

Q6. What do you think about the balance of topics covered

1. About right 4
2. Not answered 1

Q7. Did you find the course useful

1. Yes 4
2. No 1

Conclusions - Introduction to IOS

Topics. About right
Methods. Appropriate
Content was relevant
General Comments:-

This course covered a wide range of topics which staff found useful. The course was run later than originally expected due to location of new staff to a new site. It would have been better if run several months earlier. Subsequent courses suggest that staff prefer a practical approach rather than theoretical issues.

Verbal Comments:-

Some participants would have liked more information, others felt they had been given too much.
Table 20.50 Evaluation data on Marketing for non-financial managers course (1991)

1 participant

Q1. Was the course relevant and if so why.
   ‘Yes, change of role at IOSDL to Marketing from no previous experience.

Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?
   ‘Basic marketing principles. Meeting customer needs. How to run exhibitions.’

Q3. What was not relevant
   Advertising

Q4. Were the training methods used on the course appropriate
   Yes.

Q5. What areas (if any) could be introduced or improved?
   Not answered

Q6. Any other comments?
   A good introduction

Conclusions - Marketing

Topics. A good introduction
Methods. Appropriate
Content. Relevant
General Comments:- Transfer of learning to the workplace occurred.
Table 20.51 Evaluation data on Marketing Course (1993)

Questionnaire sent to 8 participants
75% response 6

Q1. Since completing the course have you found it to be useful in your work or leisure?
   a. 'Yes . . dealing with potential . . customers and industrial partners. It heightened my appreciation of negotiating 'dialogue'
   b. 'Yes, the need to be responsive, meet deadlines is one that keeps recurring'
   c. 'No transferred to HQ . . .'
   d. 'Not particularly so far'
   e. 'Focussed my attention to look at our services as from the customers' viewpoint'
   f. 'Yes'

Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues?
   a. 'Little impact'
   b. 'I am now trying to move our expertise to the market place from R&D operations'
   c. Results of market survey in conjunction with NERC were useful.
   d. Not answered 2

Q3. Can you give instances when the course has helped you in your contacts with people outside the organisation? e.g. Business matters, family, friends.
   a. 'Better negotiated contact with Industry to a . get work and b. achieve a better price . . the course helped in giving us the confidence to put forward our views and our strengths'
   b. 'No'
   c. 'Joint commercial projects..commercial conferences ..'
   d. 'Identify customers who were not being served well'
   Not answered 2

Q4. To what extent do you think that IOS/NERC benefits from these courses?
   To a large extent 1
   To a moderate extent 4
   Not answered 1

Q5. List the three most important things you learned during the course
   Customer's perception 1
   Give value for money 1
   Importance of timescales to customer 2
   Responsiveness 1
   Listening during negotiations 1
   Team approach 1
   Framing requests 1

Q6. What helped or hindered your learning on the course
   Helped: Use of external consultant 1
   Not enough time 1
   No follow-up of policy development at IOS 1
   Interactive lecturing style 1

Q7. What do you think about the balance of topics covered?
   O.K/fine 1
   Good 2
   'Good basis of where to start - lacked direction of where to go in the future ' 1

Q8. Have you any other comments you would like to make about the course?
   a. 'Most tutors do not have first-hand knowledge about our work.'

Conclusions - Marketing

Methods. Good
Content. Relevant
General Comments:- It was useful for participants to obtain the views of a tutor external to NERC and IOS though not all were able to use the information immediately.
### Table 20.52 Evaluation data on Marketing Course NERC staff (1993)

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Since completing the course have you found it to be useful in your work or leisure?</td>
<td></td>
</tr>
<tr>
<td>a. 'Gave general overview of marketing'</td>
<td></td>
</tr>
<tr>
<td>b. Not answered</td>
<td></td>
</tr>
<tr>
<td>Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues</td>
<td></td>
</tr>
<tr>
<td>a. 'Better awareness of outside world and contacts...'</td>
<td></td>
</tr>
<tr>
<td>Q3. Can you give instances when the course has helped you in your contacts with people outside the organisation? e.g. business matters, family, friends.</td>
<td></td>
</tr>
<tr>
<td>a. '.. helped in meetings discussing .. future funding..'</td>
<td></td>
</tr>
<tr>
<td>b. Not answered</td>
<td></td>
</tr>
<tr>
<td>Q4. To what extent do you think that XOS/NERC benefits from these courses?</td>
<td></td>
</tr>
<tr>
<td>a. To a moderate extent</td>
<td>1</td>
</tr>
<tr>
<td>b. Not answered</td>
<td>1</td>
</tr>
<tr>
<td>Q5. List the three most important things you learned during the course</td>
<td></td>
</tr>
<tr>
<td>a. Awareness of outside .. contracts etc</td>
<td>1</td>
</tr>
<tr>
<td>b. Not answered</td>
<td>1</td>
</tr>
<tr>
<td>Q6. What helped or hindered your learning on the course</td>
<td></td>
</tr>
<tr>
<td>a. Not answered</td>
<td></td>
</tr>
<tr>
<td>b. A bit tedious ..</td>
<td>1</td>
</tr>
<tr>
<td>Use of computer-based graphics system</td>
<td>1</td>
</tr>
<tr>
<td>Q7. What do you think about the balance of topics covered?</td>
<td></td>
</tr>
<tr>
<td>a. O.K</td>
<td>1</td>
</tr>
<tr>
<td>b. Not answered</td>
<td>1</td>
</tr>
<tr>
<td>Q8. Have you any other comments you would like to make about the course?</td>
<td></td>
</tr>
<tr>
<td>a. 'This was a poor course. It ought to include negotiating skills to be of use'</td>
<td></td>
</tr>
</tbody>
</table>

### Conclusions - Marketing (NERC)

**Methods.** Appropriate -computer-based graphics system was not helpful

**Content.** Relevant but did not include negotiating skills

**General Comments:-** This course received a 'lukewarm' response.
<table>
<thead>
<tr>
<th>Q1. Did the Seminar match your expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 2</td>
</tr>
<tr>
<td>a. No - Better than expected</td>
</tr>
<tr>
<td>b. I had not really been sure what to expect</td>
</tr>
<tr>
<td>Q2. Please list the three most important things you learnt during the day</td>
</tr>
<tr>
<td>a. Benefits/ How to claim, what to claim for 4</td>
</tr>
<tr>
<td>b. Complexity of signing-on with DHSS 1</td>
</tr>
<tr>
<td>c. Investment 1</td>
</tr>
<tr>
<td>d. Advice on financial problems 3</td>
</tr>
<tr>
<td>e. We are not going to let it [retirement] be the end of the world 1</td>
</tr>
<tr>
<td>f. Where to go for advice on investment 1</td>
</tr>
<tr>
<td>Q3. What is your evaluation of:</td>
</tr>
<tr>
<td>Benefits Session Very Good 4</td>
</tr>
<tr>
<td>Money Matters Session Very Good 1</td>
</tr>
<tr>
<td>Good 2</td>
</tr>
<tr>
<td>Organisation of Seminar Very Good 3</td>
</tr>
<tr>
<td>Good 1</td>
</tr>
<tr>
<td>Overall content and information Very Good 3</td>
</tr>
<tr>
<td>Good 1</td>
</tr>
<tr>
<td>Q4. Any other comments?</td>
</tr>
<tr>
<td>Nil 4</td>
</tr>
</tbody>
</table>

Conclusions - Pre-retirement

**Topics.** Very good/Good  
**Methods.** Appropriate  
**Content.** Relevant  
**General Comments:** The course was very useful
## Presentation skills/Occasional speaking

### Table 20.54 Evaluation data on Occasional Speaking course (1991-1992)

Questionnaire sent to 20 participants
response rate 60% - 12 Participants

<table>
<thead>
<tr>
<th>Q1. Was the course relevant and if so why.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes need to make presentations as part of my job.</td>
</tr>
<tr>
<td>b. Yes - have to do quite frequent technical presentations</td>
</tr>
<tr>
<td>c. I have to spent alot of my time presenting material</td>
</tr>
<tr>
<td>d. Yes. My work involves an increasing amount of public speaking</td>
</tr>
<tr>
<td>e. Not really - the course was intended for beginners..I suggest it is important for all new recruits and HSO/SSO levels.</td>
</tr>
<tr>
<td>f. Yes very relevant as I have to give occasional short presentations</td>
</tr>
<tr>
<td>g. Yes increasing need to do talks to small groups..</td>
</tr>
<tr>
<td>h. Yes need to make presentations as part of my job.</td>
</tr>
<tr>
<td>i. Yes, - I give presentations internally and at conferences</td>
</tr>
<tr>
<td>j. Never had occasion to speak since (or opportunity)</td>
</tr>
<tr>
<td>k. Yes, needed to improve interaction with the audience</td>
</tr>
<tr>
<td>l. Definitely - I have gained confidence and new skills from the course. Unfortunately I had to miss Day 2.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q2. Have you had the opportunity of putting into practice what you learned on the course? if so could you tell us what it was?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Yes - at an NCS Advanced Computing Seminar</td>
</tr>
<tr>
<td>b. Yes - How to prepare the present material more effectively</td>
</tr>
<tr>
<td>c. Yes - helped with pacing and body language</td>
</tr>
<tr>
<td>d. Yes - A presentation to the Geological Curators Groups and a group of teachers and museum education officers.</td>
</tr>
<tr>
<td>e. Yes - Introduction course (made me realise still more to do).</td>
</tr>
<tr>
<td>f. Yes - Talk to Management Committee of VSOP-RA..</td>
</tr>
<tr>
<td>g. Given the LRP review and a talk at the Vienna IUGG.</td>
</tr>
<tr>
<td>h. Yes.</td>
</tr>
<tr>
<td>i. Yes, a short talk to first-aiders</td>
</tr>
<tr>
<td>j. Yes I gave short presentation to fellow scientists at the start of the Marflux cruise.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q3. What was not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Nothing / Not answered 11</td>
</tr>
<tr>
<td>b. Slightly too much emphasis on formal scientific presentation.. it was appropriate to that group..</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q4. Were the training methods used on the course appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 12</td>
</tr>
</tbody>
</table>

Continued...
Table 20.54  Evaluation data on Occasional Speaking course (1991-1992)

...Continued

Q5.  What areas (if any) could be introduced or improved?

| Content | a. | It would be useful to add something about longer presentations. |
| b. | More examples of good and bad visual aids could have been used. |
| c. | All common sense, rather laboured. Not told anything that I had not been told by helpful colleagues. |
| d. | Too lengthy and repetitive. |
| e. | Show a video of a professional speaker so as to appreciate the good feature (sic) of their presentation. |
| f. | Ideally, but not practical if scientists / Generalists were kept apart... problems are almost offset by (my) seeing the wider problem. |

| Training Methods | a. | Could introduce video of case examples. |
| b. | Video very useful |
| c. | Nothing added 9 |

| Admin of course | a. | Had to travel from JRC to IOSDL |
| b. | Possibly 1 or 2 fewer participants. |

Q6.  Any other comments?

a.  Although I was sceptical about the worth of the course beforehand - looking back on it it was a very well spent 2 days |

b.  A good course... [need] same commitment to running vocational training courses |

c.  Good course |

d.  A really good course |

e.  Think the most important part of this is seeing yourself on video.. |

f.  A lot of time spent on observing other speakers, interesting but can not spare time these days. |

g.  I was nervous about this one but took it on as a personal challenge. I must have enjoyed it and learned a considerable amount as I remember it much better than other courses. |

h.  Rather expensive for what you get 5 or 6 interested colleagues with use of a video could do at least as good a job ‘in-house’.. |

i.  A useful course. Harder to learn quickly from this course as putting it into practise is harder.. I see this course as a map rather than a specific route. |

Conclusions - Presentation skills/Occasional speaking

Topics Good

Methods were appropriate

Content was relevant

General Comments:- Participants found the video playback the most useful. Several said that the course was good but relatively expensive. [Note: JTS tutors are now able to give these courses since completing a backlog of other courses]
Table 20.55 Evaluation data on Report Writing course (1991)

Questionnaire to 7 participants
60% response = 4

Q1. Was the course relevant and if so why.
   a. Yes 2
   b. It helped as far as composing letters and short reports were concerned but not in
      the actual taking minutes of meetings
   c. Yes though it was more about report writing. I have minutes to write and letters
      but it was still relevant

Q2. Have you had the opportunity of putting into practice what you learned on the course? if
     so could you tell us what it was?
   a. ‘I wrote two sets of minutes’
   b. ‘No except finding it easier to compose letters etc.’
   c. ‘In a limited way. I expect it to be useful in the future’
     ‘Basic marketing principles. Meeting customer needs. How to run exhibitions.’
     Not answered 1

Q3. What was not relevant
   None 2
   Not answered 2

Q4. Were the training methods used on the course appropriate
   Yes 3
   Not answered 1

Q5. What areas (if any) could be introduced or improved?
   Content
      O.K./Good
      Need more help with minute writing 2
   Training methods
      Good/ideal.O.K. 3
      Not answered 1
   General Administration
      a. ‘Package and time spot on. location better away from work
      environment but good reports only possible because of access to
      P.C.[Personal Computers]
      b. ‘very satisfactory’
      Not answered 2

Q6. Any other comments?
   a. ‘This was an excellent course. Quite intensive, especially day2 producing a
      report but it felt right...Recommended..I beleive it works best when you can apply
      the lessons quickly, say within 3 months.
   b. ‘I was very satisfied with the course it helped me to think about the way I
      write.

Conclusions - Report Writing

Methods were appropriate
Content was relevant
General Comments:- Participants were generally pleased and had the opportunity of practising on their PCs at work during the course.
Stress Management (run by JTS)

<table>
<thead>
<tr>
<th>Table 20.56  Evaluation data on course 'Stress Management'(1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Post-course assessment</strong></td>
</tr>
<tr>
<td>Questionnaire sent to 10 participants</td>
</tr>
<tr>
<td>50% response</td>
</tr>
<tr>
<td>Q1. Since completing the course have you found it to be useful in your work or leisure?</td>
</tr>
<tr>
<td>a. 'Yes it confirmed pointers to stress that could be encountered in future'</td>
</tr>
<tr>
<td>b. 'Yes it helped to put things into perspective. It helps you to identify potential problems'</td>
</tr>
<tr>
<td>c. 'The course was very interesting but I cannot say that it has had a great impact on my work as yet'</td>
</tr>
<tr>
<td>d. 'Yes it perhaps helped me to see stress not only in myself but also others at an early stage'</td>
</tr>
<tr>
<td>e. 'Yes'</td>
</tr>
<tr>
<td>Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues</td>
</tr>
<tr>
<td>a. 'Not as yet'</td>
</tr>
<tr>
<td>b. '..unable to give an instance'</td>
</tr>
<tr>
<td>c. 'Yes many instances'</td>
</tr>
<tr>
<td>d. 'I think it helps you to see things your line-manager has to cope with'</td>
</tr>
<tr>
<td>e. 'Not really'</td>
</tr>
<tr>
<td>Q3. Can you give instances when the course has helped you in your contacts with people outside the organisation? e.g. Business matters, family, friends.</td>
</tr>
<tr>
<td>No 3</td>
</tr>
<tr>
<td>Not answered 1</td>
</tr>
<tr>
<td>'Stress Management is an on-going process and its effects should be accumulative' 1</td>
</tr>
<tr>
<td>Q4. To what extent do you think that XOS/XERC benefits from these courses?</td>
</tr>
<tr>
<td>To a large extent 2</td>
</tr>
<tr>
<td>To a moderate extent 3</td>
</tr>
<tr>
<td>Not at all</td>
</tr>
<tr>
<td>Q5. List the three most important things you learned during the course</td>
</tr>
<tr>
<td>'I found the course very interesting .. can't pinpoint' 1</td>
</tr>
<tr>
<td>'To try to relax'</td>
</tr>
<tr>
<td>'Take things as they come'</td>
</tr>
<tr>
<td>'I had stress-producing circumstances'</td>
</tr>
<tr>
<td>'A sense of humour [helps]'</td>
</tr>
<tr>
<td>'To identify different areas of stress'</td>
</tr>
<tr>
<td>'To learn to cope ..'</td>
</tr>
<tr>
<td>'Stress is a serious problem, we are all in danger of suffering during our lives .. be aware of the possibilities.' 1</td>
</tr>
<tr>
<td>Q6. What helped or hindered your learning on the course</td>
</tr>
<tr>
<td>Not answered 5</td>
</tr>
<tr>
<td>Q7. What do you think about the balance of topics covered</td>
</tr>
<tr>
<td>Very good 1</td>
</tr>
<tr>
<td>Well balanced 1</td>
</tr>
<tr>
<td>O.K. 1</td>
</tr>
<tr>
<td>Happy with course 1</td>
</tr>
<tr>
<td>Not answered 2</td>
</tr>
<tr>
<td>Q8. Have you other comments you would like to make about the course</td>
</tr>
<tr>
<td>a. 'It was like all courses run at the Institute, very good. The lecturer obviously knew his subject matter exceptionally well'</td>
</tr>
</tbody>
</table>

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Conclusions - Stress Management

Topics Good
Methods were appropriate
Content was relevant and well-balanced.
General Comments:- This was a very useful course for participants both at work and at leisure. The lecturer knew his subject well.
Table 20.57 Evaluation data on Technical Writing Course (1991)

<table>
<thead>
<tr>
<th>Questionnaire to 12 participants</th>
<th>50% response = 6 participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
<td></td>
</tr>
<tr>
<td>a. 'Yes report writing is an essential part of my role. This included writing specific data reports and technical specifications'.</td>
<td></td>
</tr>
<tr>
<td>b. Yes I have to write papers handbooks etc.</td>
<td></td>
</tr>
<tr>
<td>c. 'Yes - although my report writing has been very limited so far, I learnt to manage ideas and thoughts.'</td>
<td></td>
</tr>
<tr>
<td>d. 'Yes it dealt with most of the technical writing issues that I need to know about at present'</td>
<td></td>
</tr>
<tr>
<td>e. 'Yes I have a project processing at the moment which should spawn several papers'</td>
<td></td>
</tr>
<tr>
<td>f. 'The course was relevant, when I next come to write a report the chances are I shall consult the notes from this course'</td>
<td></td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? if so could you tell us what it was?</td>
<td></td>
</tr>
<tr>
<td>a. 'Yes - production of technical report for . . . contract'</td>
<td></td>
</tr>
<tr>
<td>b. 'Yes writing articles for group newsletter'</td>
<td></td>
</tr>
<tr>
<td>c. 'The rules of sixes can be applied to any list-making..'</td>
<td></td>
</tr>
<tr>
<td>d. 'It was the first week back from sea and I had until the middle of the following week to get a paper ready for publication and posted off. I managed it with time to spare.'</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Q3. What was not relevant</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>4</td>
</tr>
<tr>
<td>Not answered</td>
<td>2</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
<td></td>
</tr>
<tr>
<td>Yes/excellent</td>
<td>6</td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>a. 'More actual scientific writing'</td>
</tr>
<tr>
<td>b. 'More on technical side . . i.e.handbook writing'</td>
<td></td>
</tr>
<tr>
<td>Training methods</td>
<td>O.K.</td>
</tr>
<tr>
<td>General Administration</td>
<td>Good/O/K.</td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
<td></td>
</tr>
<tr>
<td>a. 'The course covered the principles of good writing covering a wide range of topics mostly of the nature of reports. As far as technical writing was concerned we were not provided with much information'</td>
<td></td>
</tr>
<tr>
<td>b. 'A friendly group made the course enjoyable (and we sat round a table which made shuffling and note-taking easier'</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions - Technical Writing 1991/2

Methods Excellent - Good
Content was relevant -one participant requested more on scientific writing another more on technical/handbook writing.

General Comments:- An excellent course. Most respondents were able to use their new learning at work. Staff frequently mentioned that the tutor was excellent.

Verbal Comments:- Several staff emphasised that they found the course excellent. That the tutor made them work hard but that they enjoyed the course. A line manager said of one course 'They're having a great time' (1991)
## Technical Writing (AFRC) 1993

<table>
<thead>
<tr>
<th>End-of-course questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 participants</td>
</tr>
</tbody>
</table>

**Summary Report**

1 very good; 2 good; 3 average; 4 below average 5. Poor

<table>
<thead>
<tr>
<th>Category</th>
<th>Grade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Course content</td>
<td></td>
<td>7</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Supporting papers</td>
<td></td>
<td>5</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pace of session</td>
<td></td>
<td>6</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Presentation of sessions</td>
<td></td>
<td>7</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments about the course:**

a. Enjoyable and useful (sic). Relevant to needs except for slight (understandable) bias towards pure science published journal work, as opposed to technical reports, specifications etc. Useful hints for teaching picked up.

b. 'For those of us at JRC - it was difficult to be on time for a 9.00 start. Suggestion for the future - keep it at 3 days with a 9.30 or 10.00 start.'

c. The fact that the trainer was an editor and science (sic) lends authority to the teaching. Perhaps a few examples could have been taken from fields relevant to attendees...

d. 'I liked the photocopied of course notes'

e. 'Too specific to writing scientific papers'

f. 'Should have taken account of the fact that much of the writing we do is not for scientific journals. I would have liked more time on grammar and writing skills and less on the presentation of papers',

**Post-course evaluation**

Questionnaire sent to 12 participants

75% response

### Q1. Since completing the course have you found it to be useful in your work or leisure?

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 'Spend more time on planning stage ... read publications in a new light ... perhaps more critical'</td>
</tr>
<tr>
<td>b. Increased awareness of pitfalls ... and techniques ... more practice needed</td>
</tr>
<tr>
<td>c. 'Yes'</td>
</tr>
<tr>
<td>d. 'Yes it has reminded me of what I am trying to do - inform the readers not impress them.'</td>
</tr>
<tr>
<td>e. 'I pay much more attention to the quality of my technical writing'</td>
</tr>
<tr>
<td>f. 'Useful in writing documents'</td>
</tr>
<tr>
<td>g. 'Yes encourages me to start working on papers ... also now have reference material for problems'</td>
</tr>
<tr>
<td>h. 'No because I have not had the opportunity to write any scientific papers'</td>
</tr>
<tr>
<td>i. 'Yes it has helped me to organise my writing'</td>
</tr>
</tbody>
</table>

### Q2. Please give two or three specific instances when the course has helped you in your work.

<table>
<thead>
<tr>
<th>Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 'Subsequent preparation of manuscripts'</td>
</tr>
<tr>
<td>b. 'Increased the help has been mostly in the approach to writing a document - planning, structure, content'</td>
</tr>
<tr>
<td>c. 'Improved style of paper currently being written. 2. Got me to write an interim report. I would not have done otherwise.'</td>
</tr>
<tr>
<td>d. 'Writing documents and intended reports'</td>
</tr>
<tr>
<td>e. 'Writing papers'</td>
</tr>
<tr>
<td>f. One scientific paper has been accepted for publication. The rest is on its way.</td>
</tr>
<tr>
<td>g. 'Writing papers and letters'</td>
</tr>
<tr>
<td>h. 'Co-writing paper for ... Conference ... writing equipment handbook and project proposal'</td>
</tr>
</tbody>
</table>

Continued...
Table 20.58 Evaluation data on Technical Writing courses AFRC (1993)

...Continued

Q3. List the three most important things you learned during the course

Need for accuracy, brevity, clarity 4
Editing techniques 1
Reviewing techniques 1
Designing text illustrations 1
Grammar 2
Syntax 1
Vocabulary 2
Correction of proofs 1
Word/text order 2
Technical writing does not need to be boring 1
Write for a specific journal 1
Planning/structure 1
Language 1

Q4. What helped or hindered your learning on the course

Helped:
Relevant 1
Specific 1
Small class 1
Experience of tutor 1

Hindered:
Course aimed at scientific papers 1
Travelling to course every day 1
People not keeping together for lunch etc. 1

Q5. What do you think about the balance of topics covered?

More on grammar needed 1
Too specific 1
More time needed on how to marshal facts and data 1
V. Good/Good 3
Not answered 2

Q6. To what extent do you think that I0S/KERC benefits from these courses?

To a great extent 6
To a moderate extent 1
To a slight extent 1

Q7. Have you any other comments you would like to make about the course?

a. 'Hard work but very enjoyable'
b. 'I feel a lack of material which I can refer back to...some handouts summarising would help'
c. Would have been easier to be [held] at SRC..'

Conclusions - Technical Writing 1993

Topics  a good balance
Methods  Generally good
Content  Good-average some staff needed tuition on Grammar -
General Comments:- Nearly all participants found the course very useful and were able to practice the skills back at work. The tutor was good.
Verbal Comments:- Several staff emphasised that they found the course excellent.
# Time Management

## Table 20.59 Evaluation data for IOS Time-Management Courses 1990-1993

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Yes</th>
<th>No</th>
<th>Partly</th>
<th>Don't know/Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Did you find the course genuinely useful for organising work and leisure time or not?</td>
<td>80% sample 90% N = 35 (40% response)</td>
<td>15</td>
<td>15</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Q2. Can you give a work-related instance where the course has helped you to manage your time more effectively?</td>
<td></td>
<td>9</td>
<td>19</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Q3. Did you read the book on time management?</td>
<td>Yes 21 No 6 Partly 6 Not Answered 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4. Did you find it helpful?</td>
<td>Yes 15 No 10 Partly 1 Not Answered 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5. List the three most important things you learned during the course</td>
<td>Answered = 18 Not answered 17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Make lists</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Open plan working not compatible with avoiding interruptions</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Priorities</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Who Colin Summerhayes is</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. How time-management can make you more efficient</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. Distinguish between what is urgent and what is important</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>g. To recognize that you yourself are glad to be interrupted</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>h. That my time is valuable</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i. Scheduling daily/weekly time</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>j. Negotiating time</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>k. Evaluating my time management</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>l. Say no</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>m. To look at e-mail messages only once</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n. Learned techniques for organising time better</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o. I need to organise my time better</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p. Most time management is self evident</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>q. Time management carried to extremes can be self-defeating and trivial</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>r. I was not doing too badly to start with</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>s. Not to take on too many tasks/projects which I had been doing without realising it</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>t. Keep the desk tidy</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>u. Upwards delegation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>v. Time management is important</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>w. You need a secretary as a buffer to the outside world</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x. You need people to delegate to</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Answered 12 Not answered 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6. What helped or hindered your learning during the course</td>
<td>Helped:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interactive [Course]</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Good presentation skills of Director</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The book</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mix of science and support staff</td>
<td>7</td>
</tr>
</tbody>
</table>

Continued...
Table 20.59  Evaluation data for IOS Time-Management Courses 1990-1993

...continued

<table>
<thead>
<tr>
<th>Hindered:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boring</td>
<td>1</td>
</tr>
<tr>
<td>Oversimplified</td>
<td>1</td>
</tr>
<tr>
<td>Obvious points</td>
<td>1</td>
</tr>
<tr>
<td>Waste of time</td>
<td>1</td>
</tr>
<tr>
<td>Group too big</td>
<td>1</td>
</tr>
<tr>
<td>Too soon after joining IOS</td>
<td>1</td>
</tr>
<tr>
<td>Course not related to actual work</td>
<td>2</td>
</tr>
<tr>
<td>Mix of science and support staff</td>
<td>2</td>
</tr>
<tr>
<td>Too much planning of leisure</td>
<td>3</td>
</tr>
<tr>
<td>Director as tutor</td>
<td>1</td>
</tr>
<tr>
<td>I find writing down lists as part of a training exercise a bit of a cheat</td>
<td>1</td>
</tr>
<tr>
<td>The assumption that we did not try to organise our time</td>
<td>1</td>
</tr>
</tbody>
</table>

Q7. What did you think about the balance of topics covered

<table>
<thead>
<tr>
<th>Answered 16</th>
<th>Not Answered 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not always relevant</td>
<td>1</td>
</tr>
<tr>
<td>Superficial office techniques only</td>
<td>1</td>
</tr>
<tr>
<td>Too much planning of leisure</td>
<td>1</td>
</tr>
<tr>
<td>Good - with reservations</td>
<td>1</td>
</tr>
<tr>
<td>Quite an interesting course</td>
<td>1</td>
</tr>
<tr>
<td>Fair</td>
<td>1</td>
</tr>
<tr>
<td>O.K.</td>
<td>5</td>
</tr>
<tr>
<td>Good</td>
<td>1</td>
</tr>
<tr>
<td>Very good</td>
<td>1</td>
</tr>
<tr>
<td>Useful and well-balanced</td>
<td>1</td>
</tr>
<tr>
<td>Reasonable</td>
<td>1</td>
</tr>
</tbody>
</table>

Q8. Have you any other comments you would like to make about the course

a. 'I think the Director could be more gainfully employed doing his own job and delegate another member of staff or a free JTS course on-site'
b. 'Not a good idea for the Director to conduct the course as the atmosphere is not relaxed enough and people feel reluctant to criticize'
c. 'If everyone in a group does the course each develops his/her own idea of what is important and has high priority,. these may not be the same. . can cause problems.'
d. 'Good course but not easy to put theory into practice'
e. 'Although I knew most of what was on the course, I still think it was a useful exercise ans encourage continuing holding the course for other people'
f. 'The course tutor gave no indication that he had any familiarity with the working environment of a junior scientist at IOS'
g. 'It is all very well to delegate but what if you are at the end of the line. I didn't feel I could organise my time as it was organised for me.'
h. 'The items discussed on the course have not, in the long term proved to be very relevant to my job.'
i. 'Good to increase awareness of the value of time management. Probably of not value for younger staff'
j. 'Need a refresher of 30-60 mins each year to reinforce the message'

Conclusions - Time management

Topics A wide range of topics were covered
Methods Mixed responses - mostly good
Content was relevant
General Comments: At least half of the respondents found that some parts of the course were helpful. The right messages seem to have been received by participants. Approximately three-quarters rated the course as 'Reasonable' or better.
Participants liked the mix of science and support staff on the courses. A few expressed surprise at the Director acting as trainer.
<table>
<thead>
<tr>
<th>Table 20.60  Evaluation data on Welfare Courses (1991 and 1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1991 - 1 participant - female</strong></td>
</tr>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
</tr>
<tr>
<td>'I had no other training in counselling - this gave the opportunity to, practice counselling skills and learn something of what is required as local welfare officer'</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
</tr>
<tr>
<td>'Not yet'</td>
</tr>
<tr>
<td>Q3. What was not relevant</td>
</tr>
<tr>
<td>Nil</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
</tr>
<tr>
<td>'Yes'</td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
</tr>
<tr>
<td>Nil</td>
</tr>
<tr>
<td>Q6. Any other comments?</td>
</tr>
<tr>
<td>'Course held at Urchfont, Devizes - lovely location but about 15 miles from main BR station!'</td>
</tr>
</tbody>
</table>

| **1993 - 1 participant - male**                             |
| Q1. Since completing the course have you found it to be useful in your work or leisure? |
| a. 'I went specifically to learn more about counselling and I consider this was essential as it is a quite separate skill. However I found the whole course most valuable and useful.' |
| Q2. Can you give work-related instances when the course has helped you in your day-to-day contacts with your staff or your line-managers or colleagues |
| a. 'Helped in particular to vary approaches/styles for difficult types of interview' |
| Q3. Can you give instances when the course has helped you in your contacts with people outside the organisation? e.g. Business matters, family, friends. |
| Not answered 1                                               |
| Q4. To what extent do you think that IOS/NERC benefits from these courses? |
| [to] LWO (local Welfare Officer) absolutely essential. Estabs. very valuable |
| Q5. List the three most important things you learned during the course |
| 'Welfare has its own important quite separate skills/scope. It was a package rather than a collection' |
| Q6. What helped or hindered your learning on the course       |
| Helped: 'everyone interested in subject and keen. good mix of people' |
| Hindered: Nil                                                |
| Q7. What do you think about the balance of topics covered?   |
| Excellent                                                   |
| Q8. Have you other comments you would like to make about the course |
| a. 'I recommend most strongly for welfare Officers and Estabs. [Establishments] staff' |
Conclusions - Welfare courses

Topics excellent
Methods were appropriate
Content was relevant
General Comments:- The participant thought this to be a very good course and recommended it for staff in this field.

Writing Proposals

<table>
<thead>
<tr>
<th>Table 20.61 Evaluation data on course 'Writing Proposals'(1991)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 participants</td>
</tr>
<tr>
<td>Q1. Was the course relevant and if so why.</td>
</tr>
<tr>
<td>a. 'Partly - good on proposal/contract negotiation - poor on proposal writing'</td>
</tr>
<tr>
<td>Q2. Have you had the opportunity of putting into practice what you learned on the course? If so could you tell us what it was?</td>
</tr>
<tr>
<td>a. 'Not particularly. Stress on putting benefits to customer first in proposal'</td>
</tr>
<tr>
<td>Q3. What was not relevant</td>
</tr>
<tr>
<td>a. 'Group exercise on producing proposal, General marketing'</td>
</tr>
<tr>
<td>Q4. Were the training methods used on the course appropriate</td>
</tr>
<tr>
<td>a. 'No'</td>
</tr>
<tr>
<td>Q5. What areas (if any) could be introduced or improved?</td>
</tr>
<tr>
<td>a. Radical rethink</td>
</tr>
<tr>
<td>General Administration</td>
</tr>
<tr>
<td>O.K.</td>
</tr>
</tbody>
</table>

Conclusions - Writing Proposals
Methods were poor
Content was only partly relevant
General Comments:- Participant felt that this was not a very useful course
IV HEALTH AND SAFETY

Health and Fitness

There were eight volunteers for this eight week course.

Table 20.62 Health and Fitness (26.2.91) (Pilot scheme)

<table>
<thead>
<tr>
<th>Question</th>
<th>Objective</th>
<th>Achieved</th>
<th>Not Achieved</th>
<th>Partly Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2. What were your objectives for this course?</td>
<td>a. To promote and educate on the benefits of healthy exercise</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. To promote and educate on the benefits of healthy eating</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Achieve Physical improvement</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. To get a regular exercise routine</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. To get even fitter</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. To learn more about a healthy lifestyle</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3. To what extent were your objectives achieved</td>
<td>Achieved</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not Achieved</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partly achieved</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4. List the 3 most important things you learnt during the course</td>
<td>a. The right attitude to exercise</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. How to fully relax</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. To know limitations</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. To do things at your own pace</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Importance of the right kind of exercise</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. Some stress is good but you must relax</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>g. Exercise routines</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>h. Dietary information</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i. Some exercise and food enjoyed will</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>will not make one fitter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>j. Item i above can be balanced by not</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>smoking or drinking alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>k. The importance of relaxation to avoid</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>l. Monitoring your pulse</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>m. Healthy lifestyle</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Continued.
Table 20.62  Health and Fitness (26.2.91) (Pilot scheme)

<table>
<thead>
<tr>
<th>Q5a. What helped your learning</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Excellent/right level of tuition</td>
<td>3</td>
</tr>
<tr>
<td>b. Doing things together/in groups</td>
<td>2</td>
</tr>
<tr>
<td>c. Doing the course with people of different levels of fitness</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q5b. What hindered your learning</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ill with ear infection</td>
<td>1</td>
</tr>
<tr>
<td>b. Being on holiday for part of the course</td>
<td>2</td>
</tr>
<tr>
<td>c. Having to concentrate on pulse rate</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6. What do you think about balance of topics covered?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Imbalanced</td>
<td>-</td>
</tr>
<tr>
<td>About right</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q7. Did you find the course useful</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
</tr>
</tbody>
</table>

Conclusions - Health and Fitness

Topics  About right - a wide range of topics.
Methods were a good mix of practical and theory and appropriate
Content was relevant.
General Comments:-  This was a long-term course which staff found to be useful and beneficial. The volunteers on this pilot scheme consisted mainly of female staff. Participants were intensely interested and subject matter was often discussed.
Health and Safety seminars

Table 20.63  Questionnaires on Health and Safety Training

<table>
<thead>
<tr>
<th>Total number of replies 15 (Sample = 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SINCE PARTICIPATING IN THE SEMINARS HAVE YOU FOUND THE INFORMATION TO BE USEFUL.</td>
</tr>
<tr>
<td>Total ‘Yes’ 10</td>
</tr>
<tr>
<td>No Comment 4</td>
</tr>
<tr>
<td>Total ‘No’ 1</td>
</tr>
<tr>
<td>2. LIST THE THREE MOST IMPORTANT THINGS YOU LEARNED DURING THE SEMINARS</td>
</tr>
<tr>
<td>Mention of the following: -</td>
</tr>
<tr>
<td>Mention of increased awareness of safe use of VDUs - 9</td>
</tr>
<tr>
<td>Mention of increased awareness of safe lifting/manual handling - 4</td>
</tr>
<tr>
<td>Mention of use of fire extinguishers - 3</td>
</tr>
<tr>
<td>Mention of increased awareness of Fire safety - 3</td>
</tr>
<tr>
<td>Mention of increased awareness of safety at sea - 2</td>
</tr>
<tr>
<td>Mention of general management of safety - 4</td>
</tr>
<tr>
<td>Mention of COSHH/radiological protection. 1 (says more staff are now consulting him for advice on storage/handling and disposal of chemicals)</td>
</tr>
<tr>
<td>Mention of increased awareness of Fire safety - 3</td>
</tr>
<tr>
<td>Mention of increased awareness of Fire safety - 3</td>
</tr>
<tr>
<td>Mention of increased awareness of Fire safety - 3</td>
</tr>
<tr>
<td>Mention of increased awareness of Fire safety - 3</td>
</tr>
<tr>
<td>Mention of increased awareness of Fire safety - 3</td>
</tr>
<tr>
<td>More awareness to think before you act 1</td>
</tr>
<tr>
<td>Safety is 90% common sense but under pressure it is very easy to overlook the obvious 1</td>
</tr>
<tr>
<td>Self-discipline about health and safety (for oneself) 1</td>
</tr>
<tr>
<td>A good health and safety environment helps work 1</td>
</tr>
<tr>
<td>Who to complain to when things go wrong (General safety at sea very relevant - and highlighted the need for a doctor on board) 1</td>
</tr>
<tr>
<td>3. WHAT DO YOU THINK ABOUT THE BALANCE OF TOPICS COVERED/ WOULD YOU LIKE OTHER ITEMS INCLUDED?</td>
</tr>
<tr>
<td>No Comment 5</td>
</tr>
<tr>
<td>OTHER COMMENTS: - Good 5</td>
</tr>
<tr>
<td>OK 2</td>
</tr>
<tr>
<td>Adequate 1</td>
</tr>
<tr>
<td>Unbalanced (too much COSHH) 2</td>
</tr>
<tr>
<td>* (too much manual-handling) 1</td>
</tr>
<tr>
<td>4. TO WHAT EXTENT DO YOU THINK THAT IOS/NERC BENEFITS FROM STAFF ATTENDING THESE COURSES?</td>
</tr>
<tr>
<td>a). To a large extent? 2</td>
</tr>
<tr>
<td>b). To a moderate extent? 10 + 3 not completed</td>
</tr>
<tr>
<td>c). Not at all 1</td>
</tr>
<tr>
<td>5. HAVE YOU ANY OTHER COMMENTS YOU WOULD LIKE TO MAKE ABOUT THE SEMINARS?</td>
</tr>
<tr>
<td>'It's difficult to get the right balance between being seen as a 'safety nazi' and having genuine concern for staff welfare. Many people don't take H &amp; S seriously'.</td>
</tr>
<tr>
<td>'I only attended one of the seminars on VDUs and that was some time ago (too long to remember specifics) Following the seminar I altered my PC setup to a safer configuration and it must have been of some help'</td>
</tr>
<tr>
<td>'I remember thinking that much of the content was common-sense but then we all need reminding'</td>
</tr>
<tr>
<td>'As I was giving parts I find it a little hard to be objective. However overall I think they were good and the staff I feel have been well trained (ITS on change over to the new batch are different. With the SOC move busily occupying people and as we have few new staff, I recommend a low-key approach for 12 months and concentrate on setting up the new regimes training for the new building.'</td>
</tr>
<tr>
<td>'Difficult to comment as largely did not apply to the library although VDU information some information on lifting techniques and general information on fire hazards may prove useful'.</td>
</tr>
</tbody>
</table>

Continued...
Table 20.63 Questionnaires on Health and Safety Training

...continued

'I think a lot of health and safety issues are common-sense and we do not need to spend time attending seminars'.
'Videos would cover the topics except maybe fire and should be more easily available'.
'Good to be aware of safety issues'.
'It has been so long that I can't distinguish between what was learnt at the seminars and what I already knew about health and safety'.
'Safety is not someone else's responsibility and ignoring health and safety can have dreadful consequences - that thou shall not bodge it'.
'...consequences of an accident are painful and expensive'

Conclusions - Health and Safety seminars

Topics - Good-O.K.
Methods were appropriate
Content was relevant
General Comments:- Most staff found these seminars useful and a wide range of topics were remembered several weeks later. However several months later some found difficulty in remembering some of the content. Thus it is necessary to run refresher videos periodically
20.4 EVALUATION OF OTHER COURSES

Staff attended a wide variety of other vocational courses. In most instances they found them to be useful and relevant to their work. Verbal comments from a sample of these are given in Table 20.64.

<table>
<thead>
<tr>
<th>Course</th>
<th>Comment from participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro to VAX/VMS</td>
<td>Basic but O.K.</td>
</tr>
<tr>
<td>Intro. ‘C’ programming</td>
<td>Excellent</td>
</tr>
<tr>
<td>COSHH (Safety)</td>
<td>Very Good</td>
</tr>
<tr>
<td>Electricity at Work regulations</td>
<td>Useful - now need to update</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>Good and useful</td>
</tr>
<tr>
<td>Dialogue</td>
<td>Useful but system not used often</td>
</tr>
<tr>
<td>High performance computing</td>
<td>Very specialised, essential O.K.</td>
</tr>
<tr>
<td>‘C’ Programming</td>
<td>Specialised but useful</td>
</tr>
<tr>
<td>PEXEC</td>
<td>Good, no alternative method</td>
</tr>
<tr>
<td>Ocean Modelling</td>
<td>Useful</td>
</tr>
<tr>
<td>Autotasking</td>
<td>Not used much</td>
</tr>
<tr>
<td>Uniras</td>
<td>Very useful</td>
</tr>
<tr>
<td>Fibre optics</td>
<td>Good</td>
</tr>
</tbody>
</table>

There was also good general feedback from courses in salinometry.

20.5 SUMMARY

20.5.1 This Chapter has provided an overview of staff opinions on many of the courses in which they have participated.

20.5.2 An independent simplistic evaluation of JTS Management courses by the Personnel Section of the Natural Environment Research Council suggests that most are given an ‘average’ rating of 2.0 to 3.0 by participants.

20.5.3 Initiatives run for IOS staff included courses in management, vocational/computing, personal development and health/safety.

20.5.4 The Methods used for most courses were appropriate (These are considered in detail in the next chapter).

20.5.5 Generally content of courses was considered to be relevant. Transfer of learning to the workplace occurred after most courses.

Following Management I courses approximately half of participants applied some of the information at work. (This aspect is considered in detail in Chapter 22). The JTS questionnaire showed that the course score was similar to other NERC
Management 1 courses. Several participants in a non-residential Management 1 course in 1991, said they felt that their own managers should have received more management training (a situation which was remedied during 1992 and 1993).

Management 2 and 3 courses were found to be useful and applicable to the work situation.

The Interpersonal Effectiveness course run for senior staff was considered to be well worthwhile and most benefitted from it. That for more junior staff was considered to be very good but some found that there was too much information given at a time.

The Directing and Managing R and D course received a mixed response. Some participants thought it to be exceptionally useful, others found it to be mediocre.

Two different types of courses covered Project Management, one was lecture-based and one computer-based. The usefulness of each approach depending on the needs of staff. There was a mixed response to the theoretical-based course. Staff found the software-based course to be of value.

With few exceptions, vocational and computing courses were found to be relevant and staff were able to use their knowledge.

Marketing and finance courses were found to be useful generally. Aspects of Marketing helped to raise the awareness of staff of ways to improve income from Commissioned research. The information on marketing may need to be continued and reinforced.

French Language courses were considered to be excellent but demanding in terms of time, though participants were happy with the situation.

Time management, technical writing and presentational skills were adequately covered and staff gained from participating in them. Several staff commented that the commercial presentation skills courses run during 1990 and 1991 were expensive. These were replaced in 1992 and 1993 with JTS presentational skills courses. One commercial course on writing proposals was, exceptionally, considered to be poor.

Pre-retirement and Welfare Officer courses were considered to be excellent.

Health and Safety courses were considered to be useful. More male members of staff should be encouraged to participate in Health and Fitness seminars. Health and Safety awareness seminars on 'Manual Handling' and the 'Safe use of visual display units' were considered to be useful, however other more general health and safety topics were less well remembered and need to be reinforced.
CHAPTER 21

EVALUATION OF THE METHODS USED FOR UPDATING THE KNOWLEDGE AND SKILLS OF MANAGERS AND STAFF
EVALUATION OF THE METHODS USED FOR UPDATING THE KNOWLEDGE AND SKILLS OF MANAGERS AND STAFF

21.1 INTRODUCTION

All of the courses which IOS staff undertook have clearly defined objectives. In any course, the methods should be chosen to facilitate learning depending on the needs of staff and to promote its transfer to actual situations in the workplace. Thus the practical examples given by tutors or practised by participants in role-play or other activities should be as close as possible to those which are likely to be experienced by participants in their job. In this Chapter the approaches and methods used are described and the factors which helped or hindered learning are given.

21.2 THE MODE OF EDUCATION AND TRAINING

With few exceptions courses have been conducted either locally on- or off-site or at residential sites, most lasting several days on average. Post-graduate courses have been arranged through local Universities, an arrangement which has proved to be very successful. Several distance learning packages for undergraduates were undertaken on a long-term basis (1-5 years). These tended to be less popular than were local courses partly because of their rigorous time-tabling of assignments, none the less, all of the five distance learning courses undertaken prior to 1993 were completed on time. Less formal in-house seminars have concentrated on a greater amount of interaction between speakers and their audiences than might be expected from more formal presentations.

21.3 METHODS USED

Most of the courses undertaken at IOS involved theory and practical work together with group work and sometimes role-play. The methods used for facilitating learning included the following:-

Case studies, role-play, exercises, projects, feedback exercises, outdoor training, working in small groups, group dynamics, simulations, role set analysis, handouts, theory put forward by tutors, discussions, self-learning, diary, own experience, presentations.

On management courses group methods were generally used so as to give participants the opportunity to exchange experiences and to review and consolidate their learning and consider the ways in which it could be applied in the workplace.
Figure 21.1 Ratings of traditional methods given by participants in Management I courses (from Gross 1993:104-105)

Figure 21.2 Ratings of experience/action orientated methods given by participants in Management I courses (from Gross 1993:104-105)
21.4 EFFECTIVENESS OF METHODS

Gross (1993:104-105) evaluating the methods used on JTS Management 1 and Management 2 courses found that all of the above methods were given ratings by participants of either 2 or 3 (effective/quite effective) on a scale of 1 (very effective) to 5 (not effective). 'Outdoor training/feedback exercises' were considered most effective (mean rating 1.5) and 'Keeping a diary' least effective with mean rating of 3. A diagrammatic summary of ratings of traditional methods and experience or action orientated methods reproduced from Gross (1993, Table, 18 and 19) are given in Figures 21.1 and 21.2 respectively.

Similar methods were used during most non-JTS courses sponsored by IOS. When asked whether they thought training methods were effective, more than 90% of participants felt that they were effective. In two instances disappointment with the methods used involved commercially-run one-day seminars.

21.5 FACTORS WHICH HELPED OR HINDERED LEARNING

When asked what helped learning, a wide range of factors were given by IOS staff. These are given in Table 21.1.

<table>
<thead>
<tr>
<th>Table 21.1</th>
<th>Factors which helped learning on courses in which IOS staff participated</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Having people from different Institutes</td>
</tr>
<tr>
<td>b.</td>
<td>Wealth of background knowledge held by tutor.</td>
</tr>
<tr>
<td>c.</td>
<td>Plenty of practical examples</td>
</tr>
<tr>
<td>d.</td>
<td>Good mix between theory and practice</td>
</tr>
<tr>
<td>e.</td>
<td>High quality of course material and lectures</td>
</tr>
<tr>
<td>f.</td>
<td>Small groups</td>
</tr>
<tr>
<td>g.</td>
<td>Role-playing</td>
</tr>
<tr>
<td>h.</td>
<td>Hand-outs</td>
</tr>
<tr>
<td>i.</td>
<td>Physical exercise</td>
</tr>
<tr>
<td>j.</td>
<td>Demonstration of skills</td>
</tr>
<tr>
<td>k.</td>
<td>Lively teaching by tutors</td>
</tr>
<tr>
<td>l.</td>
<td>Group discussion</td>
</tr>
<tr>
<td>m.</td>
<td>Visual representation</td>
</tr>
<tr>
<td>n.</td>
<td>Good presentation skills of tutor</td>
</tr>
<tr>
<td>o.</td>
<td>Interactive course</td>
</tr>
<tr>
<td>p.</td>
<td>No outside interruptions.</td>
</tr>
<tr>
<td>q.</td>
<td>Keeping a diary</td>
</tr>
<tr>
<td>r.</td>
<td>Working with colleagues and strangers</td>
</tr>
<tr>
<td>s.</td>
<td>Knowing that other people had similar responses</td>
</tr>
<tr>
<td>t.</td>
<td>Holding course on-site</td>
</tr>
<tr>
<td>u.</td>
<td>Residential courses off-site</td>
</tr>
<tr>
<td>v.</td>
<td>Good communication</td>
</tr>
<tr>
<td>w.</td>
<td>Good balance of topics</td>
</tr>
</tbody>
</table>

389
Factors which hindered learning as put forward by IOS staff are given in Table 21.2. While most people seemed happy with the use of group work, a few voiced reservations about its use.

<table>
<thead>
<tr>
<th>Table 21.2</th>
<th>Factors which hindered learning on courses in which IOS staff participated</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Course not long enough</td>
</tr>
<tr>
<td>b.</td>
<td>Course too long</td>
</tr>
<tr>
<td>c.</td>
<td>Needed more time to prepare presentations</td>
</tr>
<tr>
<td>d.</td>
<td>Too many people on course</td>
</tr>
<tr>
<td>e.</td>
<td>Participant’s lack of enthusiasm</td>
</tr>
<tr>
<td>f.</td>
<td>Sharing course with people at different stages</td>
</tr>
<tr>
<td>g.</td>
<td>Tutor was not available all the time</td>
</tr>
<tr>
<td>h.</td>
<td>Installation problems (Computing)</td>
</tr>
<tr>
<td>i.</td>
<td>Too much listening to do</td>
</tr>
<tr>
<td>j.</td>
<td>Poor presentations</td>
</tr>
<tr>
<td>k.</td>
<td>Too many interruptions</td>
</tr>
<tr>
<td>l.</td>
<td>Subject matter not at appropriate level</td>
</tr>
<tr>
<td>m.</td>
<td>Lack of practical</td>
</tr>
<tr>
<td>n.</td>
<td>Subject boring</td>
</tr>
<tr>
<td>o.</td>
<td>Too many people from same Institute</td>
</tr>
<tr>
<td>p.</td>
<td>Senior staff as tutors</td>
</tr>
<tr>
<td>q.</td>
<td>Non-residential (Management) course</td>
</tr>
<tr>
<td>r.</td>
<td>Exercises too easy</td>
</tr>
</tbody>
</table>

21.6 SUMMARY

21.6.1 The methods used to facilitate learning are described.

21.6.2 Most of the methods used were considered effective with the exception of 'keeping a diary' which was considered to be least effective

21.6.3 A wide range of factors which helped or hindered learning are outlined.
CHAPTER 22

THE RELEVANCE OF STAFF DEVELOPMENT INITIATIVES AND TRANSFER OF LEARNING IN THE WORKPLACE
22 THE RELEVANCE OF STAFF DEVELOPMENT INITIATIVES AND TRANSFER OF LEARNING IN THE WORKPLACE

22.1 INTRODUCTION

The application of any new learning in the workplace may occur almost immediately or it may take place during a period of several months depending on whether staff have the opportunity to apply their new skills, behaviours or attitudes. In some instances they may not see immediately the relevance of their education and training to the work situation until long after courses have been completed. In other instances they may not directly gain from a course but may benefit from the broad perspective which it provides.

22.2 MANAGEMENT SERIES 1, 2 AND 3

Most staff found that courses were beneficial. Gross (1993:12) showed that a high percentage of Research Council participants in JTS Management 1, 2 and 3 courses benefitted in that they changed some aspect of their behaviour after training and that in some instances the changes had been perceived by peers or line-managers. Similar findings are recorded for IOS staff though in several instances with regard to Management 1 some staff said that they found some aspects of the course irrelevant because they did not manage other people. Several participants failed to recognise that many aspects of this course are concerned with personal development skills such as negotiation, communication, appraisal, equal opportunities and problem-solving all of which should be applied at individual level and may help if the member of staff has to supervise and/or work with others. Ways must be found to avoid the perceived misconception of what the Management 1 courses entails, either by stressing to participants that the content is applicable to them personally or by re-naming the course.

There were far fewer problems in the perceptions of the Management 2 course which was concerned mainly with group/team interaction and processes or Management 3 which dealt with the Organisation, its approach to learning and corporate identity and was geared to the needs of participants. Most participants acknowledged that they had been able to apply some of this knowledge at work.

Gross (1993:4-11) in discussing transfer of 'management' learning to the workplace reported that 46% of Research Council participants had been unable to apply course topics at work. She further suggests that often Research Council line-managers place low value on management training and that staff may adopt their managers' values and therefore take a less than positive attitude towards management training. She suggests that an accreditation system may remedy this, a view re-iterated at a recent meeting of JTS and local training officers during August 1994). Gross (1993:12) emphasises that peer groups of management course participants should find ways of
supporting innovations by trainees rather than discouraging them. While many IOS participants in Management courses found that they could apply some new learning at work, several took the view that their situation made it difficult for them to do so, though this was not perceived as a major problem. For example sometimes 'delegation downwards' could not be practised by staff because they did not have staff or students to help them. Gross suggests that a method could be found for learners to contact JTS tutors for advice if they are experiencing extreme difficulty in transferring learning to the workplace. However the problem remains that JTS insist that confidentiality of input by participants should be maintained and this makes it impossible for them to contact line-managers directly about a problem. Moreover the present system of funding does not allow for an indeterminate amount of time to be spent by JTS on this type of problem solving. A better way forward may be for IOS to enhance team-leading and team-working so that a team-member's problem can be discussed more openly by his/her team and the whole team can participate together in new learning.

The areas mentioned where the Management series had been particularly helpful and had been applied are shown in Table 22.1.

<table>
<thead>
<tr>
<th>Table 22.1</th>
<th>Areas where the JTS Management series has been helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Better understanding of others feelings</td>
</tr>
<tr>
<td>b.</td>
<td>Contact with other people</td>
</tr>
<tr>
<td>c.</td>
<td>Team-leading, team-working</td>
</tr>
<tr>
<td>d.</td>
<td>Delegation (upwards and downwards)</td>
</tr>
<tr>
<td>e.</td>
<td>Managing the project</td>
</tr>
<tr>
<td>f.</td>
<td>Greater awareness of how managers operate</td>
</tr>
<tr>
<td>g.</td>
<td>Coaching students and getting the best from them</td>
</tr>
<tr>
<td>h.</td>
<td>Taking appraisal seriously</td>
</tr>
<tr>
<td>i.</td>
<td>Managing time</td>
</tr>
<tr>
<td>j.</td>
<td>Giving feedback to line managers</td>
</tr>
<tr>
<td>k.</td>
<td>Interpretation of body language</td>
</tr>
<tr>
<td>l.</td>
<td>Successful meetings</td>
</tr>
<tr>
<td>m.</td>
<td>Dealing with change</td>
</tr>
<tr>
<td>n.</td>
<td>Awareness that good communication is essential</td>
</tr>
</tbody>
</table>

22.3 JTS WORKSHOPS

The two workshops run at IOS included 'Assertiveness' and 'Stress Management'. Staff were able to apply their new learning on 'Assertiveness' in the following ways:-

a. Thinking about others more and dealing with them better
b. Neither 'giving in' nor 'running over' others
c. Being more precise in statements about development of his/her project.
d. Delegating in a firm but friendly way
e. Not being too bossy
As a result of the 'Stress Management' workshop staff were able to recognise the symptoms of stress, identify potential problems and help them to put problems in perspective.

22.4 STAFF REPORTING AND APPRAISAL

New systems for open reporting within the staff appraisal system and the 'Management by objectives' approach have resulted in several courses and seminars being run so as to up-date staff and line-managers on the new system. There are still some problem areas, so some aspects of the system will be altered in 1995. To date, staff Reporting Officers have found the basic and updating courses beneficial in that they have applied the new system of appraisal and have discussed it with reportees. Most are aware that further updating will occur in seminars already scheduled at IOS for November 1994 and January 1995.

22.5 EXTERNAL MANAGEMENT COURSES

During 1990 to 1993 the management courses for senior staff included:-

a. Managing Research and Development (R&D)
b. Interpersonal Effectiveness
c. Managing Research Projects
d. Microsoft Project

The Managing R&D course received a mixed response from participants. Two of the eight participants recommended it unreservedly, one of whom said that he would have been unable to run his project properly without it. On the other hand, two said that it had not proved to be particularly beneficial and one said that he could hardly remember the course a year later. A further participant stated that sadly he had not been able to apply the information to his work as a Head of Department as he had to go to sea almost immediately after the course. Two other participants reported (verbally) that they had been able to apply some of the information.

The Interpersonal Effectiveness course run by a London-based organisation for senior staff almost unanimously received a good response from 5 of the 6 participants. All except one reported verbally that it was 'very good' or 'excellent' and that it was useful to apply at work in knowing how to cope with staff and in giving and receiving criticism.

The Project Management course which was run for senior staff proved to be useful for participants. Two project leaders reported (verbally) that the course was 'very good' and that they had applied the information when managing their projects, two others did not find it helpful. The Microsoft Project course was computer-based and
was applicable to middle-managers who were responsible for aspects of project-management including resources, budgets, and scheduling. The course was run on-site by a commercial firm and all participants found it to be excellent, reporting verbally that it had been useful at work. Only one responded to the post-course questionnaire, reiterating that it had been effective.

22.6 VOCATIONAL AND COMPUTING COURSES

Thirty different types of computing and vocational courses were run either off-site or in-house during 1990-1993, depending on the needs of staff. Most were found to be effective and the new information was applied at work. The high success rate for these courses were partly attributable to the fact that the staff themselves had often been recommended the courses by peers or other scientists and technologists and so they knew something about the objectives of a course beforehand and whether it was to be of use. For example in advanced computing subjects there were few 'grey areas' and either the NERC Computing Service or colleagues were able to advise about courses. Furthermore lack of funds at IOS had provided project and line-managers with the additional incentive of only providing funds for courses which were considered relevant and likely to be useful.

Three participants completed post-graduate courses between 1990 and 1991, all undertaking courses immediately applicable to their own field of research, one in software engineering and two in Geology. In addition there are some eight staff who are presently undertaking post-graduate courses in the area of Physical Oceanography at Southampton University who find the information crucial to their research. One other participant in a post-graduate course at Reading University has found that it has helped him greatly to advance his computing skills. A BTEC course in engineering and electronics has proved useful as have Open University degree courses in three instances out of four. Only one person did not find his Open University degree course useful, though undoubtedly it has given him a broader range of knowledge.

Finance and Contracts courses, all of which were sponsored and run by NERC proved to be very useful to IOS staff who were employed in the administration department. One participant was not able to use the information given on 'Financial accruals' mainly because s/he had not been able to gain as much information as s/he would have liked. The course on financial management spreadsheets was felt to be useful by a large percentage of participants. Some were able to use it directly, others attended the course so as to maintain an awareness of the system

Most personal secretaries reported that they had gained from courses aimed at updating their computing and word-processing skills. Areas where the new vocational or computer-related information was irrelevant or was not used included a few courses run mainly for non-managerial grades. These included 'Secretarial' seminars and two 'Spreadsheet' courses. In three instances participants in elementary
word-processing courses needed more time than expected to reinforce their new skills but because of pressures at work and lack of staff, both partly due to the relocation exercise currently underway at IOS, it was difficult for them to find this time. Another participant felt that he had not gained much from a computer spreadsheet course.

In summary, scientists and technologists who participate in vocational or computing courses tend to know precisely what they require of a course and usually are able to apply the new information at work.

22.7 PERSONAL DEVELOPMENT COURSES

Most courses designed to improve presentation or writing skills were run by an external company though two such courses were run by JTS and a member of the Agriculture and Food Research Council. Most participants were able to apply these skills though two technologists who participated in a technical writing course would have liked more information about writing technical reports rather than scientific papers.

Time-management courses were run routinely for most staff including senior managers. Approximately half of those who responded to the survey stated that it had helped them to manage their time more effectively. Several others commented that they managed their time efficiently anyway - a situation which was to be expected from staff of a world-renowned Institute such as IOS. One other person pointed out that open-plan working (at James Rennell Centre) was not conducive to time-saving. Someone else indicated that his time was governed to some extent by his line-manager.

Three marketing courses were run in-house by IOS staff, NERC staff and an external consultant, (sponsored by JTS) respectively. The IOS-run course in late 1991 introduced scientists and technologists to concepts in marketing and finance. It was aimed at altering attitudes to marketing and it proved effective in alerting staff to the commercial possibilities presently becoming available to IOS and on the value of collaborative research which staff were able to apply to their science. During 1993 two further courses were run, one by an external consultant and one by NERC at James Rennell Centre. Only half of the respondents to the post-course questionnaire indicated that they had been able to apply the information, though it must be recognised that because this subject was not directly applicable to their work there may not have been opportunities for them to have done so. The second marketing course at JRC was successful in that it made staff aware of the general need for marketing. In summary, although courses in marketing concepts undoubtedly have raised the awareness of staff to market their products, in many instances they have not been able to apply this information directly and may need more information on the best means of doing so. For example one person commented that one of the 1993 courses lacked direction about the way IOS
marketing should go in future and it seems that staff should be updated on this aspect during 1994/1995.

On-going courses in French language training proved to be popular. During 1991 this course was funded wholly by IOS and approximately 18 staff attended. However during early 1992, staff were asked to make a contribution towards the costs and by 1993 the course was funded wholly by participants. As a result, numbers of participants fell by 50% during late 1992 and 1993. However during 1993 the course has started to be of use to at least half of participants in that they are now able to applying the knowledge when making overseas business calls.

An Interpersonal Skills course was run as a pilot scheme mainly to make several non-managerial staff aware of the need to consider others in the workplace. Thus it was a question of changing attitudes rather than applying the subject matter to particular tasks. To this end it has been difficult to assess whether learning had been transferred to the work situation though the responses from post-course questionnaires indicated that, at least the right messages had been remembered by staff.

Several staff who participated in pre-retirement courses which were run off-site by NERC and reported (verbally) that they were excellent. During 1993 one in-house course was run as approximately ten staff were leaving due to redundancy or relocation. This proved to be beneficial. It included 'Health and Fitness' and 'Stress Management'. Post-course questionnaires and verbal comments suggest that all participants were pleased with the course and applied the information either to plan their retirement or to obtain new jobs.

22.8 HEALTH AND SAFETY

During 1990-1992 Health and Safety initiatives included 'Fire safety', 'First Aid', 'Sea Survival' and an eight week 'Health and Fitness' course. Most of the fire safety courses were run by the Health and Safety officer who had received formal training. First Aid basic and refresher courses were run regularly by an external organisation. Happily there were relatively few occasions when staff practised these skills in earnest. During 1993, in response to European Union health and safety regulations, a series of six seminars were run repeatedly for all staff. Not everyone attended all the seminars for various reasons, however a post-course questionnaire sent to a percentage of staff indicated that the seminars had heightened the awareness of staff particularly in the areas of manual lifting and safe working of visual display units. However several staff indicated that they had forgotten some of subject matter, thus there is a need for refresher courses to be run regularly.

Most participants in the 1991 'Health and Fitness' course which was run as a pilot scheme with volunteers found it to be highly relevant and useful. It was run weekly and so participants were able to report each week on how they had used the
information. It was interesting that it was mainly people who were interested in Health and Fitness beforehand who responded to the call for volunteers and that 80% of these were female. Several males showed some interest but only two participated. There may be a need for male members of staff to be given the opportunity to attend such a course locally.

22.9 **REASONS FOR NON-TRANSFERENCE OF LEARNING**

Most line-managers appeared to be keen to ensure that staff could apply their new skills in the workplace. Reasons for non-transfer of learning included the following:-

a. Lack of opportunity to practise a newly-learned skill back at the workplace

b. Change of job/task

c. Sea-going activities

22.10 **SUMMARY**

22.10.1 It was found that the course content of the JTS Management series was highly relevant and that many staff were able to apply some of its concepts on their return to work. It was estimated that 46% of Research Council participants did not have the right conditions at work to fully transfer their learning.

22.10.2 Several IOS participants in Management 1 courses failed to recognise that many aspects of this course are concerned with personal development skills which could be applied at individual level. This situation should be remedied. (Gross, 1993)

22.10.3 There were fewer problems in the perceptions of the Management 2 course which was concerned mainly with group/team interaction, most participants acknowledging that they had been able to apply some of this knowledge at work.

22.10.4 Independent research suggests that some Research Council line-managers place low value on management training (though this was not true of IOS line-managers), a view which may be adopted by their staff. It is suggested that some type of formal accreditation of the Management series may remedy this or that other ways should be found of helping participants to apply new learning possibly by increased team-working. Most senior management at IOS took management training seriously.

22.10.5 The areas where the Management series and JTS workshops have been particularly helpful are listed.
Systems for reviewing staff reporting and appraisal have worked well, the training is perceived as an ongoing process.

Management courses run by external organisations have generally been found beneficial to staff.

Most Vocational and Computing courses including academic courses were found to be effective and the new information was applied at work. The high success rate was partly attributable to the fact that sometimes courses had been recommended by peers.

Personal Development Courses including time-management, technical writing and public speaking courses were found to be very beneficial in that more than half of respondents reported that they had applied the new learning to their work.

Marketing courses varied in their impact. All tended to increase awareness of marketing issues. Generally few gave direction for future areas of interest.

Other courses such as French language training and 'Pre-retirement' were viewed as very helpful.

Health and Safety training sessions were concerned mainly with raising the awareness of staff of dangerous areas within the workplace. These heightened staff awareness, however it was found that six months after a session several staff indicated that they had forgotten some of subject matter, thus there is a need for refresher courses to be run regularly.

Reasons for non-transference of learning generally included, lack of opportunity to practise a new skill, a change of job or task or sea-going activities.
CHAPTER 23

EXPERIENTIAL LEARNING
IN THE
WORKPLACE
23 EXPERIENTIAL LEARNING IN THE WORKPLACE

23.1 INTRODUCTION

Within any organisation training may take a variety of forms but much arises as planned or unplanned informal on-the-job training during the course of daily events. Morrison and Hock (1986:240-3) stressed the importance of experiential work-based learning in career development. Several authors have emphasised the contribution of on-the-job training carried out alongside other more experienced workers (see Field and Drysdale 1991:53-4). This has several advantages in that it enables trainees to get immediate practice in transferring their newly acquired knowledge. Furthermore it may be the only way in which training can be given in job areas where technology is moving so fast that formal training courses have not been devised e.g. new computing software. Marsick and Watkins (1990:205-210) emphasize that informal learning in the workplace makes a valuable contribution to human capabilities which in turn command a price in the labour market.

Informal learning may be planned by staff themselves, their line-managers and the training officer. In addition informal learning may be unexpected (referred to as incidental learning by Marsick and Watkins, 1990:176-8). Incidental learning is unintentional and unanticipated and may be triggered by chance or by a work-related encounter or task within an organisation. A further aspect is that staff may learn from the mistakes made by others in their department or group and so help to promote organisational development a factor implicit in the "learning organisation" (see Senge, 1990)

Often the control of learning rests mainly with the learner rather than a trainer, though the latter may play a role in facilitation of learning. There are several key factors involved in informal learning one of which is dialogue. Another is critical reflectivity which may result in the challenging of culturally-induced norms and in the expression of creative behaviour (see Marsick and Watkins, 1990)

Management development may occur through 'Action learning' (see Mumford, 1991, Pedler, 1983), long or short-term job exchanges, transfers to other jobs or special job assignments. Rothwell and Kazanas (1989:310-312) point out that job rotation experiences should be planned and structured so that each line manager and employee are aware of activities and implications of each planned stage. They emphasize that these rotation programmes do not have to be elaborate and that they can even be restricted to rotation between jobs in one work-group. Field trips may also be also be an important method of training staff.
23.2 EXPERIENTIAL LEARNING AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES

Some approaches to staff development which are practised at the Institute of Oceanographic Sciences (IOS) include:-

a. Formal and informal on-the-job training
b. Management by objectives
c. Management Development
d. Formal Accreditation
e. Action Learning
f. Job Exchange/Rotation
g. Team-work and empowering staff
h. Formal training in Total Quality Management

23.2.1 Formal and informal on-the-job training

This may take several forms:-

i. Coaching by line-managers on-the-job
ii. Coaching/teaching by peers on-the-job
iii. Computing support by NERC Computing Department
iv. Sea-going experience of staff and students
v. Formal and informal exchange of ideas
vi. Empowering of staff to make decisions as individuals

Coaching by line-managers and peers on-the-job makes a large contribution to learning at IOS. A recent poll of IOS staff shows that staff vary widely in the amount of time they spend in helping colleagues, work-experience or postgraduate staff to learn a job. Some staff, particularly those with limited experience, spend less than one hour per month in helping others to learn a job, while more experienced staff can spend up to 22 hours per month. However, on average, each member of staff spends 4-8 hours per month in coaching other colleagues, industrial training or work-experience students. Over 80% of staff spend more than two hours a month teaching others while 40% of staff spend more than eight hours per month.

Bramham (1984:36) cited Training Commission figures of 3.4 days per person per year provided by United Kingdom employers for on-the-job training.

The number of higher degree students, supervised by IOS staff during 1989 to 1993 is given in Table 23.1. These totalled 32 in 1990/91 and rose to 47 in 1992/93. Many spend time at IOS and on the NERC research ships in collecting and working up oceanographic data and usually successfully complete their higher degree at the end of a three or four-year period at University coupled with practical work at IOS. At least ten senior staff act as supervisors.
Industrial training students spend 6 months to a year at IOS working on oceanographic projects. The number of students per year is given in Table 23.2. All successfully write up project reports which contribute towards their degree or diploma.

<table>
<thead>
<tr>
<th>Table 23.1</th>
<th>Number of higher degree students, supervised by IOS staff during 1989 to 1993.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Physics</td>
<td>8</td>
</tr>
<tr>
<td>Ocean Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Geology and Geophysics</td>
<td>13</td>
</tr>
<tr>
<td>Biological Oceanography</td>
<td>5</td>
</tr>
<tr>
<td>Ocean Instrumentation</td>
<td>2</td>
</tr>
</tbody>
</table>

The numbers of work-experience students at IOS vary from year to year but averaged 17 during 1992. Questionnaires sent to them indicated that they found the work-experience to be useful though some indicated that they might not enter into oceanographic research as a career (Figure 23.1). An evaluation of work-experience by participants is given in Table 23.3. All except one student found the experience to be useful and most found the IOS staff to be helpful.

<table>
<thead>
<tr>
<th>Table 23.2</th>
<th>Number of industrial Training Students supervised by IOS staff during 1989 to 1993.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Physics</td>
<td>6</td>
</tr>
<tr>
<td>Ocean Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>Geology and Geophysics</td>
<td>4</td>
</tr>
<tr>
<td>Biological Oceanography</td>
<td>1</td>
</tr>
<tr>
<td>Ocean Instrumentation</td>
<td>-</td>
</tr>
</tbody>
</table>

405
Work experience

Figure 23.1  Percentage of work-experience students who found their time at IOS useful and would pursue a career in oceanography or other marine related work
Table 23.3  Evaluation data on work-experience at IOS

Work experience questionnaire sent to 29 short-term students
Total number of replies (50% response rate)

Q1. Did you find the work experience useful or not

Yes 16  
No 1

Yes Reasons :

a. 'I found it useful because it gave me an insight into what sort of thing to expect when I go out to work and also because I picked up many new skills in the Administration and Finance Dept'.
b. 'useful because it helped me make up my mind as to which career I would like to pursue.'
c. 'I had the chance to work on computers learning how to use CAD programs as well as other work. I had a varied program (sic) and got an idea of how the working day went'.
d. The experience was useful in that I saw new aspects of scientific careers.
e. 'experience gave me insights into the team environment and the support available through it.'
f. 'useful because it gave me an insight into what sort of work I could be doing in the future, when I have graduated.'
g. 'Yes the only problem being, I wasn’t expected by the people I was working with so they had difficulty in finding me things to do, to begin with.'
h. It made me aware of other fields of work and showed me some practical applications of physics etc I’d learned at school.
i. 'I had the chance to work on computers learning how to use CAD programs as well as other work. I had a varied program (sic) and got an idea of how the working day went.'
j. 'I found that parts other than marine biology were more interesting.'
k. 'It gave me an insight into research, that I would have otherwise not had.'
l. 'I’ve found out a lot more about Oceanographic Science. Before my work-experience, I didn’t know much about what sort of work you do at the Institute.'
m. 'extremely interesting however I would have liked to find out about work in the Geophysics section i.e. use and exploration of computer analyses.'

Q2. Did your school/college give you adequate preparation and information before your placement.

Yes 9  
No 4  
Not answered 4

Comments :

a. 'No. Only the department names and an inaccurate and basic description were made available. The requirement for a curriculum vitae was only revealed at the last minute.'
b. 'No. Because the school didn’t actually organise it for me (although I think the kind of work experience you offer would be suited to a number of people interested in the sciences.)'
c. 'I was sent brochures .. by IOS.'

Q3. If not what other information would you have liked from your careers advisor or from us?

a. More details about actual work involved 4
b. ..task description, a list of minimum requirements, a description of working conditions and environment and level of involvement permitted 1
c. Would have liked careers adviser to have explored possibility of work experience in the Institute and the organised a longer period of work experience.

Continued...
### Table 23.3 Evaluation data on work-experience at IOS

...Continued

<table>
<thead>
<tr>
<th>Q4.</th>
<th>List the most important things you learned while working at this Institute.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>What it is like to work as a team</td>
</tr>
<tr>
<td>b.</td>
<td>How to use basic office equipment</td>
</tr>
<tr>
<td>c.</td>
<td>Experience of public relations</td>
</tr>
<tr>
<td>d.</td>
<td>Keep to deadlines</td>
</tr>
<tr>
<td>e.</td>
<td>Important to know what you are doing (sic)</td>
</tr>
<tr>
<td>f.</td>
<td>The routine of a typical working day</td>
</tr>
<tr>
<td>g.</td>
<td>How to use computing software</td>
</tr>
<tr>
<td>h.</td>
<td>How different work is to school</td>
</tr>
<tr>
<td>i.</td>
<td>There are many fields of scientific work</td>
</tr>
<tr>
<td>j.</td>
<td>The working ethos</td>
</tr>
<tr>
<td>k.</td>
<td>Organisation of information</td>
</tr>
<tr>
<td>l.</td>
<td>Integration with people who knew a lot more about the subjects than myself</td>
</tr>
<tr>
<td>m.</td>
<td>Planning and implementation of industrial project work</td>
</tr>
<tr>
<td>n.</td>
<td>Uses/techniques of electronics in this field</td>
</tr>
<tr>
<td>o.</td>
<td>Cartography as a career</td>
</tr>
<tr>
<td>p.</td>
<td>How complex the ocean is</td>
</tr>
<tr>
<td>q.</td>
<td>What it is like to be an oceanographer</td>
</tr>
<tr>
<td>r.</td>
<td>What it is like to work in a small establishment</td>
</tr>
<tr>
<td>s.</td>
<td>Classification and depths of many marine organisms</td>
</tr>
<tr>
<td>t.</td>
<td>An introduction to scanning the sea bed</td>
</tr>
<tr>
<td>u.</td>
<td>The design of submarine/research equipment</td>
</tr>
<tr>
<td>v.</td>
<td>Amount of research needed and techniques</td>
</tr>
<tr>
<td>w.</td>
<td>Seeing how departments work together</td>
</tr>
<tr>
<td>x.</td>
<td>Using techniques and interpreting records</td>
</tr>
<tr>
<td>y.</td>
<td>Problems involved with working on projects</td>
</tr>
<tr>
<td>z.</td>
<td>English language/people</td>
</tr>
<tr>
<td>aa.</td>
<td>Getting on with people</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q5.</th>
<th>What helped your learning?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Helpful/friendly/knowledgable staff and students</td>
</tr>
<tr>
<td>b.</td>
<td>Staff gave time to show me things</td>
</tr>
<tr>
<td>c.</td>
<td>Relaxed environment</td>
</tr>
<tr>
<td>d.</td>
<td>Having a friend there to talk to</td>
</tr>
<tr>
<td>e.</td>
<td>Seminars and talks</td>
</tr>
<tr>
<td>f.</td>
<td>Team environment</td>
</tr>
<tr>
<td>g.</td>
<td>Being treated as an equal/adult and not an encumbrance</td>
</tr>
<tr>
<td>h.</td>
<td>Being allowed to get on with my work</td>
</tr>
<tr>
<td>i.</td>
<td>Being allowed to observe at meetings</td>
</tr>
<tr>
<td>j.</td>
<td>Books</td>
</tr>
<tr>
<td>k.</td>
<td>Being able to ask a lot of questions</td>
</tr>
<tr>
<td>l.</td>
<td>Technical understanding</td>
</tr>
<tr>
<td>m.</td>
<td>Being interested in the field of [marine] science</td>
</tr>
<tr>
<td>n.</td>
<td>Wide range of jobs carried out</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6.</th>
<th>What hindered your learning?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Nature of tasks</td>
</tr>
<tr>
<td>b.</td>
<td>Got placed in Dept where he didn't want to be in first week</td>
</tr>
<tr>
<td>c.</td>
<td>S/he I did not really come into contact with employees'</td>
</tr>
<tr>
<td>d.</td>
<td>Felt S/he was not part of the team.</td>
</tr>
<tr>
<td>e.</td>
<td>Lack of time at Institute</td>
</tr>
<tr>
<td>f.</td>
<td>Lack of people during the day who could help us</td>
</tr>
<tr>
<td>g.</td>
<td>Being by ourselves much of/some of the time</td>
</tr>
<tr>
<td>h.</td>
<td>Having to work in the basement with two sixteen year old girls</td>
</tr>
<tr>
<td>i.</td>
<td>Lack of English language</td>
</tr>
<tr>
<td>j.</td>
<td>Having two weeks of separate experiences</td>
</tr>
</tbody>
</table>
Table 23.3 Evaluation data on work-experience at IOS

...continued

Q7. Has the experience made you more interested in pursuing a career in Marine Sciences in general or in related topics (e.g. computing) or electronics - if not give reasons.

<table>
<thead>
<tr>
<th>Response</th>
<th>Yes</th>
<th>No</th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

a. No I was more interested in Library work than marine science at the start
b. 'I am still interested in full time education, having just started at 6th form College. However when I finish there I could be interested in a financial position in your firm, should one arise.
c. '..the work experience re-affirmed my interest but I do not believe it expanded it.
d. '..reinforced my earlier plans of joining the royal navy as an electrical/ electronic engineer.
e. 'Yes the experience has made me show more interest in marine life and marine sciences.
f. 'When I arrived I wasn’t sure about a career. I didn’t realise the amount of research work that had to be done by yourself.’
g. '.. the things I saw certainly interested me.’
h. 'I have now planned a career in the Geology/Geophysics area.’
i. 'confirmed my opinion about studying engineering.’

Q8. Do you think it would be better to do your work experience a. with a student from your own college, b. with a student from another school college or c. on your own ..Why?

| Response | a. On my own - | b. with friends from own school | c. with students from another school college/University | d. Makes little difference as the object is to gain work experience (no to Q 1.) | e. May vary depending on individual | (not answered)
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

d. Makes little difference as the object is to gain work experience (no to Q 1.)

Q9. Have you any other comments that you would like to make on your work experience at this Institute

| Comment | a. 'I had a thoroughly enjoyable two weeks and would like to thank all members of staff involved in making my time there both interesting and fun’.
b. 'Based on friends previous experience, I expected work experience to consist of coffee-making, file work and office work. The fact that I was not treated as a glorified office boy and given challenging and interesting work, made the experience enjoyable and worth-while. Conversely a friend in another department who spent all day counting various organisms did not, I feel, attain all they could from the placement.
c. '.. thank you it was a very enjoyable week and I'd like to thank particularly Dr. C. who tried quite hard to help me fit in while I was there. Please carry on giving the pupils a chance to work their (sic) as it has helped me a lot.
d. 'I found it interesting even though I'm not taking pure sciences.
e. 'I thoroughly enjoyed it and would like to thank everybody there who helped me. I would recommend working in the Institute to anyone interested in following a scientific career.’
f. '..it was helpful though I would have preferred being around other people of the Institute, see then working and discuss their experiences.’
g. 'It was all very friendly ... to compare notes with other students doing their work experience in other departments’
h. 'I am confident that I can now relay my thoughts and ideas to younger students better. Thank you John Wilson for an excellent stay’
i. '...it 'd (sic) be a wonderful possibility for German students to have the chance of having this work experience in a foreign land.’
j. '..enjoyed myself very much...a worthwhile experience.’

Informal Training in Computing

In addition the NERC Computing service (NCS) has three support staff at IOS one of whom spends spends an average total of four working days per month in helping staff and students to run successfully NCS-sponsored software.

An evaluation of computing expertise at IOS completed in January 1993 (Appendix 23.1) showed that staff jointly had a large amount of knowledge and expertise in software packages. For example over half of the staff had a good knowledge of the
'Microsoft Word' word-processing package of which 30 were prepared to help others to learn the package on an occasional basis. Two people were also prepared to run a short course.

Furthermore over 30 staff jointly had expertise in a total of 50 other software packages and at least half of those were prepared to help others on an occasional basis to learn to run them. This information was circulated to staff and some have taken advantage of the offer of help though it is not known exactly how many. It is anticipated that the information will need to be regularly distributed to staff for them routinely to take advantage of this type of offer of help by peers-groups.

**Formal and Informal seminars**

It is estimated that, to enhance their professional skills, on average most scientists and technologists spend at least two working days per year in attending formal and informal seminars, scientific and professional meetings and one day in attending in-house reviews of peer-group research activities. These sessions provide an opportunity for creative input by participants who are encouraged to exchange ideas with peer-groups and with project leaders within a non-critical environment.

**Sea-going activities**

Approximately half of the staff at IOS are sea-goers and many receive on-the-job training at sea in the deployment of marine instrumentation and other sea-going activities.

### 23.2.2 Management by Objectives

Management by objectives (MbO) has been discussed already in the context of the NERC/IOS appraisal procedures. At IOS each individual member of staff meets regularly with his/her line-manager to discuss and agree targets for the coming months or for the full staff reporting year. Subsequently performance is evaluated against these targets. Since 1993, NERC's appraisal has been linked to this evaluation. It is too early to say whether this strategy will prove to be a success.

### 23.2.3 Management Development

At IOS management development has sought to enhance skills in a number of areas including the following:- time-management, interpersonal effectiveness, interviewing, coaching, creativity, team-building, communication, accountancy, appraisal. Basic tools are provided through attendance at formal courses, as discussed in Chapter 19, however much management development occurs on-the-job. Indeed the JTS management series is designed so that participants have the opportunity to practise
their new management skills before embarking on the next course in the Management series. In some instances this works well but in others, opportunities may be lacking for staff to gain from this type of experiential learning as discussed previously.

23.2.4 Formal Accreditation: National Vocational Qualifications.

During 1994 three administration staff have enrolled in a scheme run by Guildford College of Further and Higher Education in association with the Council for Vocational Qualifications, whereby following assessment on-the-job and evidence of a variety of tasks undertaken provided by their personal portfolio, they will qualify for an award of a National Vocational Qualification during 1995.

23.2.5 Action learning

Action learning focuses on improving staff performance during their daily activities so that problem areas can be remedied. Thus it focuses on problem-solving combined with learning. At IOS it does not operate formally, however there were regular informal meetings within units/groups or departments which resulted in group discussion, group support and group problem-solving.

23.2.6 Job exchange/rotation

Exchanges or transfers may occur within departments or between organisations. This method of cross-training can be useful in preparing individuals for more responsibility in management or administration or in science and technology. During 1990 to 1994 several exchanges or transfer of administration staff have occurred both within departments and between NERC Headquarters and IOS. This method of cross-training has proved to be useful in preparing individuals for more responsibility in management and general administration or in science and technology. Approximately half of scientists are also given various administration responsibilities including those of marketing, finance and the organisation of the formal seminar programme which help them to gain experience.

23.2.7 Team-work and empowering individuals

Training in group dynamics is important so as to ensure that all individuals within a group have objectives which do not differ widely from those of the rest of the group. During late 1993 restructuring occurred at IOS which resulted in the formation of four separate units each of approximately 35 scientific and technical staff. During late 1993 each of the unit leaders has begun initiatives such as
meetings, discussions and reviews to foster team-working. This has been successful to some extent but will need to be enhanced further prior to and following the relocation exercise to Southampton Oceanography Centre scheduled for Spring 1995.

23.2.8 Training for quality

All staff at IOS are dedicated to producing top quality data and information and as such are constantly reviewing their data. Furthermore this is often cross-checked with that of other international and national collaborators. However in the past some of the administration systems have needed to be updated. Accordingly, the Director ran a course in Total Quality Management for the Administration team during 1992 which proved to be successful in helping them to streamline their activities. It is anticipated that any further training in improving quality will centre on the formation of 'Quality circles' (which happens already on an informal basis) and on improving team-working.

In addition in November 1994, JTS ran a pilot scheme on team building. The aim was to empower individual members of a team. Aspects of team building are discussed further in Chapter 11

23.3 SUMMARY

23.3.1 Approaches to staff development in the form of experiential learning has been discussed, this includes formal and informal on-the-job training, Management development, action learning, job exchange, and team-working.

23.3.2 Staff willingly spend an average of 4-8 hours per month in helping their peers or students to learn a job. Many have expertise in computing and are also willing to impart their skills to others. NCS also provide valuable daily support for computer users.

23.3.3 Students receive valued help from IOS staff in training for future careers

23.3.4 On average scientists and technologists spend at least three days per year at professional meetings or seminars

23.3.5 Management development works well for some staff in that it combines formal management training with experiential learning. This approach may not work well for those staff who are unable to apply their formal training at work on a daily basis.

23.3.6 While action learning does not occur formally at IOS - the latter is a learning organisation in that it focuses on group discussion and problem-solving at its many routine internal meetings between and within groups of staff.
23.3.7 Due to re-organisation and relocation team-working will need to be enhanced during late 1994/1995.

23.3.8 Staff at IOS are generally dedicated to producing data of a high quality. Cross calibration and daily collaboration or exchange of information with other national and international experts helps to promote this.
CHAPTER 24

EVALUATION OF ORGANISATIONAL DEVELOPMENT
24 EVALUATION OF ORGANISATIONAL DEVELOPMENT

24.1 INTRODUCTION

During 1988 to 1993 IOS had various aims in which education and training were implicated so as to improve the skills and management ability of staff and in the long term, to change the culture. The latter was to be done in two ways. Firstly to promote IOS as a learning organisation and secondly to make staff adaptable to change, for example, learning to market scientific data and information or to work in different and more effective ways. IOS set itself broad objectives for organisational development (OD) in terms of improved strategy for management, for increasing income, publication rates of staff and development of instrumentation.

It is not easy to establish the benefits of training at organisational level. Investment in individual staff development should result in an improvement in peoples’ performance and that of the organisation but this may arise as a long-term effect in terms of several years rather than two or three.

During the past five years IOS has benefitted greatly from the support of the Joint Research Council Training Service (JTS) and the NERC Computing Service (NCS). Most staff have achieved their goals by being resourceful, by participating in formal learning events and by helping others with on-the-job training in a variety of disciplines or in self-help computer-learning groups. Many have also participated in seminars and discussion groups. The IOS Library and NERC Library Service has also provided a valuable service so as to ensure that current journals are made available to scientists, technologists and managers. NERC Headquarters has provided 'Finance' and 'Contracts' courses. Most other types of training were provided and funded by IOS from internal and external sources. It has been seen from previous chapters that at least 75% of staff who responded to questionnaires received some benefit from formal courses of various kinds.

It seems that such a large investment in people has paid off. From 1990-1994, IOS has been able to increase both income and productivity.

Improvement of IOS partly as a result of the pro-active programme of staff development and training is discussed below in terms of enhancement of a training culture, improvement in quality and communication, an increase in income, improved use of technology, improved health and safety and expertise in foreign language skills.
24.2 IOS AS A CENTRE OF EXCELLENCE

The development of a training culture at IOS has taken several years but is paying off in terms of improved staff attitudes towards training. During early 1990 staff tended to be reluctant to participate in any form of formal training unless it was seen to be immediately within their vocational sphere but gradually they have warmed to the benefits that training can offer. Indeed in recent years (1992/1994) they have become more insistent in their demands for increased education and training, an indication that they are aware of its benefits.

Encouraging staff to take opportunities to improve their skills and those of their teams has helped to improve output of high quality data and information. Some of the effort has concentrated on ‘Technical writing’ and ‘Public Speaking skills’ so as to convey the image of the organisation as a centre of excellence. For example in 1992, one member of staff reported that administration staff of the Society for Underwater Technology had remarked that the good writing standards of IOS staff were apparent.

24.3 THE IOS CORE-CURRICULUM

The IOS core curriculum has exposed staff to management methods and techniques for personal development so as to heighten individuals' awareness of what they can do to improve themselves and their teams. Vocational and computer training has been implemented at the discretion of line-managers and their staff.

A questionnaire to a sample of senior staff designed to evaluate the IOS curriculum of formal courses suggests that the organisation has benefitted in various ways. With regard to management ability eight out of fifteen managers indicated that management training had helped their staff to develop managerial skills, two had indicated that it had not while five had not commented either way. With regard to vocational courses only three out of fifteen had positively indicated that vocational training was set at a level to enhance technical or scientific achievement, though the extent of experiential learning (as discussed in Chapter 23) could not easily be evaluated except in terms of increased output of scientific or technical papers. Eleven out of the fifteen senior managers positively indicated that writing/presentation and/or marketing ability had improved. The formal courses which were quoted as being of great help at a general level were:-

a. Time-management
b. Engineering software
c. Computing
d. Staff Reporting and Appraisal
e. Marketing
f. Managing Others
Eleven of the fifteen respondents said that they felt that IOS benefitted from its staff attending formal courses to a moderate extent, two said to a large extent, one indicated that it depended on individual staff and one said not at all. Most individual members of staff gave similar responses when discussing the benefits of formal courses to the organisation.

One manager commented that IOS had started at rock-bottom with management training (in 1990) and another indicated that he felt IOS was moving ahead steadily. Another senior manager felt that IOS was more evidently professional to outsiders. Several others said that they would like enhancement of vocational training. (Aspects where training could be enhanced are discussed further in Chapter 26). A summary of the results of the questionnaire is given in Table 24.1
<table>
<thead>
<tr>
<th>20 Questionnaires distributed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Response rate 75% = 15 managers</td>
<td></td>
</tr>
</tbody>
</table>

**Q1.** Can you say, whether, in your opinion, the IOS staff development course has enabled your staff to develop their potential in terms of the following? (Please give examples)

<table>
<thead>
<tr>
<th>a. Management ability</th>
<th>b. Technological or scientific achievement</th>
<th>c. Writing/presentation marketing ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Not answered/not relevant to their staff</td>
<td>Not answered</td>
<td>Not answered</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

**Q2.** Can you give three other work-related instances where the IOS staff development programme has helped either you or your staff or your team?

Comments:-

a. 'Staff have a better appreciation of management problems'
b. 'Computer training'
c. 'Reporting and job descriptions have undoubtedly improved in some areas but uniform standards are yet to be achieved throughout'
d. 'Time Management'
e. 'Time management' (relates to manager rather than his/her staff)
f. '...recent tutorial on Microsoft Project Management software was welcomed and found useful by those of my group who attended'
g. 'Marketing - several of us in OIG have made use of techniques taught at one day seminars'
h. 'Management II [2] provided lots of thought provoking info (sic) on working in a team ... assertiveness course helped one member of staff who was aggressive rather than assertive. French course has assisted my dealings with CR [Commissioned Research] partners in Europe.'
i. 'Help to me (sic) improve my communication to others of my plans' ... better consideration of others needs ... more thought for our customers whether internal or external ... help to others (sic) technical writing has improved'
j. 'Me (sic) in particular made me aware of my shortcomings as a manager. M3 [Management 3] reinforced my growing realisation that I am not good at looking after my staff, and so enables me to improve. My staff have benefitted from time-management, stress and assertiveness training. The team as a whole likes doing training and it makes them feel valued.'
k. 'I suspect that time-management is likely to have made the most impact'
l. 'Interpersonal skills, individual management, time-management'
m. 'Better interpersonal effectiveness'
n. 'K. Better assertiveness'

**Q3.** To what extent do you think that IOS benefits from its staff attending courses (please give reasons)

<table>
<thead>
<tr>
<th>a. To a large extent</th>
<th>b. To a moderate extent</th>
<th>c. Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>11</td>
<td>1 (Depends on individual staff)</td>
</tr>
</tbody>
</table>

(Continued ...
Various aspects of organisational development are discussed below.
One long-term objective of the IOS Director has been to change the culture of the Institute by encouraging staff, line managers and group leaders to communicate across departments, projects and the perceived hierarchical boundaries. Prior to 1990 communication between various grades of staff was poor. The view held by the Senior Management Team was that although there was a potential for information to flow between widely separated staff, (in terms of location or grade), there tended to be a decrease in communication upwards and downwards at middle-management level so that information was lost. It was thought that information from the top Management Team often did not reach less experienced or more junior staff i.e. those on the 'shop floor'. IOS top management has aimed to overcome this problem by holding regular meetings within and between departments/groups/teams/project managers and by holding video-awareness sessions in management and safety-related topics. JTS Management courses have also helped to improve communication though there is still room for improvement. The training-awareness video sessions are valuable in bringing problems perceived by staff 'into the open' and in giving all staff, whatever their grade, opportunities for discussion.

During January 1992 I organised a workshop entitled 'The Line-manager as a facilitator and a communicator'. The communication problems experienced by line-managers were discussed by groups who listed possible ways of solving the problem. Later I summarised the information and circulated it to participants. My evaluation of the whole event suggests that it was not particularly successful in that two participants said that they had not gained anything from the workshop, (possibly because discussions were group-based) and two participants did not agree with the principle that, as members of the workshop, they could help others to solve the non-communication problem between staff and managers. Later, in a similar context, one of the managers involved said that he preferred to be given information by trainers rather than to work in process groups. Possibly staff were not ready to participate in this type of workshop described above where the emphasis was on them to help to solve a problem rather than to have it solved for them by a trainer. On the other hand the workshop did help to raise the awareness of staff for the need for good communication. For example the following comment was put forward by A.

'why don't managers consult us before they go to meetings' (29.01.92)

To some extent during 1992 and 1993, communications between staff and managers was enhanced in that members of the Management Team regularly provided up-to-date information about relocation strategy and the acquisition of new contracts. However by the end of 1993 there was still room for improvement. As the Director stated in March 1994 in the Science Management Audit Report:-
"We have not succeeded [in improving communication] as much as we had hoped, though not for want of trying" (p.32).

24.5 QUALITY OF SCIENTIFIC OUTPUT

The IOS Management Team's commitment to improving the IOS profile has paid off in several different areas. One measure of quality is shown by publication in the refereed scientific journals. Over the five years from 1988 to 1993 there was an improvement in the number of refereed papers published in Journals (Figure 24.1). The average output of refereed papers increased by 40-50%. In addition the average rating of IOS research proposals by external peer review increased from Alpha 3 to Alpha 4 (The maximum possible is Alpha 5). These increases in quality are believed to be the end results of cultural change, more effective management and more efficient staff. This must be, to some degree, a product of staff development initiatives.

Figure 24.1 The number of refereed papers published in journals by IOS staff
24.6 INCREASING INCOME

IOS has sought to improve its approach to marketing so as to broaden and strengthen its customer base. During the past four years all staff have been given some responsibility for searching for new opportunities to market their skills, products and services. Those staff designated as special 'science marketers' were given several types of course in finance and marketing while others were given courses to enhance their marketing-awareness. Despite a reduction of income due to loss of a major contract during 1992, from then until 1994, IOS had doubled its external income. The quality of output has been maintained mainly by empowering staff to make changes in procedures which lead to their increased efficiency and by encouraging team-working.

24.7 INCREASED USE OF INFORMATION TECHNOLOGY

The use of the computer for electronic mail by most staff rather than just the computer-literate elite has tended to streamline the mail system. Time-management seminars have raised the awareness of the importance of using time gainfully.

24.8 RATES OF ABSENTEEISM

Generally the rate of absenteeism is very low and staff seem to enjoy the working atmosphere at IOS especially at the Wormley site which is in a rural area. Although many look forward to new opportunities offered at the Southampton Oceanography Centre in terms of working with other oceanographers and students, some staff are sorry that relocation will occur.

24.9 STAFF APPRAISAL

From April 1988, a system of 'Open reporting' was implemented whereby staff were to see the whole of their annual staff appraisal report rather than just the final marking as had been the case in previous years. Moreover from April 1988, a 'Management by Objectives' scheme was introduced,(see chapter 5) whereby staff were asked to complete a 'Forward Job Plan', listing the main duties of the job, giving some indication of the work they planned and resources needed. Thus managers involved in completing appraisal forms on their staff and also 'Countersigning' Officers were required to attend seminars and courses to update them and their staff on appraisal techniques and 'Open reporting'. Appraisal workshops, completed by the IOS Director, NERC HQ and by the Joint Training Service have proved helpful. More have been arranged for late November 1994 and January 1995, so as to continue to standardise appraisal procedures. Indeed there was some improvement in communication during the period of this study in that following 'Staff Reporting' and 'Appraisal Interviewing' courses, a system of open
reporting was successfully implemented.

24.10 HEALTH AND SAFETY

IOS had always sought to address the subject of 'Health and Fitness' for its staff by providing various courses for volunteers in 'First Aid' and 'Firefighting'. By 1990, it became clear that a more proactive approach was needed in communicating to staff 'Health and Safety Awareness'. This view was later confirmed by new European Community legislation (1992) which required organisations to provide staff with literature and/or specialised training-awareness lectures on selected health and safety topics.

I evaluated the benefits of Health- and Safety-awareness seminars to staff by collating information from questionnaires sent to a sample of staff. As indicated above, at least 60% of staff felt that they had benefitted from the information given in seminars. Benefits to the organisation were apparent in that during the five year period between 1988 and 1993 the level of accidents at work remained relatively low as recorded in accident report books.

24.11 COST CONTROL

Awareness training across the board, combined with Total Quality Management (TQM) training, helped IOS to cut operating costs by 13% between 1989/1990 and 1993/1994. At least some of this improvement can be attributed to staff development and training.

24.12 SUMMARY

24.12.1 I have discussed the many benefits of the staff development programme at IOS. I have shown that it has promoted organisational development in terms of increased income, decreased costs, increased communication and increased profile in the national and international oceanographic arena.

24.12.2 The IOS core curriculum has exposed staff to techniques to enhance personal managerial and vocational development. This has paid off in that its success has been reflected in organisational development (OD). Vocational development should be enhanced to benefit OD further.

24.12.3 Organisation development has been enhanced in the areas of marketing, increased income, increased publication rates and an enhanced corporate image.
While communication within the organisation has improved, it needs to be further enhanced. Open reporting has been implemented but the appraisal system is still being developed by Headquarters staff and training should be on-going so as to standardise across NERC and IOS.
CHAPTER 25

COSTS OF STAFF DEVELOPMENT INITIATIVES
COSTS OF STAFF DEVELOPMENT INITIATIVES

25.1 INTRODUCTION

Most organisations who sponsor education and training initiatives, quite reasonably expect that these programmes should be reasonably cost-effective in terms of learning by individuals, and subsequent transference of skills, knowledge etc. to a given job or task. Costs of the IOS staff development programme include the following:

a. Costs of formal courses and seminars

b. Establishment costs e.g. salaries of participants and trainers, insurances and pension contributions.

c. Marginal expenditure e.g. costs of laboratory accommodation, support staff and the training officer, hotel accommodation, trainers/tutors/lecturer's fees, travel and subsistence fees for staff participating in external courses, books and other resources e.g. video training films.

d. The cost of services such as heating and cleaning and support staff.

e. Travel and subsistence allowances

Although an analysis may include 'Interference costs' (for example, costs involved due to reduction in output which may occur as a result of staff participating in courses) these were not included because:

(i) It was virtually impossible to assess them.

(ii) Many staff at IOS work in their own leisure time and so catch up with writing papers etc if these are delayed, for whatever reason.

The costs given below are based on approximations because I found that the actual costing for individual courses was difficult and cumbersome to obtain. The reasons for this were twofold. Firstly costs for vocational training were paid by each department from their separate projects and I did not routinely receive a copy of the financial accounts. This was compounded by the fact that costs for travel and subsistence often were paid separately sometimes several months later and were not necessarily paid from the same account. Although JTS courses and JTS accommodation were free, a small residential allowance and that for travelling was payable so that IOSDL had to provide a minimum sum. The only budget for which I had any control was a sum of between £2000 and £3000 for incidentals but even this was cut during the severe economic crisis of 1992.
In estimating the training costs for each year, I have included separately:-

a. Costs of formal courses including on-site Health and safety awareness sessions.

b. Formal and informal seminars.

Costs for travel to external seminars are excluded because it is virtually impossible to keep track of staff attendance at these. Costs for 'on-the-job training' were very difficult to assess because, by definition, they may involve incidental and/or informal learning/coaching the event of which may be forgotten by staff or the number of hours spent under- or over-estimated. It is estimated that, on average, on-the-job training accounted for as much as all other forms of training.

During 1990-3 the balance of training was altered annually to meet the needs of staff. For instance in 1988-1990 emphasis was placed on training in 'Time Management' for all staff. During 1989-1991 efforts were concentrated on the acquisition by staff of technical writing and presentational skills and in 1992-93 on management training and computing. Throughout 1989-1993 vocational training was provided as necessary and where funding permitted.

25.2 THE COST OF COURSES AND SEMINARS

Courses were broadly divisible into 'Management' courses, concerned with managing other staff, 'Vocational and Computing' courses, 'Finance/Contracts and Marketing' courses, 'Personal Development' courses, 'Introductory/Pre-retirement' and 'Health and Safety' courses. Estimates are given below in Tables 25.1-25.9.

Costs for staff time are based on full economic cost (125% overheads on salary + National Insurance + superannuation).

Management courses

The costs for management courses run during 1990-1994 are given below in table 25.1. Most courses are residential and run for an average of five days. Senior management courses last for ten days while staff reporting courses last for one day.

<table>
<thead>
<tr>
<th>Year</th>
<th>Places</th>
<th>Total costs</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Course</td>
<td>Participants time</td>
</tr>
<tr>
<td>1990</td>
<td>3</td>
<td>5.10</td>
<td>10.00</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
<td>0.00</td>
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<tr>
<td>1993</td>
<td>1</td>
<td>1.70</td>
<td>3.60</td>
</tr>
</tbody>
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Continued...
<table>
<thead>
<tr>
<th>Table 25.1</th>
<th>The estimated costs of Management courses run during 1990-1993 (£k)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management 1 (JTS-site 5 days)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
<td>5</td>
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<tr>
<td>1991</td>
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</tr>
<tr>
<td>1992</td>
<td>1</td>
</tr>
<tr>
<td>1993</td>
<td>10</td>
</tr>
<tr>
<td><strong>Management 1 (JTS, 5 days, non-residential)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
<td>0</td>
</tr>
<tr>
<td>1991</td>
<td>16</td>
</tr>
<tr>
<td>1992</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>26</td>
</tr>
<tr>
<td><strong>Management 2 (JTS, 5 days residential)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
<td>1</td>
</tr>
<tr>
<td>1991</td>
<td>3</td>
</tr>
<tr>
<td>1992</td>
<td>4</td>
</tr>
<tr>
<td>1993</td>
<td>10</td>
</tr>
<tr>
<td><strong>Management 3 (JTS, 5 days residential)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
<td>0</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
</tr>
<tr>
<td>1992</td>
<td>2</td>
</tr>
<tr>
<td>1993</td>
<td>8</td>
</tr>
<tr>
<td><strong>Staff Reporting (JTS, 1 day non-residential/ZOS 0.5 day)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
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<td>1991</td>
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</tr>
<tr>
<td>1992</td>
<td>26</td>
</tr>
<tr>
<td>1993</td>
<td>38</td>
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<tr>
<td><strong>Appraisal Interviewing (JTS, 1.5 days non-residential)</strong></td>
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</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
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<tr>
<td>1991</td>
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</tr>
<tr>
<td>1992</td>
<td>23</td>
</tr>
<tr>
<td>1993</td>
<td>0</td>
</tr>
<tr>
<td><strong>Selection/promotion interviewing (JTS, 2 days)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>Places</strong></td>
</tr>
<tr>
<td>1990</td>
<td>3</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
</tr>
<tr>
<td>1992</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>1</td>
</tr>
</tbody>
</table>

Continued...
### Table 25.1
The estimated costs of Management courses run during 1990-1993 (£k)

...continued

#### Non-JTS Management Courses

**Directing and Managing R & D (5 days - residential)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Places</th>
<th>Total costs</th>
<th>Course</th>
<th>Participants</th>
<th>time</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>8</td>
<td>10.00</td>
<td>16.34</td>
<td>26.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>1</td>
<td>1.20</td>
<td>2.29</td>
<td>3.49</td>
<td></td>
<td></td>
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<tr>
<td>1992</td>
<td>2</td>
<td>2.60</td>
<td>4.08</td>
<td>6.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Project Management IOS/NERC (5 days - residential)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Places</th>
<th>Total costs</th>
<th>Course</th>
<th>Participants</th>
<th>time</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>6</td>
<td>5.00</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>5</td>
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**Interpersonal Effectiveness (4 days)**

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**Other Courses**

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**Grand Total - Management Courses (£k)**

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Vocational and Computing courses

Costs of vocational and computing courses are given in Table 25.2. Several computing courses were provided by the NERC Computer Service, others were provided from external sources. Most vocational courses were provided from external sources including Universities.
### Table 25.2 Costs for Vocational/Computing Courses (£k)

<table>
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<tr>
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<td>10.27</td>
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<table>
<thead>
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<th>Basic Computing/Spreadsheets/Word Processing</th>
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<th>Places</th>
<th>Total costs</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
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<td>Course</td>
<td>Participants</td>
</tr>
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<td></td>
<td>Course</td>
<td>Participants</td>
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<td>9.00</td>
<td>15.00</td>
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<table>
<thead>
<tr>
<th>Grand Total - vocational/computing courses</th>
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<th>Places</th>
<th>Total costs</th>
<th>Grand Total</th>
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</table>

### Finance/Marketing Courses

Most of these were provided either by NERC or IOS staff. Costs include staff time spent on preparing courses and as tutors. Costs are given in Table 25.3

### Table 25.3 Marketing/Finance/Contracts Courses

<table>
<thead>
<tr>
<th>Year</th>
<th>Places</th>
<th>Total costs</th>
<th>Grand Total</th>
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<td>10.50</td>
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<td>5.00</td>
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<td>1993</td>
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<td>4.50</td>
<td>5.26</td>
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Personal Development

The costs of personal development courses are given in Table 25.4. These include technical writing, public speaking, French language and time-management. They were provided by external organisations or IOS staff. Basic costs of courses include staff tutor time.

<table>
<thead>
<tr>
<th>Table 25.4</th>
<th>Costs of Personal Development Courses (£k)</th>
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<tr>
<td><strong>French Language</strong></td>
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</tr>
<tr>
<td>Year</td>
<td>Places</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
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<tr>
<td>1992</td>
<td>18</td>
</tr>
<tr>
<td>1993</td>
<td>9</td>
</tr>
</tbody>
</table>

| **Presentation skills/Occasional speaking** | |
| Year | Places | Total costs | Grand Total |
| | | Course | Participants time | |
| 1990 | 19 | 4.16 | 10.20 | 14.38 |
| 1991 | 46 | 10.12 | 19.92 | 30.04 |
| 1992 | 0 | 0.00 | 0.00 | 0.00 |
| 1993 | 6 | 1.20 | 1.46 | 1.66 |

| **Technical/report Writing** | |
| Year | Places | Total costs | Grand Total |
| | | Course | Participants time | |
| 1990 | 14 | 3.10 | 10.78 | 13.88 |
| 1991 | 25 | 5.50 | 12.77 | 18.27 |
| 1992 | 11 | 3.00 | 6.70 | 9.70 |
| 1993 | 6 | 1.00 | 1.46 | 1.66 |

| **Time Management** | |
| Year | Places | Total costs | Grand Total |
| | | Course | Participants time | |
| 1990 | 13 | 2.00 | 2.76 | 4.76 |
| 1991 | 28 | 3.00 | 6.94 | 9.94 |
| 1992 | 6 | 0.60 | 0.40 | 1.00 |
| 1993 | 0 | 0.00 | 0.00 | 0.00 |

| **Other Personal Development Courses** | |
| Year | Places | Total costs | Grand Total |
| | | Course | Participants time | |
| 1990 | 1 | 0.20 | 0.35 | 0.55 |
| 1991 | 0 | 0.0 | 0.0 | 0.00 |
| 1992 | 7 | 0.11 | 2.63 | 2.74 |
| 1993 | 6 | 0.60 | 0.84 | 1.44 |

| **Grand Total - Personal Development Courses** | |
| Year | Total | |
| | | |
| 1990 | 9.78 | 24.09 | 33.87 |
| 1991 | 19.32 | 54.43 | 73.75 |
| 1992 | 6.01 | 17.45 | 21.35 |
| 1993 | 2.80 | 10.57 | 13.37 |

Introductory, Welfare Retirement Courses

Several Introductory, welfare or retirement courses were provided by IOS staff or from external sources. Costs are given in Table 25.5
Table 25.5

<table>
<thead>
<tr>
<th>Year</th>
<th>Places</th>
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<th>Grand Total</th>
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**Health and Safety Courses**

These include Health and Fitness, Sea-salvage, Fire Safety, First Aid and Safety Awareness. Costs are given in Table 25.6

Table 25.6

<table>
<thead>
<tr>
<th>Year</th>
<th>Places</th>
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<th>Grand Total</th>
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<td>2.80</td>
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435
25.2.1 Seminars

a. Formal Seminars

It is estimated that, on average one seminar per week is held at IOS. Usually speakers offer their services free of charge but £400-500 per year is allocated for incidental expenses.

b. Informal Seminars

Informal seminars were usually run by IOS staff and so cost very little except for participants’ time.

25.3 TOTAL EXPENDITURE ON COURSES AND SEMINARS

The percentage of basic costs for formal training courses amounted to approximately 2% of the salary bill during 1990-1993 inclusive. This does not take into account staff time or attendance at scientific or technical seminars. If full economic cost of staff time and overheads is taken into account this figure can be trebled. (Costs of overheads for accommodation based on 1% of the Well-Found laboratory expenses include accommodation and running costs, postage and photocopying).

Total expenditure for all courses during 1 January 1990 to 31 December 1993 is given in Table 25.7. The cost of formal courses reached a peak of over £80k during 1991 (a total of £289k including staff time based on full economic cost). Following a reduction in funds during 1992 these figures fell to approximately £50k and £172k. The figure rose again slightly during 1993 but was lower than that during 1991 due to the fact that capital costs of training fell. This was because effort concentrated on Health and Safety training during 1993 and much of this was provided by IOS staff on a self-help basis.
Table 25.7  Costs of Formal Training per Year. (*Participants’ time and staff salaries are based on full economic cost)

<table>
<thead>
<tr>
<th>Year</th>
<th>Formal Courses Basic Costs (£k)</th>
<th>Formal Courses Time Participants (a)</th>
<th>Total Basic Cost (a+b)</th>
<th>Additional Hidden Costs (£k)</th>
<th>Total Cost of Training (£k)</th>
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<tbody>
<tr>
<td>1990</td>
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<td>239</td>
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<td>289</td>
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<td>145</td>
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</table>

Travel and Subsistence costs

These are estimated to amount to at least 10% of the total cost of formal courses. This is approximately £6k per year based on averages for 1990-1993.

In summary the costs of training and overheads including accommodation and salaries of training staff amount to at least 2.5% of the total salary bill and approximately 1.5-2% of the total cash budget for IOS. If the time of participants is costed this amounts to a total of approximately 3-4%. These figures exclude costs for on-the-job training. (See Table 25.8)

Table 25.8  Costs of training expressed as a percentage of the total salary bill for each year and also as a percentage of the recurrent expenditure at IOS.

<table>
<thead>
<tr>
<th>Year</th>
<th>Formal Courses % of Salaries</th>
<th>% of recurrent costs</th>
<th>Total Training Costs % of Salaries</th>
<th>% of recurrent costs</th>
<th>% of total IOS cash budget</th>
</tr>
</thead>
<tbody>
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<td>1.3</td>
<td>8.2</td>
<td>5.3</td>
<td>3.4</td>
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<td>1.5</td>
<td>8.8</td>
<td>6.3</td>
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</tr>
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<td>1992</td>
<td>1.3</td>
<td>2.0</td>
<td>5.6</td>
<td>8.8</td>
<td>3.4</td>
</tr>
<tr>
<td>1993</td>
<td>1.6</td>
<td>3.7</td>
<td>6.4</td>
<td>*</td>
<td>4.5 (est)</td>
</tr>
<tr>
<td>Mean</td>
<td>1.6</td>
<td>2.1</td>
<td>7.1</td>
<td>8.8</td>
<td>3.6</td>
</tr>
</tbody>
</table>

* - Figure not available

The above figures are broadly similar to those given by Woodall (1980:12) who cited Department of Employment figures which suggest that some U.K. firms spend approximately 2% of their salary bill on training. The Civil Service and NERC recommend a spend of 3.5% of the total salary bill on training, (Heaton and
Williams (1974). A survey of training costs by the Industrial Society (1985:2) shows that in Britain most firms spend less than 1% of their annual turnover on training their staff.

25.4 NUMBER OF DAYS TRAINING PER YEAR

The number of days training per year is shown in Table 25.9. This amounts to an average of 3 days of formal training per person per year. If attendance at informal seminars, formal seminars and conferences are taken into account this amounts to at least 4.3 training days per person per year, (5.1 in 1993). Costs exclude overseas travel and subsistence for conferences (see Table 25.9). This is broadly similar to figures given by Bramham (1989:36) who reported that in 1986-1987 employers in Britain provided each employee with 3.6 days training off-the-job.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Days per Year</th>
<th>No. Days per Year/Staff Member</th>
<th>No. Days per Year</th>
<th>No. Days per Year/Staff Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>485</td>
<td>2.4 (194)</td>
<td>750</td>
<td>3.9</td>
</tr>
<tr>
<td>1991</td>
<td>753</td>
<td>3.8 (196)</td>
<td>1047</td>
<td>5.3</td>
</tr>
<tr>
<td>1992</td>
<td>417</td>
<td>2.2 (190)</td>
<td>702</td>
<td>3.7</td>
</tr>
<tr>
<td>1993</td>
<td>630</td>
<td>3.6 (176)</td>
<td>894</td>
<td>5.1</td>
</tr>
</tbody>
</table>

On-The-Job Training

This amounts to at least 5 days per year from colleagues alone. It is based on each person spending an average of 4 hours per month for ten months of the year (40hrs/8hrs = 5days).

25.5 PILOT SCHEMES

Several pilot schemes were run but costs were negligible. These included the following:-

a. Interpersonal Skills Course

The cost for this was extremely low (<£110 per day)
b. Communications workshop

A 'Communications' workshop was held for twelve staff for three hours. The objectives were to help the staff to improve internal communication within IOS. The cost was £250 total (an average fee).

c. Video-based training-awareness sessions

These were run by myself in the capacity as Training Officer (costed separately). Costs included the hire of several videos (approximately £150 for 2 days)

![Graph showing the number of days spent on formal courses from 1988 to 1993]

Figure 25.1 The number of days training given each year at IOS

25.6 SUMMARY

25.6.1 The costs for all Management, vocational/computing, Personal Development, Marketing and Finance and Health and Safety courses are given in terms of basic cost of courses and of participants time.

25.6.2 The average number of days formal training per year amounts to 3 days per person. On-the-job training and attendance at seminars may treble this amount.
25.6.3 It is estimated that the basic cost of courses at IOS amounts to as much as 2% of the salary bill excluding staff time and overheads for accommodation. If these are taken into account it may be trebled.
CHAPTER 26

FACTORS WHICH PROMOTE STAFF PARTICIPATION IN TRAINING EVENTS
FACTORS WHICH PROMOTE STAFF PARTICIPATION IN TRAINING EVENTS

INTRODUCTION

Nowadays staff are well aware of the benefits of education and training. Many of those at IOS are professional or skilled and so already have been given opportunities in education and training. As a 'learning organisation' IOS fosters participation of staff in initiatives which help them to update information in science and technology either on a formal or informal basis. Some of the factors which promote staff participation in events are discussed below.

THE ADVANTAGES OF STAFF DEVELOPMENT TO THE INDIVIDUAL

Advantages of Education and Training to IOS staff may include the following:-

a. Increased chance of promotion and a salary increase
b. Increased responsibility
c. Increased knowledge and expertise
d. Opportunities to publish
e. Opportunities for travel to scientific or technology-based meetings.

Most experienced staff and line managers are aware of these factors and are well aware of the type of vocational training that will help them in their work.

All staff especially the newly-recruited should be made more aware that training and development may enhance their prospects for a more rewarding career and should be given every opportunity to discuss their aspirations and career management with line managers.

COMMUNICATION OF TRAINING NEEDS

Generally the NERC/IOS system of needs assessment by line managers and the Training Officer worked well, though it is emphasised that only a small proportion of training needs are expressed formally on annual staff reports (see Chapter 11 of the main thesis). A continuation of the present system of informal discussions with the Training Officer and line managers by staff in clarifying their needs is imperative. Where training is refused by project leaders or line managers due to lack of funding, the Training Officer should be informed so that s/he can attempt to provide the training at a cheaper rate by negotiation with external contacts.
The role of line-managers

Good communication between line-managers and staff is essential so as to promote a learning culture. Most line-managers at IOS are excellent in supporting their staff in requests for training. Several have been less effective in submitting nominations for training their staff and where this had occurred the staff themselves have been slow in asking to attend such initiatives. This situation has now been remedied at IOS but needs a continued proactive approach by the Training Officer.

The role of the training officer

Training officers should remain proactive, approachable, encouraging and friendly to all individual staff whatever their grade so as to promote the training function. As Training Officer I found that informal chats over coffee or at lunch told me much about staff requirements in terms of training. Much of this information would be lost if a reactive approach were taken.

26.4 ADEQUATE RESOURCES

During the early 1990s most organisations within the United Kingdom have had fewer funds than they would have liked and to some extent this has reflected in the number and type of training initiatives which could be provided. One of the major problems at IOS is that while funding for management training is formally 'Top-sliced' from Institute funds and therefore is not in direct competition with funds for science and technology projects, the funds for vocational training have to be taken from a 'central purse' held by project managers.

If funds are restricted, this situation places the project managers in a difficult situation; either they have to provide for training or for a research project. This situation may inhibit staff in asking for training. Ways should be found to avoid this conflict of options. One possible solution is to 'guarantee' that all staff receive a certain sum per year for staff development of a type to be mutually agreed by individuals and line-managers.

An interesting observation is that the Ford Motor Company in the United Kingdom do offer individual staff limited funds towards 'personal development training' as opposed to vocational training. This approach works well and is popular with staff as shown in Appendix 26.1 (the EDAP solution).

26.5 RESIDENTIAL VERSUS NON-RESIDENTIAL COURSES

Most staff were happy to attend residential courses but there remained several staff, who, because of domestic responsibilities were unable or unwilling to attend such initiatives. At IOS, several Joint Training Service Management I courses have been
conducted on-site to cater for such individuals.

In addition several on-site courses in basic computing or word-processing were provided for individuals on a one-to-one basis. The costs are higher than those provided by Further Education Institutes but were more accessible to those staff with domestic responsibilities.

New young well-qualified staff who were invited to attend the JTS non-residential basic Management 1 courses at local hotels in preparation for the more rigorous and group-based residential Management 2 course, reported that they have 'missed out' on the residential aspects in that they have had less time for learning and had not had the opportunity to meet other NERC staff. This may be true but this attitude may be coloured by the fact that 'residential' courses are still the norm at JTS and so staff not offered them may feel that they are missing out.

It seems that a modular approach to the Management 1 course whereby various aspects of the course are each covered in separate one- or two-day sessions, could be considered by JTS on- or off-site. It may solve two problems:-

a. Staff may not need to attend some aspects of the Management 1 course prior to embarking on Management 2 - especially the high-fliers who could learn Management 1 material very quickly and may already have experience of some aspects of it.

b. Short modules of Management 1 material could be offered by distance learning prior to a practical session.

c. A modular approach might cut down on the number of nights accommodation required for Management 1.

d. At present the Management 1 course lasts for 5 days. Staff may be more willing to attend if the time involved was shortened.

A further point is that the Management for Senior Grades course lasts for 2 weeks and some staff feel that this is too long a time-span.

Distance learning has been undertaken successfully by several IOS staff who have now graduated in science based subjects with the Open University. While it has proved useful as a valuable means of training, the concept is not popular with those individuals who find it difficult to study alone. Those staff who completed O.U. courses sometimes did have some difficulty in completing assignments on time when these clashed with sea-going activities.
26.6 SELF-HELP GROUPS

IOS has a relatively large number of very well qualified staff, many of whom have indicated that they regularly help others to learn on-the-job. In addition a few are prepared to offer short courses, indeed several helped to run the Safety-awareness sessions at IOS during 1993-1994.

In my experience the self-help approach worked well but there were four main problems which needed to be overcome for it to be completely successful:-

a. Some individuals like to be taught by professional tutors or trainers and they perceive tuition by their colleagues as less than ideal

b. Staff who give tuition may not have the tutoring expertise offered by professionals

c. Staff need to be regularly reminded that 'self-help learning' is available (especially in computing).

d. The organisation of self-help training events often needs to be undertaken by the Training Officer which is very time-consuming.

All of the above problems can be overcome by training staff tutors on the presentational and facilitation of learning skills but this requires a large amount of input in terms of time by the Training Officer - also an expensive resource.

At present it is possible for the Training Officer at IOS to undertake the various roles as described in the previous chapters in approximately 19 hours per week. Any increase in tutor/training duties would result in the need for increased hours.

26.7 SUMMARY

26.7.1 The advantages of staff development to individual staff are discussed. Most are aware of their vocational training needs and should be given opportunities to discuss their aspirations and career management with line managers. At present it is possible for the Training Officer to oversee the various roles in approximately 19 hours per week, but an increase in tutor/training duties would result in the need for increased hours.

26.7.2 Line managers and Training Officers played an important role in assessing training needs on a daily basis rather than formally on annual staff reports

26.7.3 The system for top-slicing funds for management training worked well. A system should be found for separating funds from vocational training from that of research projects so that the two are not in direct competition.
26.7.4 While residential accommodation is seen as imperative for some courses there was evidence that some staff preferred non-residential training. A modularised system for Management 1 basic training is suggested.

26.7.5 Self-help groups were seen as a useful way of contributing to the IOS staff development programme. Some problems and ways of overcoming them are discussed.
CHAPTER 27

AREAS OF STAFF DEVELOPMENT WHICH COULD BE ENHANCED
AREAS OF STAFF DEVELOPMENT WHICH COULD BE ENHANCED IN THE FUTURE

27.1 INTRODUCTION

In considering areas of staff development which could be enhanced in the future it is important to take into account the views of staff and their likely future needs in terms of further updating their expertise in marine science and technology and in increasing income for the new Units which will become an integral part of the new Southampton Oceanography Centre (SOC). Moreover the present Institute's reputation as a centre of excellence in terms of quality of output must be maintained.

The present restructuring of the Institute into four major Units in preparation for the move to Southampton has also meant that some staff are now working in new teams and so team-leadership, team-working and team-building needs to be enhanced. The recruitment of new young staff has increased the possibility that new ideas and different ways of seeing and solving problems may occur. Line-managers need to maintain a mentoring and coaching role rather than a controlling role. All staff, especially the newly recruited need to be reminded that creative ideas and a fresh approach to research are welcome.

Training and Staff Development initiatives were successful in many areas as indicated from the evaluation data shown in Chapter 20. However the following are especially important and should be taken into account when deciding on future initiatives:- Technology, Statistics, Advanced Computing, Team-building, Team-working and communication, Creativity, Project Management, Quality Management and Marketing.

27.2 COMPUTING AND TECHNOLOGY

During the past three years it has become apparent that although a relatively large amount of scientific and technological updating occurs at IOS, staff perceive a need for increased vocational training particularly in the fast-moving fields of computing and technology. Here information cannot be gained solely by reading technical and scientific papers or by attending seminars and often practical, hands-on experience is needed. Funds need to be found to enhance these aspects.

27.3 STATISTICS

Several scientists and technical staff at IOS have expertise in mathematics which they are happy to convey to their staff. To some extent this is true of statistical packages but problems arise in that this is a difficult subject to teach if staff do not understand the basic concepts. Thus there is a need for staff to participate in basic
and advanced courses. The Agriculture and Food Research Council at Swindon do provide such courses and they have been asked to provide several initiatives during March 1995.

27.4 TEAM-BUILDING, TEAM-WORKING AND COMMUNICATION

The setting up of four separate teams or Units prior to relocation at Southampton Oceanography Centre has meant that all members of staff have been assigned to a team, several are now working in conjunction with two teams. The four project leaders have a busy time ahead in ensuring that the new system is fully functional so as to meet the demands of customers who have commissioned long- and short-term contracts.

The situation seems to provide an excellent opportunity for team-leadership, team-building and team-working. One of the main problems at IOS has been the classic lack of communication in both directions between relatively new and inexperienced staff who are often reluctant to voice their opinions and the senior project leaders who are extremely busy in getting the new teams and new projects underway.

Team working could be enhanced by increased mentoring of inexperienced staff by line-managers in such a way that staff are empowered rather than controlled. Indeed the new NERC appraisal system which incorporates forward job planning goes some way towards this approach in ensuring that annual objectives are agreed by line-managers with their staff and are sought to be enabling rather than disabling. Two-way feedback between line-managers, project leaders and staff is also imperative if effective team-working is to be enhanced.

Team leaders need to further develop their action plan, and motivate staff to put forward new and creative ideas, giving feedback and praise where it is due. A course on effective team-working for all team-members could include the following:-

- Reiteration of the Mission Statement
- Modes of team operation
- A SWOT analysis (Strengths and Weaknesses)
- Setting objectives
- Empowerment of all team-members
- Managing conflict
- Discussion of lines of responsibility
- Counselling other team members
- Good Communication
- Airing of grievances
- Creativity (discussed below)
- Exploration of ways forward and changes that need to be made
- Comparison of different members views of the Team.

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Individual members of staff have already received training in Time Management and are already aware that this is important if deadlines are to be kept.

27.5 CREATIVITY

In any research organisation new theories and discoveries often arise as a result of new ways of viewing a problem. Thus it is imperative that all staff and their line-managers should be given seminars and courses in creative thinking and should be versed in the IOS philosophy that all staff should have the opportunity to voice their ideas for consideration by other team members.

Courses on creativity should include the following:-

- Mind-mapping
- Lateral and horizontal thinking
- Problem-solving and new approaches
- Decision-making techniques

It should be possible to run videos on this subject at IOS during January 1995 and organise a course for all staff in conjunction with Southampton University Management School during late 1995, once relocation has occurred.

27.6 PROJECT MANAGEMENT

One way of dealing with training in Project Management is by using advanced computing systems. During Spring 1994, a pilot scheme was run to train 6 members of staff in 'Microsoft Project' which includes short-term goals setting and critical path analysis. An external consultant was used to train individuals and the whole session proved to be extremely successful. This software is available through the NERC Computing Service (NCS) and ways should be found of standardising it for use by staff. Training could be given to line-managers or other key staff who could coach others in its use. NCS should be consulted about provision of additional packages and further training initiated. This initiative should be seen as complementary to a 'theoretical' course in Project Management.

27.7 QUALITY MANAGEMENT

Most staff at IOS are experts in their field. The publication rate of refereed scientific and technical papers is high; nevertheless this measure of quality of output has increased by 40% over the past five years and could probably improve further in management's view. It is expected that this improvement will continue at the new Southampton Oceanography Centre. Quality training will have to be handled in a sensitive way in translating it into the R & D environment but it could include the
following:-

Unit/team effectiveness
Flexibility of the system
Quality circles
Methods for continuous quality improvement
Expectations of customers
Advantages and disadvantages of current practice
The monitoring and evaluation of current practice

The need for further training in Quality Management should be reviewed during late 1995.

27.8 MARKETING

At present marketing strategies at IOS have proved to be extremely successful. However there is a need for all team-members of the four new units to recognise the importance of meeting the needs of customers and managing relationships with them. One way of ensuring that this aspect is effectively maintained is to build a session on marketing into team-working. Line-managers might like to obtain more information on ways in which sponsorship by commercial organisations could develop.

Senior marketing staff are already well aware of the need for strategic planning and driving negotiations forward so as to establish and identify marketing potential.

27.9 REFRESHER COURSES FOR MANAGERS

At present most staff have been exposed to some Management training. However it is apparent that some of the long-serving line-managers attended courses several years ago before the appraisal system was altered. Now the emphasis is more on empowering staff. Thus it would be appropriate for them to attend refresher courses. Courses should include the leadership and good communication. Also it would be appropriate to enhance management development by regular group discussion of problem areas and ways to solve them, a type of action learning (see Mumford (1991:12-13)).

27.10 OTHER COURSES

Other initiatives which should be enhanced in the future include Health and Fitness (particularly for male staff) and Safety training in the practical aspects of manual
lifting. One course has already been completed in Financial Management Systems at Southampton University but it is envisaged that further initiatives will be needed during 1995.

27.11 SUMMARY

In this Chapter I have discussed those aspects of staff development which could be enhanced during the next eighteen months. The need for initiatives in Team-leadership and Team-working is emphasised. Other requirements include updating in technology and computing, statistics, project and quality management and creativity training. Other suggested options include management refresher courses for long-serving senior staff.
CHAPTER 28

THE ROLE OF THE LOCAL TRAINING OFFICER AT COMPONENT INSTITUTES OF THE NATURAL ENVIRONMENT RESEARCH COUNCIL (NERC)
28 THE ROLE OF THE LOCAL TRAINING OFFICER AT COMPONENT INSTITUTES OF THE NATURAL ENVIRONMENT RESEARCH COUNCIL (NERC)

28.1 INTRODUCTION

All NERC Institutes have a designated local Training Officer who provides a link between NERC Establishments Division, the Joint Training Service, component Institutes and individual staff. In a few instances Training Officers’ time is devoted solely to staff development activities, however in small Institutes most tend to undertake the various training roles and tasks as well as their other regular duties, whether these be in science, technology, computing or other activities. The roles of the Training Officer are considered in depth in Chapters 7-15. A summary of the present roles of training officers are given below in terms of their potential effectiveness to the staff-development function.

28.2 THE VARIETY OF ROLES

In Chapters 7-13 I have provided an overview of the various key roles of the Training Officer as derived from my own experience and that of others. Much of the research was based on ethnographic observation. Information derived from other training officers employed by Research Councils and from job advertisements have confirmed my results.

Key roles included those of:- Needs Analyst, Manager of Training and Development, Programme Designer, Programme Administrator, Facilitator for Group and Organisational Development, Instructor, Instructional Writer, Trainer, Evaluator, Communicator, Counsellor, Marketer of Training and Consultant.

Tasks inherent within the key-roles as derived from my own experience, that of Pinto and Walker (1978) and from the experience of other Research Council Training Officers are listed in Chapter 7 of this thesis.

Although I undertook many of the various roles at IOS, in some instances a few were routinely undertaken by other members of staff. For example the role of Needs Analyst was also undertaken by line-managers, whilst those of Trainer and Programme Designer were routinely undertaken by JTS and by staff from other external organisations.

The role of Needs Analyst

Staff needs were assessed from discussions with all staff, ranging from top managers down to individuals. Assessments were also made from training requests given on
the 'training section' of appraisal forms and from daily discussions with staff. In some instances I acted as a training needs catalyst in that I presented opportunities for staff development of which staff may have been unaware previously. Generally this system worked well in that staff were made aware that, at any time they could discuss their needs and that there were various options open to them.

The role of Manager of Training and Development

This role was crucial to the staff development operation in that it was concerned with gathering resources and with matching training needs with supply. It involved the strategic and short-term planning, initiating, coordinating, monitoring and supporting of all staff development initiatives so as to ensure that organisational training policy was applied. This role was undertaken by most training officers employed by Research Councils. Other roles and tasks of training officers either contributed to this task or stem from it. A further responsibility was to develop a core-curriculum for all grades of staff.

Other roles

The roles of Programme Designer and Programme Administrator stem from that of Manager but the former two roles were more narrowly focused on specific initiatives while that of Manager tended to be broad-based. That of Programme Designer was concerned with designing specific programmes within the context of stated objectives and also with the sequence of content and activities. In contrast the role of Programme Administrator was seen as extremely important, complex and time-consuming in that it carried the (usually daily) responsibility of ensuring that staff development initiatives ran smoothly. The role of Trainer was also seen as important in motivating staff to learn. The role of Evaluator was crucial to the staff development operation in that future training was often based on evaluative data. In the role of Statistician there was often a need to provide published evidence of numbers and types of course run during each year. Some of the less frequently occurring roles included that of Facilitator for Group and Organisational Development, Instructor and Instructional Writer. This was because, in some instances, these roles were undertaken by line-managers and external trainers.

The role of Counsellor was described in this thesis and some practical examples presented. I emphasised that counselling for career development cannot be easily separated from counselling for an individual's personal life and that follow-up procedures to counselling sessions were required. The role of Marketer of Training and Development was concerned with publicising events, and in motivating staff to participate in courses, sometimes using business strategies to do so.
28.3 ALLOCATION OF TIME TO EACH ROLE

The role of Manager of Training and Development and Programme administrator were the most time consuming both jointly accounting for more than 50% of my time (over 400 hours per year). Most other roles each took about 5-9% of my time.

28.4 ROLE CONFLICT

Role conflict is attributable to the requirement to serve the main interest groups within the organisation whether these were line-managers or individual staff. It was not a great problem but none-the-less there were times when there was a need to find a solution in instances where there were clashes of interest between line managers and their staff. However at IOS this did not occur too often and indeed generally line-managers were very supportive to training needs where funding allowed.

There was also some conflict between the role of training officer and other job-related roles in terms of time allocated to each as discussed below.

28.5 ALLOCATION OF TIME TO THE TRAINING FUNCTION

Role overload in the job of Training Officer was apparent for much of the time in that because funds for training were restricted, ways had to be found to keep the costs of training low and so this could be very time-consuming. The problem was compounded by the fact that other important work scientific or administration work in addition to training-related work had to be done. Some line-managers were sympathetic to the problem, others less so.

Most Research Council Training Officers who responded to my survey, asking them about the tasks they undertook, said that they undertook a wide variety of tasks but were allocated very little time in which to complete them. I suggest that this aspect is investigated further. It is apparent that NERC has recognised it responsibility to staff in implementing its recently-agreed training strategy. It also invests a relatively large proportion of funds to the Joint Training Service. It is likely that in future it should subsidise its component Institutes so as to help to pay the salaries of its Training Officers.

28.6 QUALIFICATIONS FOR THE JOB

It is imperative for Training Officers to remain up-to-date with technical and professional information and to maintain an awareness of innovation in terms of learning techniques, new technology and other initiatives. Training Officers need to have a working knowledge of a information technology so as to store training data
and to run software for producing training statistics. Members of the Management Team, Line-managers, administrators and other staff at IOS regularly require statistical information to help them to make decisions about future training for their staff. Information on names and dates of staff development initiatives, the names and numbers of participants and costs for courses can be stored on computer.

I have put forward the role of Communicator in non-routine matters as an important aspect of the job of the Training Officer in that a proactive outgoing approach is needed. I suggest that this approach leads to incidental learning which can leads to new ideas and initiatives. Furthermore it may reveal to the Training Officer previously unknown information on staff attitudes and on the culture of the organisation. Training Officers play a central role within training-related communication processes which occur between staff, line-managers, project managers, tutors/trainers and the Director, within organisations.

Various Research Council Training Officers were asked which personal attributes were most needed by Training Officers. Those most often included were good communication skills and interpersonal effectiveness. It is also important not to breach confidentiality of information received in discussions with staff. Exchange of ideas with other training professionals provided a way of obtaining information on staff attitudes external to one’s own organisation. In the longer term a system of formalised training in ways to enhance staff development, perhaps leading to professional qualifications in HRD seems to be imperative.

28.7 THE VALUE OF TRAINING OFFICERS TO THE ORGANISATION

Training Officers promote cost-effectiveness of staff-development by organising in-house events and encouraging staff to provide informal and formal seminars or on-the-job training for their colleagues, such an approach helps to enhance productivity and job satisfaction in staff. In some instances they act as counsellors to colleagues or as consultants to colleagues in other NERC Institutes or to external organisations. They also help to maintain a high profile for the Research Councils’ Joint Training Service and promote the courses in which it has expertise. While maintaining confidentiality, they may provide a communications network between and within various Institutes sometimes providing top management with advice or information about how to promote job-satisfaction in staff (for example, rewarding good work). It seems that without the problem-solving capabilities of training officers, organisations would run much less smoothly. It is concluded that training officers are cost-effective.

In the following Chapter I discuss the benefits of staff development initiatives.
28.8 SUMMARY

28.8.1 The variety of roles of the Training Officer are discussed together with the allocation of time devoted to them

28.8.2 Role conflict and Role strain are emphasised and the view expressed that role strain could perhaps be alleviated by the subsidising of their salaries by NERC

28.8.3 Qualifications for the job of Training Officer are discussed

28.8.4 The value of training officers in promoting the staff development function, supporting the Management Team, acting as consultants to line managers and helping to reduce costs of training are outlined.
CHAPTER 29

THE BENEFITS OF STAFF DEVELOPMENT INITIATIVES
29 THE BENEFITS OF STAFF DEVELOPMENT INITIATIVES

29.1 INTRODUCTION

In setting itself broad objectives for organisational development (OD) in terms of improved strategy for management and for increasing income, IOS sought to set targets for staff. Most staff had achieved their goals by being resourceful, by participating in learning events and by helping others with on-the-job training.

IOS had been greatly helped by the willingness of staff from the Research Councils’ Joint Training Service to give customised courses locally so as to minimise travelling costs. The NERC Computing Service had also been instrumental in improving the standard of computing at IOS partly by providing support staff on-site and partly by making available to staff, computer-assisted learning disks. In response to top management team’s belief that IOS should be seen as a learning organisation, staff have been willing to contribute to self-help learning groups in computer software and associated topics.

The strategy of ensuring that all staff are involved to some extent in supporting and taking part in staff development initiatives has proved to be worthwhile. The benefits of this approach are discussed below.

29.2 ORGANISATIONAL PERFORMANCE

As discussed in Chapter 24, IOS as an organisation has benefitted from its staff development initiatives in a variety of ways, mainly in that it has been able to increase both productivity and income. It has also improved communication, improved health and safety and expertise in foreign language skills.

Improved quality and output of science and technology was achieved by provision of courses in presentation and writing skills, updating of computing techniques and by the setting of challenging publication targets to staff. Scientists and technologists also have been encouraged to present papers at national and international conferences.

An increase in income

The IOS objective was to improve its approach to marketing so as to broaden and strengthen its customer base. It began by developing a marketing strategy based on the principle that effective marketing is about finding new outlets for data and information and satisfying the needs of customers. Key marketing staff (usually experienced scientists and technologists) were given the opportunity to attend several different types of course which involved marketing. They were also encouraged to adopt a 'Marketing culture'. Courses on finance, marketing and negotiation were
variously sponsored by NERC, the Joint Training Service (JTS) and IOS. In addition the JTS Management 3 course also included an element of marketing. The success of this strategy was demonstrated by a doubling of external income from customers over a three year period. (Institute submission to the Science management Audit 1994:p.29). Courses in financial management arranged by NERC have ensured that managers are able to handle budgets and to make financial forecasts.

**Improved communications**

Morale and effectiveness were all improved by good communication. Going through the restructuring and relocation exercise during 1993/1994 had made it particularly important to focus on maintaining good communications within the Institute. As in any hierarchical organisation, much communication travels vertically up and down via line managers. Results of a (1991) questionnaire sent to all staff by the IOS Director, stating that he wished communication to be improved, confirming that communication throughout the Institute was less than ideal. This has been remedied in part by a pro-active approach by line-managers and project-leaders. The implementing of informal seminars and video-based management training in addition to the more formal management-awareness courses provided by JTS has also encouraged good communication. Video-based sessions tended to provide an 'Open Forum' for Staff so that perceived problems could be discussed. It also became usual practice for senior project leaders who together with the IOS Director, formed the Senior Management Team, to routinely keep their teams informed of developments within the organisation.

Another aspect of Communication which improved during 1989 to 1993 was concerned with Staff Reporting and Appraisal Interviewing. As shown in the preceding account, courses for Reporting Officers had been regularly updated so that virtually all of the latter were kept up-to-date with procedures for standardising staff assessments. During the past five years 'Open Reporting' gradually took the place of 'Closed reporting' so that all staff were given the opportunity to see their assessments on performance, and to discuss these with line-managers. Previously the standard of reporting had depended very much on individual Reporting Officer’s communication style and skills, some being more restrained than others in the provision of feedback to staff about the latter’s performance. This meant that some staff were informed of the content of their annual assessment, whilst others were 'kept in the dark'. The NERC/IOS sponsored series of 'Reporting' and 'Interviewing' courses has helped to remedy that effect. The more open system of communication has also helped IOS to improve its culture so that whereas, during 1988, staff were reluctant to attend courses, staff development initiatives were later seen as a necessary adjunct to career development.

**Increased use of information technology**

The role of NCS helped to ensure that all the computing systems at the Institute functioned to a high standard and that expert computer users e.g. scientists and
technologists were provided with daily support in the use of software. Additional training from external sources for less experienced staff ensured that almost all of the latter were now computer-literate by the end of 1993.

**Improvement in Health- and Safety-awareness.**

IOS had always sought to address the subject of 'Health and Fitness' for its staff by providing various courses for volunteers in 'First Aid' and 'Firefighting'. By 1990, it became clear that a more proactive approach was needed in communicating to staff 'Health and Safety Awareness'. This view was later confirmed by new European Community/Union legislation (1992-1994) which required organisations to provide staff with literature and/or specialised training-awareness lectures on selected health and safety topics. As a result of the IOS pilot scheme almost all of IOS staff had attended at least two seminars in the range of topics offered by the end of 1993, and, in the foreseeable future will continue to be presented with further opportunities to maintain their 'Health and Safety' awareness. The success of this approach was reflected in the low occurrence of accidents at work.

**French language training**

IOS fostered contacts with many other research organisations throughout the world, the staff of whom regularly exchanged information with scientists and technologists at IOS. Training in French conversation helped several top scientists and secretarial staff to improve their verbal and written communication skills so as to promote good social and work-based relations.

### 29.3 HELPING INDIVIDUALS TO DEVELOP THEIR FULL POTENTIAL

The evaluative data, derived from conversations with staff and by questionnaires distributed to staff who had participated in a variety of courses, suggests that at least 75% of staff who responded to questionnaires received some benefit from courses of various kinds as summarised below.

### 29.4 ADVANTAGES OF STAFF DEVELOPMENT INITIATIVES AS PERCEIVED BY THE MANAGEMENT TEAM

Questionnaires sent to the Management Team and other senior staff pointed to the benefits to the organisation provided by the curriculum, and to staff in their department, project or team-members. The following comments are based on their observations: -

a. Inexperienced staff may have better understanding of the problems faced by managers.

b. Staff development initiatives may give staff a better understanding of how
they contribute to the whole IOS/NERC machinery

c. Self-help groups are especially useful for trouble-shooting in areas of computing.

d. Presentational skills courses have helped staff give talks and presentations including those who are involved with giving television interviews.

e. Day-release courses in engineering/software have enabled staff to develop into knowledgeable engineers/engineering software experts.

f. Technical writing courses have been beneficial.

g. Microsoft project management courses have proved to be useful

h. Assertiveness courses have enabled staff to adjust and improve their behaviour.

i. The organisation is more evidently professional in appearance to people who perceive it from outside.

29.5 ADVANTAGES OF STAFF DEVELOPMENT INITIATIVES AS PERCEIVED BY INDIVIDUAL MEMBERS OF STAFF

Questionnaires sent to staff who had participated in a variety of courses yielded the following information:-

a. Health and Safety awareness

This type of training reduces the risk of aches, pains and injury and provides staff with techniques for the safe lifting of bulky goods. It also provides them with an awareness of their responsibility of health and safety as a manager. Furthermore safety films and talks for sea-goers promote safe working on ships. Health and Safety-awareness sessions also inform staff of whom to contact in the case of queries and provide information on fire hazards.

b. Management training

This has helped staff to perceive their own role and that of others with whom they work. It also enabled them to become more focused and organised, to get the best out of their staff or students and to maintain quality of output. Some staff also found management courses helpful in giving feedback to their own line-manager and in negotiating or compromising with colleagues so as to come to a mutual agreement.

c. Time-management training

This was seen by staff as helping them to prioritise and to schedule their week’s activities so as to avoid wasting their time on unimportant activities.

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d. Interviewing and Staff Reporting

These courses were perceived as important so as to maintain a fair staff appraisal system.

e. Technical/Computing Training

Staff saw these types of course as being crucial to their work. There was no question that almost universally they found them useful. Moreover many voiced the concern that there was insufficient of this type of training.

29.6 INCREASED COOPERATION BETWEEN STAFF AND MANAGERS

Written or verbal comments from staff suggest the following:-

a. Participation in courses may help managers and their staff to see each other's point of view.
b. Personal development courses and management courses promote interpersonal effectiveness and team-work in staff.
c. Video-based management-awareness sessions promote exchange of ideas and discussions which may lead to problem-solving
d. Informal and formal seminars followed by discussion may lead to the development of creative ideas and shared goals between team-members

29.7 INCREASED COOPERATION BETWEEN STAFF

From discussions with staff it seemed that participation in staff development initiatives in general :

a. Promoted an awareness in managers and staff of new technology within their fields of expertise.
b. Promoted better communication between all levels and grades of staff within IOS
c. Promoted better communication between staff at different IOS sites
d. Promoted better communication between IOS staff and NERC staff.
e. Promoted better communication between staff who are employed by the various Research Councils such as the Science and Engineering Research Council and NERC.
29.8 SUMMARY

In this Chapter I have discussed the many benefits of the staff development programme at IOS. I have shown that it promotes organisational development and that of individual staff in terms of increased output and skills.
CHAPTER 30

SUMMARY OF RESULTS
SUMMARY OF RESULTS

30.1 INTRODUCTION

In the previous Chapters I have provided an overview of the various key roles of the Training Officer as derived from my own experience and that of others. Information derived from other training officers employed by Research Councils and from job advertisements have confirmed my findings. In addition a comprehensive evaluation of the cost-effectiveness of the staff development function at IOS has been provided and my contribution as Training Officer described.

30.2 THE KEY ROLES OF THE TRAINING OFFICER

While my findings on the 15 key roles which I enacted as Training Officer confirm those of other researchers as described for training professionals e.g. Pinto and Walker 1978; McLagan 1983), and those of training officers employed by the Research Councils, I propose that an additional role of Communicator in non-routine events should be seen as an additional separate key role.

I have described 92 tasks inherent within 15 key-roles based on my own experience, that of Pinto and Walker (1978) and from the experience of other Research Council Training Officers. In Figure 7.0, I put forward a simple model to describe the key roles and discussed their inter-relationships. The role of Communicator was considered as essential to all the roles but that of Communicator in non-routine events was considered to be crucial to promoting and publicising staff development initiatives. The role of Strategist was involved with long-term planning and organisational development therefore it was placed at the beginning of the conceptual training cycle. I undertook this role jointly with the IOS Management Team (Chapter 7).

The role of Needs Analyst was outlined. I showed that staff needs were assessed from my discussions with all staff, ranging from departmental managers down to individuals. Formal assessments were also made from training requests written on the 'training section' of appraisal forms by staff and/or line-managers. The types of courses available to staff were summarised (Chapter 9).

The role of Manager of Training and Development was seen as crucial to the staff development operation in that it was concerned with the planning and implementation of staff development programmes so as to match training needs with supply. Indeed, I showed that this role took up approximately 28% of my time and was concerned with the broad planning, initiating, coordinating, monitoring and supporting of all staff development initiatives so as to ensure that organisational training policy was applied.
I emphasised that this role was undertaken by most training officers employed by Research Councils. Other roles and tasks either contributed to this task or stemmed from it. I gave examples of tasks including overseeing a budget and liaising with interest groups. I stressed that a further responsibility was to develop a core-curriculum for all grades of staff. I concluded that the roles of Programme Designer and Programme Administrator stem from that of Manager but the former two roles are more narrowly focused on specific initiatives while that of Manager is broad-based. (Chapter 10).

The role of Programme Designer, was concerned not only with designing specific programmes within the context of stated objectives but also with the sequence of content and activities. In contrast the role of Programme Administrator was seen as extremely important, complex and time-consuming in that it carried the daily responsibility of ensuring that all staff development initiatives ran smoothly. The role of Trainer was also seen as important in motivating staff to learn and in helping them to meet their objectives. I pointed out that I undertook this latter role infrequently because this was often undertaken by external tutors or trainers. The role of Evaluator was considered crucial to the staff development operation and I gave an example of a comprehensive exercise based on IOS (Part IIB). The role of statistician was spent in maintaining computerised records and producing statistical data. I stressed that some of the less frequently occurring roles included that of Facilitator for Group and Organisational Development, Instructor and Instructional Writer. In some instances, these roles were undertaken by line-managers and external trainers (Chapter 11).

To some extent role conflict and role strain which I experienced were attributable to the requirement to serve the various different interest groups within the organisation. Furthermore the widely varying aspects of the job resulted in role fragmentation. Reasons given for role strain included lack of time and funds and the need to work with several of my direct line-managers who had different interests and time schedules.

30.3 EVALUATING THE COST-EFFECTIVENESS OF TRAINING AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES (IOS)

Having put into operation the staff development function, one of my major tasks was to evaluate it (Chapters 16-29). During 1988-1993 many changes occurred within IOS. The organisation sought to help its staff to adapt to change by enhancing its capabilities as a learning organisation, by improving internal communications and by empowering its staff.
30.3.1 Benefit of Staff Development to the Organisation

With regard to organisational development, the majority of staff and managers felt that IOS and NERC benefit to a moderate extent by participation in courses. The present research data on cost-effectiveness suggests that the pro-active programme of staff development and training for all IOS staff, run during 1988-1993, has paid off. The success of the IOS strategy for staff development was demonstrated by a doubling of external income from customers over a three year period, increased publication rates, improved use of information technology, standardisation of the staff appraisal system, improved health- and safety-awareness and maintenance of an excellent standard of quality. The more open system of communication also helped IOS to improve its learning culture so that eventually staff came to expect to participate in training events and saw these as a necessary adjunct to career development.

The success of the staff Development Strategy depended on the resources available to the organisation as discussed below.

30.3.2 Resources available to IOS

A large proportion of management training was provided by the Research Council's Joint Training Service (JTS). Evaluation data provided both by participants from IOS and from other NERC Institutes indicated that generally it was of good quality. NERC Computing Service (NCS) helped to ensure that all the computing systems at the Institute functioned to a high standard and that expert computer users e.g. scientists and technologists, were provided with daily support in the use of software. Staff were pleased with the level of NCS support but it was recommended that prior to relocation to Southampton University there should be some discussion with NCS about the level of formal training in computing to be provided. The loan of Computer-assisted-learning disks by the NCS regional Training Officer were of help in providing basic training. The IOS self-help computing software learning groups were also a potentially useful asset to IOS although not utilised fully by staff.

NERC Finance and Contract departments provided regular courses. It was recommended that 'Contracts' workshops should become an annual occurrence at the Institute. The IOS Library and the Research Councils' Joint Library Service provided a valuable facility so as to ensure that current journals were made available to scientists, technologists and managers.

External courses in advanced computing techniques were comparatively expensive and this factor tended to inhibit staff applying for them. The Rutherford Appleton Laboratory which was run by the Science and Engineering Research Council sometimes offered less expensive courses and it was recommended that staff should continue to apply for them. More elementary computing courses were found to be readily available from local colleges or commercial companies at competitive fees.
Staff were an important asset in participating in and helping to implement the training programme by giving seminars and coaching others. At least two-thirds of staff provided on-the-job training for colleagues and students, amounting to an average of 4-6 hours per month each. Long-term work-experience students were also instrumental in teaching other students. Scientists and technologists readily attended conferences and other professional meetings so as to problem-solve and enhance their skills.

At present project leaders have to provide funds for training which is not otherwise sponsored by NERC, NCS or JTS. It was recommended that a system of funding should be devised so that funds for vocational/computing training are not in direct competition with those for research projects.

30.4 THE CURRICULUM

Vocational, computer and managerial training were included in the broad curriculum. Questionnaires sent to a sample of senior staff point to the many benefits, provided by the curriculum, to the organisation and to staff in their department or to team-members. Important aspects mentioned, include those of helping staff to understand the points of view of others, improved managerial, presentational, writing and technical skills. The Institute was also perceived to be more professional in appearance in 1993 than previously. Thus the broad curriculum offered to all staff seemed to be well-balanced and to work well, though several managers and their staff expressed concern about lack of funds for vocational and computing training. Staff were quick to inform myself as Training Officer if subjects perceived to be important were omitted from the curriculum or deferred. Thus the training function tended to be both student-centred and organisation-centred.

30.5 ACHIEVEMENT OF INDIVIDUAL OBJECTIVES

The evaluation data suggest that most staff development initiatives were cost-effective in that they helped staff to achieve their training objectives. There was little evidence that expensive courses were necessarily better than the more inexpensive. The numerous brochures and mail shots received annually provided useful sources of information about which types of courses or seminars were available in the market-place and details about their cost.

Evaluation data suggest that at least 75% of those who responded to questionnaires received some benefit from courses of various kinds and were able to use it at work, though it was difficult to measure the amount of learning which occurred in precise terms. While formal seminars were usually attended by specialist staff, informal seminars seemed to be popular with the less experienced. The informal 'Young at Heart' seminars produced especially to promote the interest of less-experienced staff
were very successful. Formal and informal seminars were of great value and it was recommended that staff should be encouraged to attend them through good in-house publicity.

Most work-experience students found their practical work at IOS to be valuable, several later took up careers in the field. Most undergraduate and post-graduate students, supervised by IOS staff, completed their courses successfully.

IOS sought to address the subject of 'Health and Safety (H&S) for its staff by providing various courses for volunteers in 'First Aid' and 'Firefighting'. It was successful in providing staff with an awareness of their responsibility as managers of health and safety. It informed about hazards and reduced the risk of injury. Furthermore safety films and talks for sea-goers promoted safe working on ships. As a result of the programme almost all of IOS staff have attended at least three seminars in the range of H&S topics offered. The success of this approach was reflected in the low occurrence of accidents at work. However evaluation data suggest that this type of video-based training is sometimes forgotten by some staff and so it was recommended that refresher sessions need to be run on a regular basis.

Management training helped managers to perceive their own role and that of staff and colleagues. It also enabled them to become more focused and organised, to get the best out of their staff or students and to maintain quality of output. The JTS 'Management 1' course, the most elementary in the series, provided information in basic management skills of use to all individuals whether they had staff or not. However, individuals were sometimes reluctant to participate in them especially if they did not have staff to manage. It was suggested that it would be appropriate to change the name of the JTS 'Management series' so as to avoid pre-conceived ideas by potential participants about the relevance of such courses. Some staff with domestic responsibilities found it easier to attend one of the special non-residential management courses run by IOS.

Time-management training helped staff to prioritise and to schedule their activities so as to avoid wasting time. Interviewing and Reporting/Appraisal courses (which were ongoing) were important so as to allow NERC/IOS to continue to maintain a fair staff appraisal system. Technical and computing training was seen by staff as being crucial to their work. There was no question that, almost universally, staff found such courses helpful. There remained the concern of staff that there is insufficient of this type of vocational training. Training in French conversation helped several scientists and secretarial staff to improve their verbal and written communication skills so as to promote good social and work-based relations.

In considering areas of staff development which could be enhanced it was considered important for the Management Team to take into account the future needs for updating staff expertise in marine science and technology. It was emphasised that future vocational training should focus on the following initiatives:- Technology, Statistics, Advanced Computing, Team-building, Team-working
(including Communication), Creativity, Project Management, Quality Management and Marketing.

Staff were well aware of the necessity to provide top quality data and information. However it was recommended that further seminars in quality-related training and the formation of quality circles would enhance staff attitudes to quality of output and might help to reduce costs at IOS even further.

30.6 METHODS AND APPROACHES TO LEARNING

Evaluation of the methods and approaches used in the implementation of the training function, as investigated partly by the present research and that of Gross (1993 - JTS Management courses), suggests that most are well-received. Factors which helped or hindered learning were enumerated. It is not clear whether the use of process learning/discussion groups is wholly effective. Distance learning packages for undergraduates tended to cause some problems for sea-goers because of the rigorous time-tableing of assignments.

30.7 COSTS AND LEVELS OF TRAINING

During 1993, staff received an average of 3.6 training days per year on formal courses plus an average of 1.5-2 days for attending seminars and conferences. Most of the costs for staff-development initiatives were estimated as they were relatively difficult to assess with total accuracy due to the complexity of the costing system. The basic cost of formal courses amounted to 1.5-2% of the IOS salary bill but if participant's time was taken into account this amounted to approximately 5.5%. If costs for accommodation and travel and support staff were added this amounted to approximately 8%. The most successful formal short courses in terms of their cost and value to the organisation included 'Technical Writing', 'Interpersonal effectiveness', Business French Conversation, and the JTS-run Management II (Group Management and Teamwork). Costs of JTS courses were moderate while University-run courses for senior managers were one and a half times more expensive.

30.8 THE ROLE OF LINE-MANAGERS

Line-managers were shown to be important to the training function. They provided input into staff development programmes by assessing the needs of staff, helping to define training objectives and sponsoring or coaching staff so as to update their skills. Management courses which many attended included sessions on coaching skills. There was no evidence that lack of funds prevented them from recommending training for their staff, although they sometimes commented on the difficulties of finding such resources. It is not clear whether they were aware of the precise
contents of courses or the best means of learning as they frequently consulted myself as Training Officer on such matters.

While it was relatively easy for line-managers to monitor the success of vocational, computing or personal development courses in which their staff had participated, it was not clear as to the extent to which they were able to monitor the effects of such management training. They can be of great help to staff by facilitating the transfer of learning to the work-place and should be encouraged to do so.

30.9 THE BENEFITS OF TRAINING IN PROVIDING A COMMUNICATION NETWORK

Participation in courses helped managers and their staff to see each other’s point of view and to get to know others better. JTS-run Management 2 courses tended to promote interpersonal effectiveness and team-work in staff. It was recommended that staff should be encouraged to participate in these. The more expensive University-run 'Interpersonal Effectiveness' course was found by almost all participants to be excellent in helping them to manage staff.

Video-based management-awareness sessions run by myself as Training Officer promoted exchange of ideas and discussions which in some instances led to problem-solving. Informal and formal seminars followed by discussion provided a forum for exchange of creative ideas and for updating colleagues on current IOS projects. It was suggested that more team-based management-awareness sessions to improve team-leadership, team-building and team-working are needed in 1994/1995 when restructuring of IOS occurs. In some instances young staff tend to be afraid to put forward their views to their line-managers. It was suggested that this aspect could be improved by team-based creativity training. The proposed relocation to Southampton Oceanography Centre in 1995 should make it easier for whole teams to meet more often than in the present situation where staff work at various different sites.

30.10 FORMAL QUALIFICATIONS

During the 1989-1994 IOS gave its staff the opportunity to participate in a range of activities so as to improve themselves and their work-related skills. It has provided a wide range of training which now needs to be consolidated. Many staff do receive some type of formal certification on completion of their courses i.e. undergraduate, post-graduate, sea-survival, boat-handling and some technical courses. Ways should be found to provide formal qualifications for management courses.
THE TRAINING OFFICER AS A RESOURCE

The roles which I have undertaken as Training officer as described in preceding Chapters were essential to the smooth-running of the staff development programme and were particularly important to staff so as to ensure that there was a balance between organisation-centred and student-centred provision.

All the roles which I undertook involved some degree of routine communication with staff and managers. However my findings suggest that communication in non-routine events was crucial so as to maintain an effective approach to the job. A proactive, communicative approach was considered to be extremely valuable because it allowed me as Training Officer to 'keep a finger on the staff development pulse' mainly in terms of determining the current culture of the organisation and attitudes of staff.

Some roles were undertaken by other staff at IOS. For example line-managers usually assumed the role of Task-analyst. My role of Statistician was necessary as line-managers, administrators and other staff at IOS regularly required statistical information to help them to make decisions about future training for their staff.

The system of analysing the needs of staff by formal and informal discussion between the Training Officer, the Management Team, line-managers and individual staff worked well. It was emphasised that the annual staff report was but one method for assessing staff training needs and that needs analysis should remain an ongoing process throughout the year. It was found that individual staff often knew precisely their vocational training needs, though they were sometimes less clear about personal development or managerial needs.

Management-awareness video sessions, run by myself as Training Officer were found to be valuable to managers by bringing such problems perceived by staff 'into the open' and in giving all staff, whatever their grade, opportunities for discussion.

In Part III of this thesis I shall discuss methods which I employed for the research and further specific aspects of the roles of training officers. Also I shall focus on the factors which contribute to a cost-effective staff development function. Other aspects which will also be discussed are broader issues such as the debate which focuses on the conceptual separation of the 'Education' and 'Training' functions.
PART III

Implications of the Research to Training Officers and to Organisations
INTRODUCTION TO PART III

In the research described in Chapters 7-15 I have described the following:

a. The various roles I undertook as the Training Officer at the Institute of Oceanographic Sciences (IOS), a component Institute of the Natural Environment Research Council within the United Kingdom.

b. The circumstances in which I, as Training Officer, enacted various roles and contributed to the cost-effectiveness of staff development.

In Chapters 17-30, I have also evaluated the cost-effectiveness of the staff-development programme at the Institute of Oceanographic Sciences (IOS) on which I based the whole case-study.

The following discussion is divided into two aspects of the research. Part I (Chapter 31) deals with the methodology which I employed, the education and training debate, aspects of culture within organisations, the performance of role and the attributes needed by Training officers.

In Part II of the discussion (Chapter 32) I elaborate on the training programme at IOS and highlight factors which contribute to an effective training function, the cost-effectiveness of courses and the way in which training officers contribute to cost-effectiveness. I also examine their changing role, the changing training needs of staff and implications for the future. An overview of methodology and results is given in Chapter 33. In Chapter 34, I discuss areas which may benefit from further research.

Concluding remarks are given in Chapter 35.
CHAPTER 31

DISCUSSION - PART I

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31 DISCUSSION - PART I. THE ROLE OF THE TRAINING OFFICER

31.1 INTRODUCTION

In the research described, I have investigated the following:

a. The various roles I undertook as the Training Officer at the Institute of Oceanographic Sciences (IOS), a component Institute of the Natural Environment Research Council within the United Kingdom.

b. The circumstances in which I, as Training Officer, enacted the various roles.

c. The cost-effectiveness of the staff-development programme at the Institute of Oceanographic Sciences (IOS) on which I based the whole case-study and my contribution to this as Training Officer.

It is hoped that the account of the various roles which I undertook and the practical events surrounding them as well as my evaluation on the cost-effectiveness of education and training presented in this thesis may provide up-to-date data and information of use to training professionals, employers and employees and will provide a basis for enhancing the strategy for staff training and development at IOS and within the Research Councils.

In this Chapter (Part 1 of the discussion) I elaborate on the salient aspects of the research including methodology, performance of role, attributes of training officers and their value to organisations, the 'Education and Training' debate and on the importance for organisations to adopt a learning culture.

31.2 METHODOLOGY

In conducting this research, basically I took an ethnographic approach incorporating naive enquiry with orthodox ethnography. Implicit in my approach was the assumption that the enquiry and observation should disturb as little as possible the interaction and communication in the setting being studied. The data and information presented in this thesis resulted from my interpretation of the daily events which occurred in my job as Training Officer and of other interest groups involved with training. Furthermore the evaluation data arose not only from my observations but also from those of participants in the staff development process.

Throughout the research, I remained aware that neither myself as researcher nor any of the people involved could remain neutral to the various social situations encountered. For example, the events which I recorded were interpretable in a variety of ways. In contrast to the scientific method, the method of naturalistic
Inquiry, which I employed, did not oblige me to have formed certain conceptions or theories about the field of interest beforehand. Essentially observations on individuals, groups or communities were made in the context of the immediate social situation being studied and pursued beyond this context when necessary. Although this method of enquiry went some way to establishing a basis for innovative ideas, I accept that, as with most other forms of research, there were limitations to it partly because it focused on a limited setting. On the other hand some of the observations were covert and so did not interfere with my daily activities or that of other staff. In addition a more overt form of research was conducted by means of questionnaires and comments elicited from staff which helped in the research into cost-effectiveness.

As Training Officer at the Institute, I needed to ensure that educational practice was improved where necessary, thus there was a requirement for me to include an element of modification to existing action. In implementing the programme I was placed in a unique position as researcher and trainer not only to observe but also to alter (albeit in a relatively small way) an educational situation and later to re-observe. To some extent this formed a type of 'action research' in that it was unique to IOS and sometimes resulted in further research actions.

Although providing accurate data of use to the various government-run Research Councils, the data may not be appropriate for empirical generalisation without further enquiry into the staff development function throughout a wide range of commercial and non-commercial organisations. However the present study is strengthened in that a large number of participants in the staff development programme contributed to the research, partly by making impromptu remarks relevant to the study and partly by completing questionnaires.

When interpreting the results I have attempted to take the relatively deterministic approach in recognising that the observations which I recorded within the training function were determined in part by the culture of the organisation, the culture of individuals, their goals and their social norms, a situation previously discussed by Heron (1981:21). The fact that relocation of the Institute was to occur a year or so later probably influenced some responses by staff. On the other hand in the changing world economic situation any era chosen for the research might have been problematic.

In some instances the relatively objective methods which were used in this study to supplement the ethnographic approach proved to represent catalysts for new outcomes which could themselves be viewed subjectively. For example, one small part of the present research programme entailed sending out a questionnaire on whether there was a need for a computing course. As discussed in Chapter 6, the very act of sending out those questionnaires sometimes resulted in verbal comments from staff which yielded a different type of information than that originally expected.
It is acknowledged that the information contained in my diary some of which is presented in this thesis, arose from my own interpretation which to some extent were subjective. At the start of the research project, I naively thought that it would be possible to:

a. Record every daily activity in my diary;
b. Record many conversations verbatim.

Neither event proved possible. This was partly because, the job of Training Officer was extremely time-consuming and so there was not the time to record every conversation or every event which occurred during my daily activities. Often short conversations with staff were remembered almost exactly as they had occurred for several minutes after the event, however, before I could make a verbatim record, there were usually interruptions from various sources i.e. from the telephone or from other staff. Thus most entries in my diary were made at least fifteen minutes after the event, and in some instances, at least a day later. On the other hand I was able to research and record the various comments and events over a relatively longer period of time i.e. for several months longer than I had originally expected, and to collect relevant documentation so as to put my findings into the context of events and milestones within the organisation.

In undertaking a content analysis of letters, memoranda, discussions and observations, I attempted to be as objective as possible, however it is acknowledged that one person’s perspectives in coding and interpreting the data could differ from that of another. None-the-less, most of the categories of the roles which I describe in this thesis, broadly follow those reported by the American Society for Training and Development, (McLagan 1983:31) though, as discussed in Chapter 14, I put forward the view that the roles of Communicator especially in non-routine matters and Counsellor (especially for retirement/redundancy) are more pronounced than had previously been noted. I suggest that these latter roles help staff in organisations to cope with the rapid changes which are occurring in the work-place.

As I collated my research data and information and established them in some presentable order, a variety of observations and further questions came to mind which I present below. Next I shall discuss aspects of role which I feel to be profound.

31.3 SUPPORTING THE LEARNING ORGANISATION

It may be argued that the responsibility of training officers within research, government or commercial organisations is to support not only top management but also the rest of the workforce in promoting a 'learning' culture. As Kenny and Reid (1986:25) suggest, the philosophy of training varies in individuals and has foundations in social, educational, economic or cultural origins. At IOS some individuals placed great value in developing their skills. Many individuals,
particularly professionals and other skilled staff were well used to learning informally and formally by a number of different methods and from many different sources including local colleges, higher education institutes and other commercially-orientated organisations. Thus the 'corporate classroom' was seen as yet another means of gaining further education and training. Indeed as Marsick and Watkins (1990:206) point out, the benefits of staff development and experiential learning are great in terms of increased earning power and everyday 'know-how'. On the other hand, there were other individuals at IOS who initially (in 1990) failed to recognise that staff development initiatives could help them to develop further skills. There were very few occasions when I encountered problems in supporting the learners (i.e. the staff) and the organisation long-term, though there were a few short-term problems.

31.4 THE 'EDUCATION AND TRAINING' DEBATE

I conclude that 'Education', 'Training' and 'life-experiences', including work-related experiences, represent a continuum which leads to staff development and that these concepts 'blend' with no sharp divisions. As far back as the 1970s, Tough (1979:1-5) showed that approximately 90% of adults per year were engaged in self-managed learning projects of various kinds and today there is no indication that this situation has changed drastically. Staff learn from many different sources including the media, travel, conferences, seminars, computer software and formal courses at work and external to it. All of these sources will impart information on various aspects of physical, cognitive and attitudinal skills of immediate or later use to people on- or off-the-job and it makes little sense for organisations to separate the 'training' aspect from that of 'education'. For example in research institutes, at a simplistic level, staff can be 'trained' to use computer software by learning to press only the correct keys but in today's fast growing technology and corporate competition this approach is outmoded and will not allow them to make progress. For example, they need to be able to make decisions about which software is best for a given task, how it should be run and what to do if the system fails. They need to know how to get on with other colleagues and to work in teams. Indeed, I support the argument of Peterson (1992:81-83) who suggests that lifeskills, education and training provide a continuum and also Kenny and Reid (1986:9) who suggest that Education and Training should be seen as 'complementary parts of the same process'.

31.5 ROLES ASCRIBED TO TRAINING OFFICERS

Most of the roles ascribed to training professionals and described in detail by Pinto and Walker (1978) and McLagan (1983;1989) which I discussed throughout Chapters 7 to 15 were very necessary for the effective completion of the job of the Training Officer. In addition I suggest that, during the period of research the role of 'Communicator in non-routine matters' was particularly important partly because so many changes to the organisation and its staff were occurring. Thus as new and
unexpected events occurred, a proactive approach coupled with efficient communication pathways was necessary. This relatively high-profile 'Communication-based', problem-solving role required of me during the period of my research may not have proved so prominent in more affluent and less changeable eras when there might have been less necessity to actively search for new resources. In a sense many of my actions were determined by the events at IOS and the Management Team's strategy in coping with them.

The key roles were very diverse and in some instances impinged on each other. For example, in some instances it was difficult to distinguish that of 'Manager of Training and Development' with that of 'Programme Administrator' in that the former role was more broader based than the latter but some of the tasks were similar. Thus in some instances there was no clear boundary between these two roles. During 1990-1993 the emphasis on my duties tended to change. For example during 1990 as manager of Training and Development, I set up administrative systems for recording the amount of training provided while in 1992 greater emphasis was placed on acquiring resources either free of charge or at reduced cost. Key roles are shown in Table 31.1. Those shown with an asterisk were especially important to the smooth-running of the training function.

<table>
<thead>
<tr>
<th>Table 31.1 Roles which I undertook given in order of importance to the organisation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those shown with an asterisk were particularly important to the personnel</td>
</tr>
<tr>
<td>Roles which I undertook</td>
</tr>
<tr>
<td>Training Officer</td>
</tr>
<tr>
<td>Manager of Training and Development</td>
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<tr>
<td>Programme Administrator</td>
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<tr>
<td>Communicator</td>
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<tr>
<td>Trainer</td>
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<tr>
<td>Group Facilitator</td>
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<tr>
<td>Individual Development Counsellor, Needs Analyst</td>
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<tr>
<td>Statistician</td>
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<tr>
<td>Evaluator</td>
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<tr>
<td>Strategist</td>
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<tr>
<td>Programme Designer</td>
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<td>Marketer</td>
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It seems that roles and competencies of training professionals appear to be undergoing some changes possibly due to an expansion of the training profession and that further new roles will be needed. For example, I found that counselling for personal and career development was a common adjunct to the more traditional roles. Now that competence-based learning is being promoted within the United Kingdom it is likely that a new role of 'Assessor' will emerge, possibly as a requirement following the implementation of National Vocational Qualifications. I also noted that in addition to my role as 'needs analyst', I was also a 'needs catalyst' in that in my role as marketer of staff development initiatives, I sometimes presented to individual staff, new concepts of their likely needs and put these into
action where funds permitted. The various roles which I undertook were broadly similar when working with the different occupational groups who worked at IOS, i.e. scientists or administrators of various grades, probably because the Management Team and myself as Training Officer, strove to work towards an organisational culture which emphasised that equal opportunities for staff development would be available to all. The situation might have been different in an organisation with a more rigid hierarchical structure.

With regard to the tasks that I described, I emphasise that my interpretation and descriptions of them are relatively simplistic, but I suspect that to have broken tasks down further, to have related them to the large number of competencies relating to National Vocational Qualifications as outlined by the Training and Development Lead Body, would have been beyond the scope of this research topic.

Next I shall discuss the concept of role as I perceived it when undertaking the job of Training Officer.

31.6 PERFORMANCE OF ROLES

I tend to support the argument of Turner et al (1962) who suggest that individuals are expected to perform roles which society itself has created. Moreover I agree with the views of Pettigrew et al (1982:6-12) who take the view that each role-occupant brings to the position his/her own values, perceptions and experience.

In undertaking the various roles, I attempted to conform to the expectations of the Institute Management Team and the staff. I conformed to my own perception of a 'Training Officer in that I attempted to remain approachable to all staff whatever their level of seniority. However I had no way of knowing if this was acceptable to the 'Relevant-others' (as described by Turner, 1962). There was a suggestion that it was acceptable, in that during 1993, I was asked to take on an additional duty of part-time Welfare Officer by one of my colleagues at the Wormley site and with whom I often had informal conversations and who told me that I would be a popular choice. I agreed to do so. On the other hand several weeks later, one person at the Chilworth site suggested that perhaps a more junior person should be asked to undertake the task. The inference was that I was too senior for the relatively young staff there. Thus there were different perceptions of my suitability for this role by various people.

I believe that my behaviour as Training Officer was sufficiently generalised to be viewed as consistent with what was required of the job, indeed there was no evidence from anyone that it was not. But it was not clear from my research whether the various perceived roles as discussed in Chapters 7 to 12 were similarly perceived by relevant-others. For example in the descriptions given of my role as 'Counsellor', I was also a colleague and a friend of the staff concerned. On the two separate instances described, I saw myself as a 'Counsellor' but the 'relevant others' may
have viewed me as a 'friend' or as a 'colleague' rather than a counsellor. Certainly within the sessions described I was overtly interacting with each individual, a concept discussed by Turner et al 1962:00 but to enquire into their perception of me at that time would have disrupted the session.

In most of the roles which I undertook within the organisation, I was expected (understandably) to produce some type of end-product by 'relevant-others'. For example the Joint Training Service (JTS) staff expected me to provide them with predictions of numbers of participants for the courses which they sought to provide (this was in my role as 'Manager of Training and Development'). The Director required statistical information (my role as 'Statistician') and staff expected me to be able to give them times and dates of courses in which they were to participate (my role as 'Programme Administrator') they did not necessarily recognise the separate roles which I enacted as such, indeed they almost certainly viewed me just as a 'Training Officer', a colleague or a friend depending on their perspective. Indeed the group of staff who had asked me for support in getting them funds for training at a time when funds were barely existent might have viewed me only as a supporter of their cause. In one sense for them I was but one channel used as a way of communicating with top management so as to reach a compromise and to problem-solve. Groups which turn to someone as compromiser will not have an exact idea of which behaviour the role-enactor might pursue (see Turner 1962:34).

In the particular example given, I did enact the role of 'Communicator' but equally I might have enacted the role of 'Counsellor' and helped the group concerned to find their own way of solving the problem.

In reflecting on my own position at IOS during the period of this research, several ideas about role come to mind. First of all it seems that role is sub-cultural but that it is also more than this. To me it presented a framework within which I acted within given situations. Although none of my roles was prescribed, I needed to ensure that my behaviour was acceptable to the culture of the organisation as a whole (see discussion by Handy, (1986:292-3) who describes cultures in organisations as either 'task', 'power', 'person' or 'role' oriented. Had I not acted in a manner which was considered acceptable to staff and the organisation, I am quite sure that I would have been asked to alter my behaviour. For example I know of one person who in the course of carrying out a relatively high-profile role, acted impulsively and somewhat irrationally and who eventually was asked to relinquish that role because the behaviour in question caused disruption of normal work activities (for reasons of confidentiality that role cannot be named). Thus in this respect I provide support for Turner's (1962:24-26) argument that role may play a functional aspect within the social system.

From another perspective, I, as the role enactor, knew which behaviours to exhibit without anyone having told me what to do because I had become culturally adapted to IOS. For example my cultural perspective decreed that, as training officer it was quite all right for me to take a proactive stance, to leave my office and go to talk to anyone of any grade. Furthermore it was quite all right to laugh, to visit the pub
on Friday lunchtimes with others from IOS and to discuss staff development initiatives, a new oceanographic instrument, new research findings or anything other topics of conversation there. It was not all right to breach confidentiality of any kind including that with regard to training matters. From this viewpoint, my behaviour within the organisation became a working compromise between what I perceived to be my various roles and to the extent I was able to remain flexible. Because IOS tended to be rather an informal organisation, I was given a relatively free hand in how I ran the staff development programme. On the other hand because there was an acute shortage of funds during 1992 and 1993, my resources were reduced and I had to make contingency plans for staff development initiatives.

I consider that role carries what may be an accurate or inaccurate descriptive element. In this thesis I have used the concept of role as a type of shorthand to describe my behaviour as Training Officer. For example, many of the roles which I enacted as training officer were previously described by McLagan (1983:31-33). From the descriptions she gave, I was made broadly aware of what they entailed but I placed my own constructs on them both as to the behaviour expected and of their boundary management. My findings support Turner’s 1962 argument that, although role is a process involving interaction, it has come to be seen as a refinement of conformity theory. With regard to role-taking, in broad terms, I tended to understand and conform not only to the IOS culture but also to that of western society in that I was able to follow McLagan’s 1983 descriptions.

I became a role-maker because I was able to visualise several roles which did not fit neatly into previously described concepts. In this instance I did not follow, blindly, the adherence to custom in all aspects of the staff development programme, rather I attempted to be innovative. For example in describing the role of Communicator of non-routine events, I was role-making. Indeed I had perceived the non-routine aspect of communication to have an important function in allowing me to follow paths which might lead to entrepreneurial and innovative activity.

31.7 ROLE BOUNDARY AND MARGINALITY

Pettigrew et al (1982:13-18) showed that some of the key issues which affected the performance of training officers were:-

a. Their fit as training professionals within the existing organisational culture.

b. Their approach to boundary management.

c. Their power and authority as dictated by the resources made available to them.

They suggest that these are key issues of which educational and commercial organisations should remain aware when evaluating the performance of training officers.
With regard to boundary management, in the course of my job as Training officer, I tended to build up relationships with various key staff at IOS and within the Natural Environment Research Council (NERC) and JTS, mainly by attending meetings. I do not believe that it provided me with any special credibility or power as such but it did provide me with resources and a possible basis on which to exchange services between IOS and the other NERC-sponsored bodies. From the point of view of the Pettigrew et al. (1982:16) perception of role types, I suspect that I came into the category of 'Provider' and also 'Change Agent'. The latter to a lesser extent. My primary aim was to provide training initiatives for staff on a daily basis. Although conceptually I aimed to act as change agent, on many occasions the routine work-load was so time-consuming that I tended to act mainly as 'provider'. Thus my role of 'Change agent' tended to remain secondary in my job though this was not necessarily because I perceived it to be placed in that position. Rather it was due to lack of time to promote it as much as I would have wished. On the other hand I knew that the roles of Change Agent were also being undertaken by members of the IOS Management Team.

I found that it was necessary to retain some element of marginality and neutrality when undertaking daily activities. A situation sometimes arose when a line-manager and a member of his/her staff had different views about the latter's need for training. It makes no sense for the training officers to become entangled in individual clashes of personality and ideals because, in such a situation, failure to maintain a neutral stance might prejudice their credibility to the detriment of the training function as a whole. On the other hand where individuals have a real need for training and development which is not being met, then training officers have to find a way to solve the problem, reducing elements of marginality and neutrality where it is perceived to be necessary. In this respect good boundary management may help to break down barriers to participation in staff development.

31.8 ROLE CONFLICT, ROLE OVERLOAD AND ROLE FRAGMENTATION

In describing the roles above, Pettigrew et al. (1982:12-14), suggest that a major issue is the management of role and the extent of the fit of the person within that role. My position at the Institute of Oceanographic Sciences (IOS) was jointly that of biologist and that of Training Officer (each for 19 hours per week). In turn each of these positions carried roles or behaviours which were mutually acceptable to me as the role enactor and to my colleagues. I was expected to play my various roles or tasks overtly, within a certain way and to a certain level so exhibiting certain behaviours. For example, as biologist I was expected to act as a writer, as an ecologist and as a consultant. As a training officer, I was expected to act in such roles as Programme Administrator or Evaluator.

Although I enjoyed both jobs, there sometimes occurred an element of role-strain in that the work overload within a single task, single role or dual roles tended to occur because of lack of time or lack of funds. Thus I had to take extreme care that
overloading of my time and energies had not resulted in errors either in my role as Training Officer or as Biologist. For example on one occasion I had to miss a previously-arranged biology meeting because four of the twelve potential participants in an expensive on-site 'technical writing' course which I had organised, had dropped out without warning due to sea-going commitments and I had to spend time finding replacements for them. Although my respective 'Training' and 'Biology' line-managers were excellent in supporting both roles, they too must have experienced some difficulties in successfully competing for my time when I was needed elsewhere to perform urgent tasks. Organisations should remain aware of this aspect and do what they can to reduce role strain and overload in Training Officers.

In other instances, I sometimes experienced role conflict in that it was difficult to perform simultaneously all the training officer roles as required by various 'relevant others'. On the other hand there were advantages to performing jobs as Training Officer and Biologist. As a research biologist I knew which type of curriculum or specific initiatives from which scientists were likely to derive most benefit. I was also in a position to promote a learning culture from within the IOS scientific community.

On the other hand it was difficult to undertake both jobs well so as to retain credibility. As Watkins and Marsick (1989:50) point out, if training professionals perform two jobs (i.e. as educator and technical specialist) then they must remain competent in both to avoid obsolescence in either one or the other.

Having discussed aspects of role, I shall now discuss the attributes of training officers and the pressures upon them.

31.9 ATTRIBUTES OF TRAINING OFFICERS

As discussed above, I found that for some of the time I was having to problem-solve so as to overcome problems with funding and to ensure that courses were filled by the people who needed them. In a few instances I found that staff were hostile or at the very least they look for reasons why they should not participate in training events although nominated to do so by line-managers. Thus it was not an easy task to remain cheerful and confident and to maintain credibility in such circumstances. As London (1988:78) points out, training professionals need to remain resilient.

It was impossible to please everyone, all the time and this caused some pressure in carrying out the role. Discussions with other training officers suggest that this situation is normal. I suggest that the ability to cope with pressures is an essential attribute of training officers and that they themselves should be trained for this. Indeed good personal relationships were essential. The survey of Research Council training officers showed that good communication skills and effective personal relationships were placed high on the list of attributes which they felt were needed by other training officers. Those personal qualities are essentially those which permit
individuals to adjust to the organisational culture in which they find themselves. Training officers need to be provided with education and training which will help them to cope with the various pressures which they are likely to meet in their daily activities.

My experience at IOS suggest that training officers need to develop problem-solving skills, business acumen and, marketing ability. Furthermore they need to undertake research regularly into the best methods for promoting learning. They also need to be able to balance the development needs of individuals with those of the organisation, remaining flexible and approachable but adopting effective strategies for boundary management.

It seemed clear from advertisements that many employers are unaware of the precise role of the various training professionals in the workplace. For example, in some instances the tasks required of 'Training Officers' seemed to be similar to those of 'Training Managers'. It was also unclear whether employers were fully aware of the personal qualities such as good communication and interpersonal skills needed to undertake the various jobs and which of the roles and tasks were most pertinent to their requirements. Further research is required into these aspects.

In conclusion, I have shown that training officers do not undertake the roles in isolation but that for the staff development programme to be effective, they must plan in collaboration with the organisational Management Team, project managers, line-managers and with the staff themselves. Thus it seems that my definition of a training officer as defined in Chapter 1 should be redefined as follows:

'a person within an organisation who promotes a staff-development culture, is responsible for activities related to the provision of staff education, development and training and who plans and implements those activities on a daily basis in collaboration with the staff concerned and with their managers.

Practising training officers need to be provided with opportunities for self-development leading to professional qualifications to help them to meet the heavy demands made upon them in terms of enacting a wide variety of roles in sometimes difficult social situations. Some outstanding attributes required of them include, credibility, confidence and ability to problem-solve. They also need to be able to cope with role overload, role strain and, on occasions role fragmentation. They need professionally-run courses to help them to cope.

I have discussed my various roles as Training Officer at the Institute of Oceanographic Sciences (IOS) and assessed the cost-effectiveness of its staff development programme. I concluded that there were at least seventeen key roles which I undertook and that there were at least 92 tasks which were undertaken in the context of these role. All were necessary to complete the job effectively. These
findings were also supported by other Research Council Training Officers.

So far I have dealt with roles and responsibilities of training officers, but organisations too have major responsibilities towards developing their staff. In the next Chapter I shall discuss factors which contribute to the cost-effectiveness of training (including efficient and effective training officers) and attitudes of staff and their managers.
CHAPTER 32

DISCUSSION - II

THE COST-EFFECTIVENESS OF TRAINING AT THE INSTITUTE OF OCEANOGRAPHIC SCIENCES
INTRODUCTION

My second research question was 'What is the cost-effectiveness of training at IOS'. I concluded that the staff development function was cost-effective. In this Chapter I shall discuss in broader terms some of the issues which have been highlighted by research into the cost-effectiveness of the training function.

As Drake (1982:121) argues:

'The usefulness of cost-effective analysis is to be judged not by comparison with some idealized evaluation set up in heaven, but by comparison with the everyday realities of training resource allocation' (p.121)

I included many variables in my evaluation of staff development initiatives at IOS such as the role of culture, the resources available, changes at NERC and IOS; factors which contributed to cost-effectiveness including the role of managers, staff and the Training Officer in ensuring that the programme ran smoothly. It is possible that an economist might have evaluated staff development differently but as Training Officer I used the best means available to me.

One cannot be certain that the fortunes of research organisations are influenced greatly by excellence in providing staff development initiatives but at the very least they can promote the idea of continuing learning. As Senge (1990) argues:

Learning organisations are possible because we are all learners. (Senge, 1990, p.4)

In 1988/89 IOS set out to create a learning organisation by ensuring that all staff whatever their level of seniority were provided with opportunities for learning vocational, computing and managerial skills, for working in teams better, for improving quality and reducing running costs throughout the whole Institute. To do this it was necessary to adopt a strategy for staff development. Indeed Senge (1990: 7-13) suggests that the five disciplines of the learning organisation are systems thinking (a conceptual framework for seeing the whole picture), personal mastery (which involves a commitment to lifelong learning), mental models, the ability to build shared vision with others, and team learning. This is what IOS attempted to put into action and, by the end of 1993 it was well on the way to achieving its objective.
32.2 THE LEARNING CULTURE

Bramham (1989:9) recognised that to promote a change in culture in organisations may prove to be 'more problematical' than a change agent might hope. Indeed at IOS, establishment of a learning culture was slow to take effect but this situation gradually improved so that by 1993 staff more readily looked to staff development initiatives to help them. This improvement was brought about by the following:-

a. Promotion by the Management Team and myself as Training Officer of the concept of IOS as a learning organisation

b. The proactivity of myself and external tutors as training professionals.

c. The NERC policy to inform staff that career development was linked to staff development.

In 1990 when I commenced the job of Training Officer, I found that often it was necessary to persuade staff to participate in training events so as to enable them to fulfil their needs. In addition it was necessary to fill places so as to ensure that courses designed for a given number of participants ran smoothly. Moreover, often it was more cost-effective for several staff to attend a training event rather than one or two.

Gradually by 1993 staff were well used to the idea that not only was it expected that they would participate in staff development, it was also their right to do so. Thus the proactive approach on the part of myself and the Management Team had paid off. It is difficult to say to what extent the change in culture of the organisation promoted the change in the attitude of staff to training events. However I suspect that it would have been impossible to bring about such a change without the backing of the Management Team, line-managers and experienced trainers or tutors. Furthermore it is likely that a change to a 'Learning culture' requires a considerable reinforcement if it is to become long-lasting.

In the few instances where line-managers took a passive stance to staff-development, their staff were sometimes also slow to participate in such initiatives. In one instance, following a change of Head of Department, it was noticeable that several of the staff who previously had been slow to take up places on training courses, became keener to participate.

On the other hand, it seems that within any cultural environment, staff aspirations may strongly influence participation in training. For example following the announcement in 1993 of the relocation of IOS to the Southampton site scheduled for 1995, several non-mobile, less-experienced clerical staff who previously had made little attempt to volunteer to take part in learning events, expressed some desire to participate in some additional elementary computer training because they felt that this additional experience would help them to obtain other jobs. Thus a
response to change itself and also individual aspirations were factors which played a role within the existing culture of the learning organisation.

32.3 THE CURRICULUM

The corporate classroom at IOS offered a broad curriculum for staff development. During the period of the present research (1990-1993), training at IOS was given high priority. However in 1992-1993 funding was lower than in previous years mainly due to the current European economic recession. As a result ways had to be found to resource and maintain a cost-effective but balanced curriculum. As discussed previously, NERC, JTS and NCS made substantial contribution to the training function by providing tutors in financial, management, and computing subjects respectively. Other sources of training had to be funded by IOS.

As Training officer I felt that I was acting in a contingency situation particularly with regard to ensuring that staff received vocational training. On the one hand, I was able to provide management courses because effectively they were paid for with funds already top-sliced from the Institute's budget by the NERC but on the other hand I had to ensure that, where possible, vocational and other personal development courses such as 'Technical Writing' were provided.

I had to ensure that a balance between NERC-funded- and IOS-funded initiatives, such as technology updating' was maintained. Thus it was not only a question of matching staff development needs with supply, it was also a question of achieving a reasonable balance of professional and personal development for all staff at the right time in their careers.

The main problem was that most vocational and some personal development courses such as 'Technical Writing' were provided from IOS funds. Any shortfall in funds was sometimes reflected in a reduction of training. Thus I was in a position where I had find effective but inexpensive means of supplying computing and other vocational training including the use of computer-assisted learning methods, self-help groups and informal on-the-job training by line-managers or peers. In my situation as sole training officer and allocated only 19 hours per week in which to undertake the complexity of activities which I have described in the previous chapters, this situation brought its own pressures. The current European Community/Union legislation requiring employing organisations to ensure that staff should receive adequate training for safe working practices compounded the situation. There is no doubt that most professional staff and/or their line-managers knew what they needed in terms of vocational courses and it was a question of finding the funds to meet those needs. Exceptionally, in a few instances, where funds were not available, staff were able to pay for courses out of their own pocket, although time and accommodation were provided by the Institute, as in the instance of the French language course. Clearly this was an extreme measure, but in times of economic crisis it presented a positive way forward.
External training and development courses were provided by government, commercial or educational organisations all of which proved to be of value in supplying good quality training. Once training needs were established, it was in my role as Manager of Training and Development that I matched training needs with provision. There were no hard and fast rules for achieving this. In some instances, I actively searched among college prospectuses for courses but such was the multiplicity of mail shots and prospectuses which came to me daily by post from a variety of different sources that it was relatively easy to help a member of staff to choose the most suitable course. Most choices were based on the potential ability of the course to meet objectives and/or the personal recommendations of previous participants. Generally non-governmental training organisations adopted more aggressive marketing policies than government-run organisations.

More research is needed into factors affecting the cost of external courses. One method for reducing costs might be for several organisations to work together to exchange their training expertise in given topics. Probably this would need to be coordinated by local Training and Enterprise Councils.

Relatively few long-term further education courses were taken by staff mainly because most already held scientific or technical qualifications. However several graduates were undertaking postgraduate courses in work-related topics. A few technologists and scientists successfully updated their vocational skills via 'Open-' or 'Distance learning'. In future, following the retirement of long-serving technicians and further recruitment of young staff to replace them, it may be necessary for organisations such as IOS to participate in a system whereby young technical staff are offered formal modern Apprenticeships leading to National Vocational Qualifications.

Most staff at IOS, recognised the benefits of the staff development curriculum made available to them. The results of my research suggest that further team-building initiatives might further enhance the staff-development programme.

32.4 APPRAISAL AND CAREER DEVELOPMENT

As I have shown, within NERC Institutes, the policy was such that staff development was linked to career-development and procedures ensured that negotiation took place between line-managers, countersigning officers and individuals in the planning of careers. This situation still prevails in 1995. The system of 'open' staff reporting and appraisal at IOS introduced in 1990, whereby staff were informed of their performance provided a further step in encouraging the latter to take some responsibility for the planning of their careers.

As staff are effectively a 'captive audience', they should be provided with opportunities for personal and vocational development and career advancement at a level broadly similar to, or better than that experienced by other staff within the
United Kingdom. In time to come it may be possible for Research Institutes and others to consider a scheme whereby it is mandatory for all staff whatever their professional status to be allocated a minimum amount of funding and time per year so as to promote their development in whatever way they and their line-managers agree on. This presents a possible recipe for the future so that participation in education and training may be further linked to career development.

There is no doubt that most professional staff and/or their line-managers knew what they needed in terms of vocational courses, thus it was a question of finding the funds to meet those needs. This situation sometimes created a tension between the employers or managers on the one hand who, at times, were not be able to provide funding, and staff on the other, who needed to develop careers.

The implications for appraisal are complex in instances where staff are unable to perform a task or complete an objective as required by management but where the training is unforthcoming due to lack of funds. The present relatively new system of 'Management by Objectives' may not work well in periods of severe recession where lack of funds for personal or vocational training may prevent individuals from meeting their objectives. Where such situations occur, training officers and line managers may be criticised by staff and Management Teams if they cannot providing adequate training of a suitable standard.

Management teams within research organisations such as IOS have set a good example in promoting a learning culture so as to enhance staff development and organisational effectiveness but they and those of other organisations have to ensure that there are enough resources to pay for staff development activities and for training officers to implement them.

32.5 ATTITUDES OF STAFF TO THE TRAINING FUNCTION

I have shown that at IOS, staff remained open to various methods for education and training. Most seemed pleased to participate in initiatives by helping to teach colleagues and staff on-the-job and by giving formal and informal seminars. Although this helped in reducing the costs of training and development, some were less happy about presenting 'Health and Safety'-awareness sessions mainly because this took relatively large proportions of time when they already had large workloads. In periods of recession, when staffing levels and resources are scarce, it is problematic as to the extent to which staff should be expected to teach others especially in a situation where 'helping others to learn' is not included in their formally stated annual objectives which in turn are linked to appraisal. If organisations require staff to act as tutors or trainers, then it seems reasonable to expect that such extra duties should be included in their formal annual objectives.

By 1993 it seemed that almost all staff at IOS had recognised the importance of staff development though some middle managers tended to remain less enthusiastic.
than their younger colleagues, viewing their participation in management training some years earlier as being sufficient. On the other hand, others recognised that they should participate in some form of management refresher courses throughout their careers. Kenny and Reid (1986:47) pointed out that continuing education, whereby the emphasis is on personal responsibility for learning throughout life, may replace the 'front-ended' model for learning in which staff receive some form of education or training early in their career but not beyond that. My research suggests that, with few exceptions, at IOS this 'front-ended' model was already replaced by a model of continuing learning by staff.

Line-managers were willing to nominate staff for training whatever their race or sex if funds permitted. Also there were no differences in the relative proportions of male and female staff who took advantage of training. However, because of domestic responsibilities, older female staff were more reluctant to reside away from home or to travel great distances from it.

Although most staff were offered the chance to participate in management courses run by JTS, several declined the offer on the grounds that they were not managers despite being told that they were likely to benefit from these courses. It was eventually suggested to JTS that these courses should be modularised and that the course titles should be changed to reflect the fact that they were likely to help staff both in their personal development as well as management skills. It seems that human resource professionals must be responsive to the needs of the organisation yet must develop training programmes in which employees are willing to participate. It was interesting to see that staff undertook training options only if they felt they were relevant.

Some less-experienced staff seemed to perceive an aura associated with management training which I found difficult to dispel, though several staff who had attended such JTS courses perceived, management techniques to be just 'common sense'. Modularisation of management and other courses would help to diminish this perceived aura and also increase the flexibility of provision, so giving potential participants a greater choice in the subjects they choose to learn.

32.6 ROLE OF ORGANISATIONS IN PROMOTING STUDENT-CENTRED LEARNING

IOS went some way in providing student-centred training programmes as well as organisation-centred training programmes. It was interesting to see that, at IOS, staff undertook training options only if they perceived them to be of value to their immediate needs. Although many courses were provided free of charge by the IOS, staff were encouraged to enrol on long- or short-term further and higher education courses and in most instances 80% of the cost was paid by the Institute and limited study-time was provided. However these privileges had to be agreed by appropriate line-managers. At least 8% of staff took up this option. A further example of a
student-centred approach was seen at IOS in that there was a compromise over the previously-described French language training which could not be subsidised due to lack of funds but for which IOS provided time and accommodation.

The success of the student-centred approach, which the Ford Motor Company of Dagenham employs in its Employee Development Programme (EDAP) (G. Simmonds, Personal Communication), albeit limited by funding, also provides evidence that staff are keen to take up educational opportunities made available to them by employers. It is acknowledged that it would be financially impossible for the latter to provide educational and training opportunities for all staff on demand but organisations which subsidise various forms of training for staff to undertake largely in their own time are proving beneficial for non-graduates or graduates who wish to update managerial, vocational or language training.

It seems that many organisations have come some way from the concept of employee skillfulness as discussed by Pace et al (1991:29-30). No longer is it a question of employers having the monopoly in deciding on the work-related training needs of staff, to a great extent, the staff themselves know broadly what their needs are and are anxious to avail themselves of opportunities for personal development. Indeed there was evidence from my research that new recruits place a high value on working for organisations which promote their education and training.

The position of training professionals reflects that of top management in that they are also required to support their employing organisation in terms of promoting an increased output of data information and services, and help the organisation to adopt successful strategies for growth. Yet on the other hand they must support and encourage staff to find time to participate in staff development initiatives and remain available to them as consultants (see London, 1988:252-3).

32.7 EVALUATION OF STAFF DEVELOPMENT INITIATIVES

In assessing the cost-effectiveness of staff development activities at IOS, I took into account the costs of initiatives in terms of :-

a. Fees for courses
b. Costs of participant’s time,
c. Costs for laboratory facilities, travel and other expenses.

I then looked at outcomes of training in respect of :-

a. Participants’ comments
b. Manager’s comments
c. Increase in organisational income,
d. Reduction of organisational running costs
e. Quality management.
I did not seek to provide a ratio for costs against benefits because it was virtually impossible to assess the percentage of benefit which was accrued as the result of training. Furthermore it was almost impossible to assess such benefits in terms of cash. As Drake (1982:120-121) argues, intermediate products such as increases in knowledge about costs, processes and outcomes of training initiatives are just as valid as final resource-results ratios.

Evaluation of on-the-job learning was problematic in that although it was possible to estimate the average number of days per year spent by staff in helping others to learn, it was virtually impossible to assess whether on-the-job learning was efficiently run throughout the whole Institute. However, from ethnographic observation it seemed that some staff were relatively skilled in coaching, whereas others were deemed by potential learners to be lacking in such skills. In one sense efficiency was self-controlling in that because of the informal, open-door policy at IOS, potential learners were able to obtain coaching from several different colleagues as well as line-managers. Thus colleagues with expertise and coaching skills, rather than the less-skilled, were chosen by potential learners to advise and coach them. Recently Lloyds bank has also recognised the value of coaching and has introduced a quality coaching programme for its managers (Training, 1994:p.3). Perhaps other organisations should follow suit.

There were no unique criteria for determining the success of courses. However in instances where participants deemed them to be particularly successful, they nearly always mentioned the excellence of the trainer who provided participants with the information they required, in a competent manner. Not unexpectedly a pre-requisite for a successful outcome was that participants should be motivated to learn. There were indications that the ambience of the training room had to be acceptable. In other ways it seemed that personal expectations, fears, problems and perceptions coloured each person’s view.

32.7.1 Transfer of learning to the Workplace

Evaluation data suggest that in most instances transfer of learning to the workplace occurred, though it was difficult to assess exactly how much. In some instances sea-going duties had prevented application of new skills in the laboratory. In several other instances especially with word-processing or computing courses, staff said that they required more practice on-the-bench to help them to use their learning more fully and to reinforce it. Several participants in management training suggested that line-managers could help them further to utilise their newly-learned skills.

32.8 LEVELS OF STAFF DEVELOPMENT

During 1993 staff received an average of 3.6 days per year participating in formal courses and approximately 2 days per year in attending informal and formal
seminars. In addition I estimated that each received at least 5 days informal on-the-job training from colleagues or line-managers. These figures are similar to those given by the National Audit Office, (Bourn, 1990:27) who reported that investment in off-the-job training by several companies surveyed amounted to five or six days per employee per year in 1899/89. Bramham (1989:36) also cited a survey by the Training Commission (1988) who reported that, during 1986-87, employers in the U.K. received an average of 3.6 days training per year off-the-job and 3.4 days on-the-job.

Factors which controlled the amount of staff development included lack of funds, lack of staff time and sea-going duties. However, sea-going activities probably resulted in new learning particularly for new recruits. Most individuals were very busy in their work and so genuinely found it difficult to find time to participate in staff development initiatives. I suspect that, in period of the research (1990-1993) which coincided with a recession within the United Kingdom, this same situation prevailed in many other research Institutes. In this era of expanded contract research by Institutes, it is necessary for them to ensure that costs and time for staff development are written into quotations for newly commissioned research contracts.

Scientists tended to participate in a slightly larger proportion of training than technologists or administrative staff. There were three main reasons for this:

a. Most of the new recruits during 1990-1993 were young scientists who needed to develop their personal and managerial skills quickly so as to enhance organisational development (For example by writing scientific papers). These represented approximately one-sixth of the total workforce. On the other hand the technologists received a relatively large proportion of training, mainly in enhancing and updating their technical skills which was required in response to new technology.

b. The management team, most of whom were scientists, needed advanced skills in management techniques so as to promote the idea of the 'Learning Organisation'.

c. The level of participation of administrative staff depended greatly on their line-managers and the interest shown by the Training Officer. Some individuals came forward to participate in staff-development initiatives, others were less keen to do so.

32.9 COST-EFFECTIVENESS OF STAFF DEVELOPMENT INITIATIVES

The cost-effectiveness of staff development at IOS was helped greatly by the willingness of staff and line-managers to teach their colleagues. The use of their time for training others had to be balanced with the requirement for them to get on with their job of undertaking and writing up the results of new research and in
obtaining new contracts for further work.

Cost-effectiveness of courses was maintained by:-

a. Sharing of resources with other NERC organisations
b. Willingness of staff to exchange information with others, sometimes acting as tutors, seminar/workshop facilitators or lecturers.
c. The use of computer-assisted-learning
d. The Training Officer playing an important part by:-

   i. Negotiating for reductions in tutor's/trainer's or consultants fees
   ii. Ensuring that maximum permissible numbers were included in courses
   iii. Running/organising courses on a non-residential basis on-site
   iv. Providing accommodation and time for courses provided that staff paid the fees (This was applied to French language training)
   v. Presenting in-house management video-based training.
   vi. networking with other organisations to provide free, or subsidised resources.
   vii. Ensuring the relevance and quality of the curriculum.

32.9.1 The Cost of Courses

During 1993, the cost of formal courses and seminars, including fees, laboratory costs, support staff and participants' time at full economic cost, amounted to approximately 6% of the salary bill. This figure is similar to the 6% quoted by the National Audit Office (Bourn, 1990:4-5) for the average investment within the Civil Service.

32.9.2 The Role of Project- and Line-Managers

Managers faced a dilemma in the prevailing situation of limited funding, they found it difficult to provide funds for formal staff development initiatives while also ensuring that these were sufficient to run their projects. However most were enthusiastic about staff development and supported it as best they could. Without their support it is unlikely that it would have been successful. Further research is needed in their future role in promoting staff development, particularly in managerial and vocational subjects.

32.10 STANDARDS OF TRAINING

The standard of training enjoyed by staff depended on the support of IOS in providing funds, time, staff and the other resources needed for training. Evaluation
data and other information derived from the present research suggest that individuals, especially those who were relatively new to IOS, recognised the benefits of staff development initiatives. During 1993/4 several staff embarked on courses leading to National Vocational Qualifications or to diploma courses. Several graduates undertook post-graduate courses. However there was no formal certification accompanying most other staff development initiatives.

It seems that certification of formal training initiatives would help staff to record evidence of continuing formal education which could be of value to them during careers, especially in the instance of short-term or contract employment. Now that many have participated in management training it seems appropriate to explore with JTS, ways of providing certification. JTS have considered this option in the past through collaboration with Sheffield Business School. At that time it was considered to be an expensive option, however it would be appropriate to reconsider this. One such option is provided by the National Vocational Qualifications (levels 1-3) which several clerical staff at IOS are following. However this is run mainly for undergraduates and does not reach the standard of Master of Business Administration (MBA) courses. On the other hand there are critics of the competency-based approach. For example Holmes (1990:20) challenges the wisdom of adopting a wholly competence-based approach to education and training because it tends to emphasise the acquisition of elements of competence to certain standards in contrast to a learner-centred developmental approach. The idea of competence on which national standards are based differs from vocational education and training which, prior to NVQ standards, emphasised personal qualities in terms of skills or traits rather than competence in terms of ability.

32.11 STRENGTHS AND WEAKNESSES AT IOS

Most scientists and technologists at the Institute are graduates or post-graduates who have spent many years in gaining experience so that now IOS is a world-renowned organisation. At least 70% of staff had skills in computing and many were prepared to help others to learn such skills on an occasional basis as part of the on-the-job training. However, the majority of staff are now over 40 years of age and several are over 55 years, thus during the past three years new, young graduates have been recruited. This situation, coupled with relocation to Southampton University has created the need for new team-building initiatives. There is also a need for creativity courses for the majority of staff to help individuals to recognise that they are working in a culture which values new ideas and new ways of doing things and to help to break down any of the few remaining hierarchical barriers between new recruits and long-serving staff.
In summary, the present research suggests that training officers are a resource of value to organisations. They perform a complex, time-consuming task which requires personal skills and professional expertise. Some of the main ways in which they help to promote the staff development function are summarized as follows:-

a. Helping Management Teams develop strategies to create a 'Learning organisation'.
b. Acting as Change Agents (as discussed by London, 1988).
c. Maintaining a balanced curriculum.
d. Maintaining an overview of the whole function.
e. Promoting cost-effectiveness by acquiring resources and monitoring standards.
f. Maintaining records.
g. Providing Communication pathways between staff of different grades and at different sites.
h. Providing information on staff needs to the Management Team and Line-Managers.
i. Running Pilot Schemes.
j. Providing support for distance-, Open-, or Computer-assisted- learning.

Training Officers perform a difficult job in that they are expected to satisfy the demands of staff and managers. To some extent they have to 'Walk a tightrope' in getting things done. Certainly within science research Institutes sponsored by the Research Councils they have the potential to maintain cost-effective, strategic and supportive roles. They perform a repertoire of roles and undertake a multitude of tasks which require the capacity to communicate fully with all staff, to problem-solve and to recognise the needs of staff and organisations. Indeed, I suggest that they are cost-effective.

In this Chapter I have attempted to highlight some of the salient points concerning the cost-effectiveness of the staff development function which I hope will be of value to Training Officers and to organisations. I have shown that for an organisations training function to be successful it needs support of all staff especially the Management Team and line-managers. Training officers play a major part to ensure that staff development functions run efficiently and effectively. They also provide a very important means of communication between various levels of staff, from the Management Team down to the 'shop-floor'. Without them it would be difficult for an organisation to develop a 'learning culture' which maintained some impact.
CHAPTER 33

AN OVERVIEW OF METHODOLOGY AND RESULTS
33 AN OVERVIEW OF METHODOLOGY AND RESULTS

33.1 INTRODUCTION

This dissertation has emerged out of an interest in the provision of education and training for adults. In my role as Training Officer at the Institute of Oceanographic Sciences (IOS) I have focused inquiry on various aspects of training to provide information and data on the roles of training officers particularly in terms of cost-effectiveness in employing them. In addition some new and potential roles are described. The research has provided insight into what was involved in undertaking the roles and tasks of the training officer. A description of daily activities and events has been presented which provide a scenario against which the roles were enacted.

The research was undertaken as a collaborative venture between IOS (which is a component Institute of the Natural Environment Research Council), and the University of Surrey. Thus the expectation of IOS as the sponsoring organisation was that of functionality. The organisation needed to understand the work of the training officer not only in terms of variation of role and the circumstances in which it was enacted, but also the time and effort expended, the work-load, the amount of time spent in undertaking key roles and the consequences for staff development. As a training officer I needed to follow prescribed patterns of training and perform the roles expected of me, also to investigate previously undescribed roles and relate these to the context of the work environment.

The expectations of the University of Surrey were that not only should I meet its requirement to further existing knowledge but also to add to new knowledge concerning the work of training officers employed by organisations to promote staff development.

In this Chapter first I shall consider retrospectively the theoretical weaknesses and strengths of this dissertation and then describe in broader terms other ways in which I could have interpreted the data particularly from a non-functionalist viewpoint and consider more thoroughly some of the theoretical aspects.

33.2 THE WEAKNESS OF THE DISSERTATION

I shall consider weakness of the dissertation in terms of :-

a. data collection,
b. Role-theory and role-creation
c. Research methodology and data interpretation
d. Data presentation
e. Role-time legitimacy and breakdown
f. Ethnographic reporting
g. Meanings
a. Data Collection

Although I think the data that I have produced represent a reasonably accurate picture of my various roles and that of other training officers employed by the Natural Environment Research Council (NERC), I acknowledge that it was not collected systematically every day because of the sheer pressure in undertaking a high workload and the interruptions by staff and other interest groups. On the other hand, large amounts of data were collected over a period of two years, much longer than originally intended so that together they provided a large amount of research material in terms of the roles I enacted, the expectations of ‘relevant-others’, the daily tasks involved in the work of training officers and the intricacies of the staff development function. Moreover, the data were analysed as if they were collected systematically as I shall discuss below.

b. Role theory and role creation

At the commencement of the research I recognized that the concept of role could be viewed in different ways. For example, it is seen by some researchers as central to conformity theory (see Turner 1962: 37), or it may describe the manner in which it could be undertaken (Davis 1949: 89-90) or that it may be governed by the expectations of role-incumbents themselves and also those of others (Gross et al. 1958: 17; Bradbury 1972: 43). Although I described key-roles in detail, I did not make it clear that there were so many roles which I could have played in response to my perceived behaviour of others and their expectations, and that there was some choice in which role to enact. I could have pointed out that there were pressures from various individuals, management or relatively inexperienced staff of all grades and that I was free to enact roles but only within certain constraints. Moreover, I felt compelled to achieve a balance of roles to enact, depending on those pressures.

c. Research methodology and data interpretation

Inductive methodology is a process which attempts to establish an association between variables derived from empirical observations. This contrasts with deductive arguments in which hypothesis and theories are advanced and predictions made. A functionalist approach compared to, say, a wholly ethnographic approach to research presents such comparative examples. I felt compelled to present data in a way which was easily understood by the Management Team within the organisation. Thus I adopted a mainly functional approach in the analysis of role.

At the commencement of the research I knew nothing about the roles I was to enact as Training Officer over the future three to four years of the research. I started off by recording daily events in my diary for several months. Although I did not analyse the diary at this stage, I made a mental note of the key-roles I was enacting on a daily basis such as ‘manager’, ‘needs-analyst’ or evaluator. Gradually over the next four months I reviewed the literature on training officer roles (at the same time still
recording events in my diary). After several months, having read Mclagan’s (1983) comprehensive ‘Model for Excellence’ and also Pinto’s and Walker’s (1978) account of training officers’ roles and tasks, I came to the conclusion that as a new Training Officer I should follow McLagan’s (1983) and Pinto’s and Walker’s (1978) work which told me that there could be approximately seventeen key-roles which I should look for in my data. Furthermore I was to keep an open mind about other key- and subsidiary- roles which it was possible that I would encounter.

The diary was produced by entering data and information on computer in date order. In most instances it was recorded straight from my notes. The information included daily events, what people said, what they did. I also kept letters and other material information which provided evidence of organisational events, so that I could build up a holistic picture. In many instances the data were easily divisible into mutually exclusive key-roles each of which was entered with the appropriate code. In other instances they were interpretable in terms of two or three different key roles and so were entered several times - each time together with one of the appropriate codes. Where extracts from my notes were very long, entries from the diary were split into blocks of several lines but in such a way that the original notes could be put together again. Finally the codes were sorted by computer.

The weakness of this approach was that I found it easier to clarify and categorize the data rather than to let them totally speak for themselves over a longer period of time. To some extent I imposed on my diary some of the more prescribed key-roles which I was following as a new Training Officer. I felt that a functional way of analysing the data, together with an analysis of costs involved together with ethnographically-derived description of events (including enactment of some implicit subsidiary roles) would be of most practical use to the sponsoring organisation. I did not theorize fully about the depths of the comments made to me.

I recognize that there is a weakness in my data in that I have analysed it in functional terms. On the other hand I have also analysed it from a critical viewpoint not only to check whether I could confirm data and information already present within the literature but also to bring to light any new or potential roles as role-maker or potential role-maker as derived from my own research. A separate content analysis of my diary made later taking such a cross-check of my data provided me with much the same picture in that the categories were similar to those I have used. However in addition there were others which were subsumed into the key-roles which I have described (examined further in item f).

I did not take a wholly functional approach in that throughout the research I was also constantly matching examples of role with examples of daily events. For example I was aware that as a role-taker my enactment of roles was likely to be affected by the behaviour and expectations of others, that some roles would be imposed on me, that I would be free to undertake others, that I might become a role-maker. I was also aware that some roles could be thought of as subsidiary to key roles and that they might be subsumed into key-roles. For example the role of

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'negotiator' could be thought of as being subsumed into several key-roles, for example that of 'Manager of Training and Development' or 'Programme Administrator'.

Throughout the research I was attempting to recognize new roles which were previously undescribed. Indeed I became a role-maker in that I described and enacted a new key-role as 'Communicator in non-routine events'.

Much of my data was ethnographic in origin, derived from the everyday happenings within the organisation so that a disclosure of events and attitudes of staff as applied to the staff development function gradually emerged. Although I felt compelled to follow the needs of the organisation in terms of a requirement for a description of what I did in my daily activities, the time I spent in doing it and the costs, I was also researching the training function including role in terms of concepts and meanings derived ethnographically. I envisaged that this would provide not only the new knowledge demanded by the University but also some 'added-value' as demanded by the organisation. I recognised that since the data were ethnographic they might have been interpreted in different ways and from different viewpoints.

While I feel that I have presented an accurate picture of key-roles, none-the-less it is a functional account and thus is somewhat lacking in the interpretation of underlying meanings. However I feel that my data have validity in that they were ethnographically-derived, descriptive and instrumental in contributing to my argument that training officers perform a number of roles and tasks and that it is cost-effective to employ them.

Further strengths of the data are upheld in that I sent questionnaires to other Research Council training officers who confirmed findings on training officer roles and tasks. Moreover I analysed data obtained from advertisements on training officer requirements which further confirmed the research findings. This aspect is discussed below in section 33.3 in terms of the strengths of the research.

d. Data Presentation

Throughout the dissertation I have presented the data and analysed and described roles in practical terms and related them to daily events. The subsidiary (non-key) roles which I enacted are implicit within the dissertation. However I now feel that I could have presented some of the subsidiary roles in tabular form (as I shall do in Table 33.1) and analyse them more fully.

Role-enactment has been described in terms of daily events at the research Institute which formed the basis for the case study. However it could have been considered also in terms of my power and influence on behaviour of staff and the extent of conformity within the organisation. It would have been possible to describe in detail the variation within my role relationships with 'relevant -others' and discuss cultural or social determination. As Mead (1935) cited by Stryker (1962:42-43) argues,
taking the role of other people means viewing ones actions from their point of view and one needs skill to simultaneously view one's own role and that role of others. These aspects will be discussed in greater detail in Section 33.4 below.

In previous Chapters, I did not point out explicitly that within each key-role for much of the time I was playing bits of roles or in some instances I was playing several bits of several roles simultaneously. I feel that the organisation gave me adequate time in which to perform the variety of roles and tasks expected but I had the responsibility to ensure that I achieved a balance. Indeed there was no indication that I had not achieved a balance. For example as 'Programme Administrator' I always ensured that for any given initiative trainers and the appropriate number of staff were present at the right place and at the right time. As Evaluator I ensured that so far as possible courses provided value for money in terms of achievement of objectives. I should point out that the roles were not evenly balanced within each year and that the figures given represent the average amount of time which I found it necessary to spent on each key role or parts of them. In summary it is necessary for training officers to achieve role-time balance which is affected by resources available, requirements of Management Teams, job-descriptions, pressures from individuals and management, the time-table imposed by interest groups.

e. Role-time breakdown and legitimacy

My approximations of role-time allocation were applicable mainly in functional terms of cost-effectiveness and the employment of training officers rather than to the application of roles at a non-functional level. The approximations of the time spent on each key-roles in Chapters 7-12 were given mainly to provide the organisation with a working account of how much time I spent on training officer roles so that they could equate my time to salary costs. In effect role-time allocation must be seen as a broad approximation because in practical terms allocation of time depended on a multitude of factors such as available resources, line-managers' roles in supporting the training function, the training needs of staff and management at any particular time. I had only a limited amount of time in which to undertake the roles thus time for enacting roles was sometimes under pressure. The balance of role-time was determined primarily by the pressures put upon me and the curriculum which I had agreed with the Management Team. In turn the curriculum depended on the resources available. For example as 'Manager of Training and Development' time-wise it was relatively easy for me to provide and administer management courses mainly because the Joint Training Service (JTS) had the responsibility to plan, monitor and provide a programme of such courses, to arrange accommodation and to undertake some of the administration. In this respect my responsibility was mainly to match participants with courses. In contrast if I found it necessary to provide in-house or near-by courses which were non-residential then although JTS provided a tutor I had a greater task in planning and coordinating the initiatives, placing participants on courses and arranging most of the administration thus I had to allow plenty of time for this as sometimes accommodation needed to be booked many months ahead.
In the dissertation, I could also have given ethnographically derived instances of when I had to make choices between my allocation of time as for example when I had to make sure that approximately 180 staff were provided with health and safety courses within a period of six months whilst also having had the responsibility to ensure that computerised training records were updated as soon as possible. In that instance I gave priority to the health and safety training because it was a legal requirement that the organisation should provide such initiatives. In effect I had a finite time in which to enact the roles and tasks which were expected of me, therefore the question of prioritizing quite often arose.

f. Ethnographic reporting

A comprehensive description in broad terms about what training officers do has been given. But although I have described some subsidiary roles in Chapters 7 to 30. I now feel that I could have pointed them out in more detail and stressed that within each key-role other subsidiary roles were enacted and that often I was performing one or more parts of roles at any given time. For example I stressed that the key-role of Manager of Training and Development was concerned with planning, monitoring and coordinating staff development initiatives. From this point of view I could be deemed a monitor or a coordinator, roles subsidiary to the main key-role. In addition these roles could also be subsidiary to other different key roles. For example in the instance where I was Programme Administrator for health and safety initiatives, I was not only monitoring the function to make sure that all staff, the trainers, the accommodation and equipment were at the right place at the right time but also to ensure, from the broader perspective as Manager of Training and Development that the staff were complying with European law. Furthermore in some instances I was performing several roles at anyone time for instance on occasions I was acting simultaneously as a career-adviser, a line-manager, and a confidante. For ease of reference some other example of role are presented in Table 33.1.
Table 33.1 Some roles which I undertook which I saw as subsidiary to key-roles

<table>
<thead>
<tr>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountant</td>
</tr>
<tr>
<td>Adviser</td>
</tr>
<tr>
<td>Buffer between staff and line-managers</td>
</tr>
<tr>
<td>Change agent</td>
</tr>
<tr>
<td>Conduit between far-flung regions of organisation</td>
</tr>
<tr>
<td>Contact for external agencies</td>
</tr>
<tr>
<td>Developer of staff perceptions</td>
</tr>
<tr>
<td>Fosterer of creativity and quality</td>
</tr>
<tr>
<td>Imparter of values</td>
</tr>
<tr>
<td>Leader</td>
</tr>
<tr>
<td>Listener</td>
</tr>
<tr>
<td>Monitor/enforcer of law</td>
</tr>
<tr>
<td>Negotiator</td>
</tr>
<tr>
<td>Relay of power and authority</td>
</tr>
<tr>
<td>Resource-gatherer</td>
</tr>
<tr>
<td>Strengthener of organisational structure</td>
</tr>
</tbody>
</table>

It can be argued that role helps to foster regularity and predictability of social processes within organisations (see Salaman 1974:40-45). I was working within a bureaucracy and a defined framework, namely that of analysing training needs, matching them with supplies of education and training and evaluating the outcome. I was free to make my own decisions and not only to role-take, to enact role in the way I perceived best but also to role-make. I had expectations of others and they of me. As a leader in the training and development field I was also an innovator, decision-maker and imparter of organisational values. I was also a relayer of power and authority from the Management Team to staff within the organisation. I felt that I needed to instil an element of permanence, stability and certainty. At times when resources were scarce I was also a resource-gatherer acting not only for staff but for the whole organisation. To a great extent these roles were interlocking. For example part of my power came as resource-gatherer. If I wished to be innovative I needed at least basic resources.

But relevant-others had expectations of me. For instance they expected that I should listen to them, to advise and to negotiate on their behalf. In several instances they asked me to approach their line-manager so as to arrange courses for them. This I perceived myself as a buffer between staff and their managers. Individuals expected me to remain available, to see me regularly at the various sites. Indeed as I indicated in Chapters 7 and 11, I was a 'Communicator' acting as conduit thought the organisation. Tutors and representatives from commercial companies expected me to act as recruiting officer, and as their first contact with the organisation. Thus I formed part of an internal/external communication network. I was monitoring/policing Health and Safety initiatives within the organisation, a promoter.
of the legal requirements of the European Union. A review of my diary also showed that I was also playing the role of accountant forming a conduit between tutors and organisational cashiers.

g. Meanings

A further weakness in my ethnographic account was that as functionalist I did not always theorize about the comments made to me. They would have told me something about the existential position of individuals within the organisation (See Macquarrie 1972:13-31) and more about what people expected of me. For example in items i. to v. below. I present five examples of comments which I had recorded in my diary and which I have now analysed in detail so as to uncover meanings:-

i. 'Comment from M..he said that sometimes young staff could not produce papers if they were part of a team. Also some were worried about short-term contracts being renewed. We went on to discuss the fact that young staff had not had the time to make contact with other scientists outside.'(11.11.91).

I placed this item under the heading of staff needs because I was using the information as 'Needs-analyst' to ascertain staff needs in terms of my plans to arrange a 'technical writing' course but I could also have looked for less obvious meanings such as:-

Why was it difficult to produce papers if staff were part of a team? Was it that young staff had not had the experience to see the whole oceanographic picture because they were such a 'small cog' in a large wheel or was it because their team leader would not let them write papers? or did they feel that it would be precocious to write papers as they were only part of a team?. What was the connection between short-term contracts and papers - was it that staff felt that if they did not write papers then their contract would not be renewed. That would be unfair if they had not had the opportunity. As training officer how could I help them?. Should I discuss the position with their team-leader? Did the person who told me this expect me to intervene? Did they really need to make contact with other scientists so as to write papers. Does it take much time to build up contacts. Should I arrange or promote the idea of an international seminar so that they could make contact with other scientists. Should I foster communication between teams and non-IOS scientists more? Where did my duties lie? What action would I take next- Mediator, advisor, interventionist or an alternative?

ii. 'I'm gradually getting in cheques in payment for French courses all are willingly paying £15 per term. The teacher told me that the drop-out rate had been
lower than last year when the course was free'
(11.11.91)

I entered item b. in the category of 'Manager of Training and Development' because I was monitoring the staff development function but also I was ensuring that tutors received payment. Other meanings:-

I was acting as cashier. The course was partly subsidised by IOS and partly by staff. The drop-out rate was lower because staff were spending their own money rather than last year when the course was wholly paid for by the organisation. Probably the teacher would have derived more satisfaction from a lower drop-out rate provided that the numbers did not become too low. Staff may or may not have derived more satisfaction from a lower drop-out rate - fewer in a class would mean more individual attention but more effort would be required. On the other hand there would have been less interaction within the group. Would staff have made financial contributions for courses other than French with their own money?. Did this apply to languages only? I did not have any other instances where they had offered to pay. Should I experiment and design/set up other language course- perhaps open them to the public (was I going to act as an innovator?).

iii. 'I commented that he would like to be taught by professionals rather than just anyone (when I told him we should have self-help groups) (03.03.92)

I felt that I was acting as 'Manager of Training and Development' in this example. I had enquired about his attitude to using self-help groups because they might spread the expertise and would not be expensive to run. My interpretation of meanings:-

Had he had bad experiences when taught previously by non-professionals? Did he feel that self-help groups were non-professional? By using the term 'anyone' did he feel that self-help groups did not usually have the appropriate level of expertise or did he feel that they had the expertise but did not have the ability to help people to learn.? Did he look on me as a professional educator or just another scientist? Should I argue that non-professional teachers might still have work-skills expertise?. Should I take a confrontational stance?

iv. 'C. agreed to do an informal [seminar] on marine chemistry. He said my posters were too bland, wanted me to advertise that he was running the whole in 'Indiana Jones' style. (23.03.92). Meanings:-

He was happy to participate in self-help groups. He wanted to run it his way. He was not happy with the publicity which I provided. Did he feel that all IOS courses needed to be more creative? Should I be more creative? Was he implying that he
wanted to do all the publicity for his group? Was he implying that he knew best? -
perhaps he did. (In that instance I asked him to re-design some posters).

v. 'I received questionnaire back about marketing courses [courses in marketing]. Although several staff asked for various types of marketing course their line-manager [also marketing manager.] had disagreed that they needed it ...[he] said we must not waste lecturer’s time. He has asked me to liaise with him? am I treading on his toes’ (16.06.92) Meanings:-

Several staff requested marketing courses. Their line-manager disagreed with their view that they needed the course. Did the line-manager feel that I was giving them too much freedom? When he asked me to consult him, did he feel that I was 'treading on his toes'? Was I weakening his position as line-manager? Did he feel that by sending the questionnaire out I was indicating that his department was not good at marketing and needed help? Did he feel that I had singled out his Department? Did he feel that his staff really would not benefit from a course? How should I cope with this? I know that organisation marketing strategies could be improved. Should I override his position, should I argue the case for his staff to participate?.

The above five items present examples of how I felt the data could be analysed in a different way. All presented me with a dilemma in that I was unsure what role to enact next. I was role-taking. Each situation had provided me with a choice of role. For example some were demanding that I should conform, one that I should be more creative. I was making demands on myself in knowing that I should act innovatively. There was role-conflict over choices to make partly because I was wondering what others were expecting of me.

33.3 STRENGTHS OF THE DISSERTATION

I shall consider the strengths of the dissertation in terms of the following:-

a. Meeting the expectations of the Organisation and the University
b. The innovative method used
c. The large amounts of data presented
d. Keeping a diary
e. Conducting the research from within the organisation
f. Confirmation of prior findings.
g. New roles
h. Value-added information

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a. Meeting the expectations of the Organisation and the University

I have attempted to produce what the organisation and the University expected in this collaborative piece of research. The Organisation required information on what training officers really do from day-to-day, the key-roles they enact and the tasks they perform, the costs in terms of training officers' time and the cost of the whole staff development function. The University required a collaborative piece of research undertaken from within an organisation which would result in new knowledge.

Generally theory and practice tends to divide but I have presented a holistic account so far as possible. I have reconciled the needs of the University with that of the organisation. A view from within a research organisation of the various key roles of the Training Officer has been provided as derived from my own experience and that of others. I have shown what it is like to be a training officer and that other training officers employed by Research Councils also performed similar roles and tasks.

b. An innovative method

Although the requirements of the organisation were for me to produce a functional dissertation. Its strengths are that I have attempted to break away from a functional paradigm in that the data were not collected through formal questioning or interviews but much more through dialogue with colleagues in the workplace. Thus I was able to combine ethnographic data with functionally derived data about role enactment. Following a comprehensive analysis, I have been able to present a description of the staff development function which has practical applications, whilst also providing a description of the scenarios in which they occurred.

c. Large amounts of data have been presented on the following:-

i. role
ii. circumstances in which role occurred
iii. attitudes of staff
iv. evaluation data

I defined the training officer in terms of a person who is involved in day-to-day activities related to staff development and who practises in conjunction with other managers and staff. Practical aspects of role-taking and role-making have been described. I provided a view from within a research organisation of the various key roles of the Training Officer as derived from my own experience and that of others. I showed that other training officers employed by Research Councils also performed similar roles and tasks. My findings on key roles confirmed those of other researchers (e.g. Pinto and Walker 1978; McLagan 1983). I put forward the proposal that a new role of Communicator in non-routine events should be seen as a separate key role. Data have been presented on attitudes of staff and some of their reasons for wishing to participate in courses.

Comprehensive evaluation data for 'Management, 'Personal Development and
Vocational/computing courses have been presented.

d. Keeping a diary

I am the first training officer to keep a diary and other relevant documentation for research purposes thus at present these represent a unique record of major events in the workplace, taken over two years which had a bearing on the staff development function. There are examples of dialogue with staff and aspects of my daily activities which provide some insight into the attitudes of staff and their managers.

e. Conducting the research from within the organisation

As a member of staff I undertook the research from within the organisation. Thus I had the advantage of understanding the culture and power structure which prevailed, the personalities of the staff and the intricacies of oceanographic research. As a scientist I understood the organisation and the administration staff, scientists and technologists who were employed there. Furthermore I had an advantage in that I was known to staff rather than being an outsider. Moreover I had an advantage in that I was reporting partly on my own actions, thus I was reducing the classic confusion which may exist between a researcher and a role-incumbents interpretation.

The advantage of the collaborative approach was that I was able to undertake the research within a social setting to which I had long been accustomed. Thus I was able to research much of the education and training scenario through participation and observation and the collection of relevant documents. Because I had worked at IOS for over thirty years as a biologist and was relatively senior I had the advantage of interpreting events from the point of view of the Management Team and also from the perspective of my peers. I had some insight into the ways in which staff perceived the world and the ways in which they were likely to react to any given situation. I could undertake the research both overtly and covertly. This meant that my research into the staff development function was unlikely to interfere with the actual process. Staff were not wary of me because they knew me as a friend and as a scientist therefore they were likely to say exactly what they thought in any given situation. The research would have been very difficult to conduct from the outside therefore I was able to report it the way I did.

f. Confirmation of prior findings.

In conducting the research the way that I did partly from a scientific point of view and using an ethnographic approach, I feel that my work is in line with previous research topics but in addition I have added to and enriched previous data. I confirmed the work of McLagan (1983) and also Pinto and Walker (1978). Moreover I was able to cross-check my results and obtain new data from other NERC training officers and from advertisements derived from other external organisations within the United Kingdom.
g. New roles.

I described not only new and potential key-roles but also other non-key/subsidiary roles as implicit in my ethnographically derived data. I have shown that within the broad constraints of my position as Training Officer I was able to make choices about role enactment and that the onus was on me to maintain a balance of roles. The findings on key roles confirmed those of other researchers (e.g. Pinto and Walker 1978; McLagan 1983). One of my main proposals was that a new role of 'Communicator in non-routine events' should be seen as a separate key role. I showed that it allowed me to act as conduit throughout the length and breadth of the organisation. I acted as a vertical conduit between NERC Headquarters, the Management Team, middle managers and staff 'on the shop floor'. I also acted as a horizontal conduit between departments, buildings and sites. In undertaking these roles I was a role-maker no-one expressly asked me to act as conduit but my own values decreed that in the interests of running effective staff development initiatives I should do so. I felt there was a need to provide information not only in the course of routine-events but also non-routine ones.

h. Value-added information

It has been possible to provide large amounts of 'value-added' information which is applicable to organisational theory. Staff attitudes to education and training initiatives and the value of training officers in helping to develop a bottom-up approach to management rather than a hierarchical top-down strategy has been described. Implicit in the data are methods to enhance staff development and a curriculum designed for professional scientists and technologists. Examples of cost are given also.

In some instances the data presented in Chapters 7 to 31 showed strengths from the point of view of broader perspectives but weaknesses in certain aspects. They are discussed in the next section.

33.4 STRENGTHS AND WEAKNESSES OF THE ANALYSIS

One of the strengths of the dissertation lies in the fact that it shows how enactment of role is less simplistic than has been described previously (see Turner 1962). The present data imply that role enactment entails more than simply role-taking and role-making (which implies some creativity). Training officers may enact fragments of role at any one time or may enact several roles simultaneously. Moreover a 'relevant other' person could perceive the role-enactor in a different way to what the latter expects, depending on their perceptions at the time. For example I took the role of negotiator on many occasions. Sometimes this was in my capacity as 'Manager of Training and Development' and sometimes as 'Programme Administrator'. At times I was role-taking whilst also thinking about a situation and adopting a strategy for the next step in role-enactment.
It is important to stress that 'bits' or fragments of role(s) may be enacted and that this balance depended on the personal judgement of the training officer, and on pressures from staff and the management Team. I was free to undertake roles or fragments of roles but only within certain constraints. Those included pressure of time, previous happenings, what others expected. At times there were so many different roles and overlapping roles that I was playing in quick succession or at any one time that, as I have discussed previously in Chapter 31, at times this led to role fragmentation, role conflict and role strain.

But there are also weakness in the analysis in that I have not pointed out strongly enough that the roles I enacted were governed to a large extent on my expectations of others and their expectations of me. Looking back on my data I feel that it would have been better had I stressed that role-takers need to understand that individuals will not always conform to their expectations. In Chapters 7 to 12 I have shown that as role-taker and enactor I responded to the expectations of tutors, staff, line-managers and other interest groups. For example tutors offered me their expertise, some pressurised me to employ them. Those whom I did employ sometimes pressurised me for payment, so that in turn I had to pressurize the cashier. Some also expected my support as facilitator during their sessions; in one particular example I was asked to be present to run a 'brain-storming' session.

A strength of the dissertation is that to a great extent I have shown what it meant to me to be a training officer in that inherent in my description of events, in Chapters 7 to 16, I have discussed the variety afforded by the position. Satisfaction came from helping people to enrich their lives through education and training. However there is some weakness in my account in that some aspects were not discussed. For example as a scientist it meant that I was unable to undertake as much scientific research as I would have wished. I did not point out that there were advantages such as the freedom to develop a curriculum, to participate in courses as an observer, to recruit tutors. I had the right to move freely between the organisation and its Headquarters. Furthermore the recognition afforded by Headquarters staff and the Joint Training Service were also important. As I shall discuss in the next section, status was conferred on me as Training Officer by the Management Team and to a great extent I obtained my power through the Team. On the other hand I felt that if I were to produce ineffective initiatives then my status would be reduced. There were also drawbacks, it was a tiring position to be in, there were constant interruptions from staff. Commercial vendors of courses were constantly telephoning to try to persuade me to buy courses. But it was also an interesting position to be in that I was able to perceive events within the organisation from both perspectives of staff and management. Some of these aspects are discussed in the next section.

So far I have discussed strengths and weaknesses of the research. In the following account I shall discuss other ways in which I could have interpreted the data
ALTERNATIVE WAYS OF LOOKING AT THE DATA

In this dissertation. Although I have incorporated ethnographic data I have missed some alternative ways of looking at the data. As I shall describe below, it would have been possible to view the data from broader theoretical perspectives so as to understand the responses of individuals in the context of broader issues. In this section I shall discuss alternative ways of examining the data under the following headings:-

Role, role-balance and criteria; the curriculum offered; empowerment of people; tensions between people and management; attitudes of staff to organisational policy; the training officer in a monolithic role; tensions which I experienced; the functions of training: The nature of training officer roles; the education and training debate.

Role, role-balance and criteria

It would have been possible to examine the data from the point of view of staff actions in response to my own position. A review of the data shows that the actions of staff were not constrained. Most were worldly and had professional qualifications and knowhow. They were well-used to judging situations, to making demands and to making decisions. Furthermore people have different capacities to impose their expectations depending on whether they have power or not. Thus senior staff might exert more pressure than others.

Some staff had explicit expectations of me i.e. that a good service should be provided. Others enjoyed staff development experiences or felt them to be a good investment towards career-development and promotion. Some were fearful of courses and shrank from them. I felt the need to help them to overcome their fears. Some staff were critical that there was 'too much' training so I thought more about the amount of initiatives which I provided. In short a wide range of emotions were evident. Some staff conformed to my expectations - some did not. I hoped that I was conforming to theirs. I believed that education and training benefits individuals but I felt that I had to provide it in a way which was acceptable to them.

Another way in which I could have interpreted the data would have been to look at the way in which I determined priorities or chose between competing expectations so as to achieve a balance. Within any job undertaken or position held individuals are pressurised to behave in certain ways. These roles may be formally or informally derived, explicit or implicit. Higher discretion roles therefore imply more power in problem-solving and decision-making.

My own philosophy was that as training officer I should contribute to stability within the organisation by ensuring that there was equality of opportunity for staff whatever their position, grade, age, sex or creed. Thus in this respect a balance of role was imposed by the expectations of staff. If one person was provided with opportunities for participation in events then quite often others felt that they should
be given similar opportunities. It followed that the system provided some constraints in that I had to spend a certain amount of time as 'needs analyst' (needs were recorded formally on appraisal forms) and following this I was expected to meet demand with supply. Having set up initiatives it was necessary to see them through without mishap in my role as 'Programme Administrator')

In some instances following the 'Management by Objectives' initiatives there was a requirement to meet needs of particular staff within a short time so that they were able to be competent enough to meet their formal annual objectives.

Necessity also exerted some pressure on the extent to which I was a resource-gatherer and negotiator. If funds were low or non-existent it was necessary to negotiate to remedy the situation. In other instances timetables were imposed by the Joint Training Service or the NERC Computing Service. In that event I was expected to undertake the role of 'Administrator', 'Publicist' and 'Coordinator'.

There were also examples when staff were distressed (most often as a result of arguments with line-managers) and so I had to act immediately as 'Listener', 'Counsellor' and/or 'Advisor'.

ii. My power and responsibilities;

The data could have been interpreted from the point of view of power and responsibility. I recognised that although I would provide education and training initiatives not everyone would conform to their expectations or nor would I necessarily conform to those of relevant-others. I was placed in a relatively powerful position in that my legitimacy was bestowed by the Management Team. In part I felt that my behaviour was prescribed because of the position I held and the conformity expected. Moreover I had been told that I was in charge of the education and training function and believed that I brought to the position my own values as an individual i.e. my emphasis on educational freedom and well-being of others. At times I adopted some non-prescribed roles if and when it became necessary. In return I felt that staff had the right to deny me power if I did not fulfil expectations.

On the other hand I expected that others would act reasonably, they would be polite, considerate and democratic as indeed they were for most of the time. I in turn would provide every individual with opportunities for growth and that this would help to provide some motivation for her or him to enjoy doing a good job.

I expected that the Management Team and line-managers would harness group and individual competency so that ultimately new ideas would emerge, research problems would be solved and IOS would continue to be recognised worldwide as a 'Centre of Excellence'.

Although I was given power I felt that I should not coerce staff to attend training
courses (albeit on behalf of the organisation). Indeed they should be free to chose whether or not to attend courses. Indeed Peters (1966) cited by Jarvis (1983:8) suggests that education 'picks out no particular process and that learners in the process must be willing and voluntary'.

I could also have viewed the data from the point of view of the power held by staff. As an organisation IOS valued excellence in science output, quality and value to customers. During the 1980's the overriding culture had been that of science, the majority of staff at IOS were scientists or technologists and so the culture was science-orientated. During the early 1990s, following a decline in the science budget, power was held not only by the Management Team (remunerative - keeping people in jobs) but also by most senior staff who had unique expertise as scientists and technologists and whom the organisation needed so as to obtain new and remunerative contracts in a science-marketing culture. They imposed their expectations upon me but I also on them.

iii. The curriculum offered; empowerment of people

An examination of the curriculum would have been another way of viewing the data. In Chapter 32 I have shown that I felt that I was acting in a contingency situation particularly with regard to vocational training. I was able to provide Management training for most people because in effect it had already been paid for, funds having been top-sliced from Institute funds. It was part of my responsibility to devise a curriculum but that was agreed also by the Management Team.

Curriculum development was based on several factors:-

a. The vocational and computing needs of staff as defined by staff themselves and their line-managers

b. The IOS policy to empower people including new recruits so that they could become relatively autonomous in their work, to undertake research, to write papers, to present ideas at meetings, to support others as team-members. The philosophy was to create a learning organisation in which systems thinking, shared values, commitment to organisational goals, openness, personal mastery and continuing learning were paramount (see Senge, 1990). Often people were given the responsibility to make decisions but at the same time to some extent they operated in a relatively low-risk environment.

c. The needs of staff to manage others, to appraise others and to maintain interpersonal effectiveness.

d. The need to help people to cope with change such as working in different ways, working in new teams, relocating to a new site, working on new contracts.

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e. Promoting the acquisition of the French language so as to help administration staff to develop European markets.

f. Preparing staff for retirement or redundancy

However the development of a curriculum was not 'cast in stone' and staff were encouraged to put forward ideas for new initiatives, thus taking part in the decision-making process.

Although there was a broad curriculum I had some autonomy in promoting people for initiatives. For example I tended to ensure that equal opportunities prevailed and that, for example women or less-experienced staff were not left out. To some extent it was based on my own ideology. Generally I gave most middle- and senior managers opportunities to participate in Management courses, though usually the more expensive University-based courses were reserved for senior staff who managed large projects. This system was imposed partly by Headquarters who had put aside funds on a temporary basis for specialist senior management training.

From my own point of view I was conforming to the needs of IOS staff at all levels of seniority. I was doing my best to provide a balanced staff development curriculum for all despite the fact that, particularly in 1991-1993 financial resources were low. In effect I do not believe that myself or line-managers acquired sufficient funds for vocational training although the problem was helped greatly by the setting up of self-help groups. It is problematic as to whether staff have time to help others to learn rather than concentrate on their own tasks, a problem of which I made the Management Team aware.

It seems that within small research organisations there should be increased funding to cover all aspects of staff development because unlike Higher Education Institutions often they do not have the infrastructure in place to train staff on site at reduced cost. In Higher Education Institutes probably it is easier to maintain a balanced curriculum.

iv. Tensions between people and Management

Although I have presented examples of conflict situations in previous Chapters, It would have been possible to view the data in more detail from the point of view of tensions between individuals and their line managers although within the organisation a classic 'them and us’ between managers and staff was rare. Indeed the majority of staff were managers albeit at various levels of seniority. For example during 1991 I decided not to use a video I was evaluating for training purposes because it portrayed a case study in which there was aggression shown by staff and managers (a 'them and us' situation).

As I have shown in Chapter 9, there was generally good agreement between staff and their line-managers about their training needs. In some instances I pointed out
to staff or line-managers relevant opportunities e.g. seminars or courses and there
seemed to be very little conflict arising from this situation.

On the other hand inevitably there was some conflict within the organisation. For
example during 1991, before it had become the norm to participate in Management
courses, I first began showing videos about management techniques to staff. Several
people asked me to ensure that their line-manager saw such videos thus indicating
that they felt that the latter could benefit from them. Eventually by 1994 most
people had participated in at least one management course and although I heard the
occasional grumble about line-managers, this seemed to have decreased.

In contrast, in Chapter 10 I have described a situation of underlying tension between
a line-manager and one of his staff in that the former disapproved of the latter
having applied for a management course although the staff member had a right to
do so. In several other instances some conflict arose if line-managers deemed that
their staff should require courses in 'interpersonal skills' and the individual
cconcerned took exception to the suggestion. On several occasions I had to take care
to avoid becoming embroiled in such argument although as Training Officer I had
the responsibility of intervening so as to give individuals the opportunity to
participate in such initiatives.

v. Attitudes of staff to organisational policy;

The data can provide some further indication of staff attitudes. There was the person
who agreed to attend a course whilst adding that a mention of a training event
would look good on his appraisal form. Others simply wanted to update their skills
and become more effective i.e. the person who requested a technical writing course
because it would help him to write scientific papers. There was the instance of the
new staff who asked me to intervene on their behalf in a dispute which centred on
the fact that the organisational Heads were planning to suspend staff development
initiatives for a year due to lack of resources. Those staff may well have had the
interests of the organisation at heart, but it was clear that they viewed their career
development as important and that they linked this process with participation in staff
development activities. They viewed me as a person who could help them in their
cause.

There were others who did not wish to participate in the training function for a
variety of reasons. One person attended only part of a course which had been
booked months beforehand and which he had agreed to attend because he had
intensive work commitments as well as local political commitments. Several people
declined courses or postponed them due to pressure of work. To attend such courses
might have prejudiced completion of work which in turn might have prejudiced
status, a trip abroad, completion of a contract, development of instrumentation for
an expedition. But there were further implications. An unfulfilled contract could
mean loss of new contracts, potential loss of job, loss of income and loss of status.
An oceanographic expedition without adequate instrumentation was doomed to
failure also resulting in loss of status.

It seemed that just as I had experienced role conflict so too did staff in that often they quite reasonably experienced problems in finding time to update skills, work in the laboratory or manage staff. For sea-goers it was especially difficult. In Appendix 12.5 I present an example of someone who was experiencing difficulties in finding enough time to put a training initiative into effect.

Another way in which I could have viewed the data would have been to view the way in which individuals responded when offered the chance to participate in courses. I found that usually people seemed to make a mental note that courses were on offer and if interested gradually over a period of weeks they would contact me and request to be included.

Generally I was able to categorize staff reasons for participation into four main categories:-

a. Because participation would increase their promotion prospects,

b. Because staff had been advised by line managers to participate in that the latter had felt that it would improve the quality or quantity of their work or interpersonal relationships or managerial skills. Furthermore the requirement for Managerial training was reinforced by the organisation’s Headquarters who had recommended that individuals of management calibre should undergo such training prior to promotion.

c. The requirement for compulsory training as in the instance of European Union legal requirements which had imposed Health and Safety demands on organisations as I have discussed above. Another example of compulsory training was seen in the instance of 'Appraisal' training in which 'Reporting Officers' who appraised their staff (usually on an annual basis) were required to update their 'appraisal' skills every three years or so or when new and different systems of managing (e.g. Management by Objectives) were introduced.

d. Staff genuinely felt that education and training would help them in their work. Many were professionals who wished to take every advantage to improve or update their skills. For example many individuals expressed an interest in 'Speed reading' courses to help them read faster with increasing understanding. Others sought to update engineering-based skills because technology was moving ahead fast.

e. Individuals felt that it would help them to obtain a new job especially if they were likely to be made redundant or their short-term contract was due to expire as in the instance of the administration staff who required basic computing and word-processing courses.
f. People were curious about new developments. For example at least three enquired about courses in E-mail and the 'Internet'.

g. Individuals were 'Playing the system' in that a mention of a course(s) would improve the look of their *curriculum vita* or appraisal form.

I felt that people only took part in the training function if they felt it advantageous for them to do so. It seemed that none of these reasons was mutually exclusive and that any one individual might have adopted different reasons for participation depending on the type of initiative offered.

Although large amounts of evaluation data from various courses have been presented in detail (Chapter 20), for reasons of brevity they have not been interpreted fully. However it is clear from the data I have presented that staff usually found vocational or computing training and to be helpful. Whilst management training received a mixed response. Most participants felt that IOS/NERC gained from staff participation in initiatives to a moderate extent, whilst project leaders felt that the IOS staff development function was worthwhile. Having been provided with a moderate to large amount of training over the past few years, it would be appropriate to ask staff which future initiatives they now feel would be most helpful to them.

vi. Training officer as a monolithic role;

A further analysis could have been undertaken on the managerial role of training officers. The data show that I was acting like a line manager in a number of different ways. For example I negotiated with Unions and met their demands for 'redundancy' training for non-mobile Institute staff. I saw a clearly-defined role in helping individuals to recognize new techniques i.e. in computing and emphasised the need to update on new technology. Occasionally I pointed out new ways of doing things as for example using e-mail regularly rather than writing notes. In some respects I was also monitoring staff attitudes and behaviour.

As discussed above I also expected staff to conform in some sense to my expectations though I might have shown more flexibility than a line-manager because often there was not the same urgency for staff to participate in initiatives which I had instigated as would be experienced in getting a task completed.

On the other hand I was working in parallel with line-managers in that I expected that staff would develop and gradually move up a career ladder and that often I could provide them with material resources which would help them to do so. My attitude was probably little different to that of a line-manager, sometimes empathising with staff and sometimes being disappointed with their reactions. Another similarity with a line manager was that although my actual position was imposed on me and I had to act within the constraints of the organisation, I had some autonomy. Just as a manager I often worked very hard and experienced role
strain and role fragmentation. As Fox (1974:16) argues, if behaviour called for by role is diffusely defined it is discretionary. It is suggested that a discretionary role may invite a process of fragmentation, but if a role is greatly defined it is unlikely to lead to fragmentation.

vii The tensions between myself and others

A re-examination of the data shows the potential which existed for tensions and stress. Any tensions which I experienced were due mainly to the following:-

a. My position as training officer and as biologist
b. Work overload
c. Conflicting positions as Training Officer.
d. Hostility of staff
e. Pressure from tutors
f. Pressure from marketers from commercial organisations.

a. It was quite a difficult task to balance my time between my work as a research scientist and that as Training Officer. As a scientist I needed large blocks of time for research and for writing papers but for the training function I needed to be on call when individuals required action. In some instances if under extreme pressure, I had to 'borrow' time from one job to give to the other which in itself was stressful. Thus I needed to have the flexibility to work the 19 hours per week allocated to training when I deemed it to be most advantageous for all concerned. Failure to achieve the right balance would have caused some tension between my line managers and myself.

b. Work overload and role fragmentation

As I have discussed in Chapter 31 a training officer has to be able to perform numerous different roles and tasks within any single day, sometimes even bits of roles. Thus role enactment may become fragmented. This means that so as to undertake most of their duties efficiently training officers have to make choices between competing pressures. In this respect I was guided by the most urgent needs for action as I perceived them, by legal requirements for training and to a lesser extent by pressures from others. In extreme instances the task was simply delayed for several days. The type of training required for people to cope with fragmented roles is complex. Potential training officers would need to be shown how to look at ways of doing things and of prioritizing.

c. As I have discussed in Chapter 28 I experienced role conflict in that sometimes it was difficult to cope with two differing sets of role expectations, for example in instances there were pressures from 'biology' line-managers and the Director respectively. Differing demands made on
me by line-managers and their staff respectively at any one time also imposed stress.

d. Although my data do not present much evidence of hostility between myself and various line-managers, I suspect that this was because I took care to avoid getting into situations of major conflict. This was partly because I felt that it would not be of advantage to the organisation if day-to-day contact was handled badly. I attempted to exhibit good boundary management, visiting offices during most days so as to become available for discussions therefore I could judge where future areas of hostility might occur and act quickly to dispel problems. Usually it was possible to negotiate where difficulties occurred over funds or where time for attending courses was at a premium.

e. Most of the problems I experienced with internal or external tutors seemed to arise from the fact that payment to tutors occurred via the organisation's bureaucratic system which meant that there was quite often a month's delay in paying them for their services. As the recruiting officer they quite often held me responsible for non-payment.

f. Attitudes of staff towards the organisational policy varied. Generally staff seemed happy to participate in staff development initiatives and generally I personally did not experience much direct conflict. However at times it might have seemed as though I was imposing some pressure on staff to participate in courses solely for the benefit of the organisation. There were two main constraints on staff namely that:-

Once having booked a course they were committed to attend it or comply with IOS policy and find someone to substitute for them and:-.

The Joint Training Service imposed a cancellation charge if individuals dropped out of courses within several weeks of the event.

Thus I had to impose some pressure on staff to attend once they had committed themselves to do so. Furthermore the NERC policy as shown in Appendix 8.1 stressed the importance of staff participating in Management courses as a pre-requisite for promotion.

It might have seemed to staff that I was imposing too much pressure on them for the good of IOS. In fact I felt that I should give them opportunities for new learning and 'open their eyes' to self-development. But it could have been construed that I had only the interests of the organisation at heart. For example the Marxist approach places stress on the economy as determining such social processes, thus it could be interpreted that the whole education and training function was run only for the good of the organisation. For example Bowles and Gintis (1976:31-60) examining values underlying education put forward a view that one of its main purposes is to produce
a workforce which contributes towards profit. Another similar approach is made by Althusser (1972) who suggests that education supports the interests of capitalism.

It was true that people needed to earn a living but an interest in scientific research was at least as important a reason for updating skills or learning new ones. The IOS policy and my own ideology was to provide staff development initiatives which would promote the organisation as a centre of excellence and that education and training would help individuals to develop and grow with the organisation. IOS was basically non-profit-making and was government subsidised. Any small profits made from contracts were ploughed back into research which scientists and technologists wished to undertake not only for patriotic reasons (i.e. to wave the flag for Britain") but also for individual reasons i.e. to establish a reputation as a scientist or technologist.

Some Marxist approaches tend to emphasise subservience of the workforce. This certainly was not true of IOS which was controlled partly by the many individuals who had acquired virtually unique expertise within their research field. The workforce at IOS is clear-thinking - subservience was at a minimum. I felt that I was giving even more freedom and power to individuals by educating them and freeing them to 'know themselves' (see Freire 1973:11-15) and to update on new technology and management techniques.

The present data suggest that there is a need for training officers to participate in education and training initiatives so as to help them perform the rigorous tasks and wide-ranging roles which they have to perform. There should be further investigations into the means of affording them training linked to professional status.

viii. The functions of training:

The data could have been analysed further in terms of the wider-reaching functions of training, how it helped people and also the organisation. Evaluation data suggested that it helped the organisation by promoting its image as a centre of excellence within the national and international field, by improving communication, and by helping it to acquire and harness the energies and expertise of its staff through efficient project- and man-management procedures. It was apparent also that an overtly supportive approach to staff development initiatives provided one factor in the successful recruitment of staff. For example the data indicate that, during 1992 when there were problems in the funding of initiatives, staff put pressure on management to maintain levels of funding for post-graduate courses on the grounds that at their recruitment interview they had been told that they would be provided with opportunities for such training.

At an individual level evaluation data suggest that staff development initiatives are valued in that they help to empower and to motivate people, to update them on new technology, to help them to understand the point of view of others and to develop

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contacts both within and external to the organisation. This is particularly true of the scientific fraternity who need to meet colleagues at national and international meetings so as to discuss new technology, new ideas and collaborate on new projects. Staff development functions also help potentially redundant staff to gain new jobs which, from present experience helps to reduce stress not only on those who have to leave the workplace but also on those who remain.

In the ultimate conclusion one could imagine that individual staff could become more powerful than some of their Directors through the continuing acquisition and updating of expertise. Thus it is envisaged that organisations would lose some control. It would be interesting to know to what extent this is likely to happen. I have shown that lack of resources and lack of time exert a powerful effect by limiting training initiatives but somehow a balance has to be maintained in provision to as to benefit the organisation and the individuals within it.

ix. The nature of Training Office role

From the data implicit and explicit in this dissertation it seems that training officers play a part in shaping individuals within organisations. That is not to say they take the sole part because individuals develop by various means. The media also has joint responsibility for developing people and also the individuals themselves.

I put forward the view that by offering a wide-range of initiatives in vocational, computing, management and personal development topics, training officers within organisations take over from teachers and lecturers in Further Education and Higher Education Institutions. By shaping and developing people training officers help to develop organisations. It can be argued that as people develop and grow so does the organisation because the latter is only as good as the people within it. But it is possible to develop this argument further and point out that training officers are in a position to provide seminars and other action-learning initiatives so as to foster shared values, objectives and solutions. Their responsibilities are to work with Management Teams to create a learning organisation so that the joint expertise of staff can be shared and joint energies harnessed to create a centre of excellence. But it seems that such an organisation cannot be achieved without the voluntary support of staff. Such an approach should be paternalistic rather than coercive.

So far I have already described a role-making position which means that I was to some extent autonomous, also I have put forward the view that training officers take a managerial role. But it is also a professional role in that it requires not only a competent approach but also an ethical one. It carries responsibilities for giving staff opportunities to develop as people. In this respect I view the work and responsibilities as being little different from that of a teacher or a lecturer. In some ways it carries greater responsibilities for allowing people to develop than in Further- or Higher Education Institutes because in effect staff in organisations are a 'captive audience' they need someone to support them especially in instances where top management may not support the training function as strongly as did the
Management Team at IOS. Some inexperienced staff within organisations tend to be unaware of opportunities which could be afforded to them and need to be helped to participate. Training Officers should undergo formal training initiatives before being allowed to practise as should course tutors.

One question which I could also ask is how do training officers play their role?. For my part I invested a great deal of effort in providing initiatives which I deemed could be of value and interest to most of the staff. I tended to take a relatively casual approach to nonattendance of staff on courses provided that the latter were filled by other individuals who either had requested courses or who line managers felt might benefit. I was aware that some staff might be 'playing the system' i.e. the 'professional' volunteers for attendance on courses. Occasionally I turned a 'blind eye' to this because people were sometimes useful in making up numbers on courses from which other staff were likely to benefit. If there were too few staff on courses then the latter could fail. I felt that it was most effective to ignore minor irritations and to remain flexible to daily events which impinged on or were integral to the work.

I took pains over staff welfare particularly for the new and/or less able and for those who had the more 'difficult' line-managers, for example those who were unlikely to insist on equal opportunities for new learning.

x. The Education and Training debate

In Chapter 1 of this dissertation I have already examined the question of whether the terms 'Education' and 'Training' can be thought of as being synonymous. I came to the conclusion that these once separate concepts are moving towards each other and that they form a continuum. The data can provide further insights into my position as educator or trainer of adults within the workplace. As I have discussed above as Training Officer I aimed to make staff aware of the opportunities which continuing education and training could provide. In some respects I was helping to mould staff to the requirements of the organisation in that they were deemed to require competence to practise their chosen work efficiently and effectively but also to be able to manage others and to get along with colleagues. However this was hardly a top-down oppressive authoritarian approach as discussed by Giroux (1981:65). This was not so at IOS because there was a perceived equality between tutors and staff. Neither was it a bottom-up approach, rather it stemmed from a working compromise between myself and individuals. They knew which initiatives would help them at work and I was happy to match supply with demand provided that it would develop them in some loosely work-related way. As I have indicated most staff were well educated, competent, powerful and part of a meritocratic society at work. It was unlikely that I would have been able to coerce them into doing anything which would meet with their disapproval.

The present data support my view that a continuum between education and training exists. In some ways I was playing a similar role to that of a teacher in compulsory
education in that I was providing a service for clients rather than coercing them. However while most of the initiatives which I provided were attended at the discretion of individual staff and managers, others regarding Health and Safety training were compulsory. From this point of view it can be argued that adult educational initiatives are not compulsory whilst some training initiatives are. On the other hand it can be argued that to some extent staff are expected to participate in at least some education and training initiatives within organisations even though it is technically not compulsory to do so. From similar point of view it can be argued that because some training is compulsory it is similar to compulsory education. Are we making false differences between the terms 'Education' and 'Training'? Does the fact that some training tends to be compulsory whilst education tends to be undertaken voluntarily (for individuals who have reached school-leaving age) enable one to separate these entities?

33.6 SUMMARY

Within this Chapter I have provided a critique of this dissertation in terms of the strengths and weaknesses of the data. Moreover I have reviewed some of the data, looking at it in new ways mainly from the point of view of the social position of training officers within organisations so that it would help to advance knowledge about the education and training function. Moreover it is intended that it might help to explain social phenomena from a broader perspective.

Within previous Chapters I defined the training officer in terms of a person who is involved in day-to-day activities related to staff development and who practises in conjunction with other managers and staff. I still uphold that view but feel that this presents but a simplistic approach and so I have now described both practical and theoretical aspects of role-taking and role-making partly taking an existential approach.

Further theoretical insight into the impact of staff development on organisations and on the people within them has been provided. It is clear that there is an effect not only of the impact of the training function on the organisation but that the function itself is strongly influenced by the attitudes and behaviour of individual and/or groups of staff.

Practical and theoretical aspects of role-taking and role-making have been analysed fully. The data have been reviewed further from a phenomenological perspective and described within the context of power, culture, conflict and conformity within the organisation. Data have been highlighted which reinforce the theoretical perspective that roles are characterized by expectations of others and that indeed the role-occupant role-takes, role-enacts and role-makes (see Turner 1962). In addition I have shown that the role-incumbent participates in a complex behavioural system. As Mead (1935) suggests role-occupants may view role from the vantage point of 'relevant others' or as Linton (1936) argues view role-taking as a prescription for
self. The present data confirm the view of Turner (1962) that role enactment entails playing both prescribed and non-prescribed roles. However it appears to be a complex process in that within the education and training function subsidiary roles may be enacted which are inherent within key-roles and that fragments of roles may be performed. Furthermore not only does role-enactment entail different behavioural patterns for any one role, a role incumbent may perform several roles simultaneously. Thus role-taking, role-making and role-enactment present a more complex situation than has been supposed previously and where complexity is maximised this may lead to role fragmentation and possibly to role-breakdown. It seemed that role-taking and role-making involved some creativity as well as conformity in that it partially depended on interpretation which is inherently subjective and sometimes involved compromise. To some extent my behaviour in terms of role enactment was prescribed because of the position I held. A code of ethics and excellence in quality and quantity of output and well-being of people were paramount within the philosophical approach of the organisation. The present data suggest that I too brought to the position my own values as an individual i.e. my emphasis on freedom and well-being of others and that I was free to role-make. Thus I was not greatly constrained by my position. On the other hand the constraint exerted by the organisation is likely to be much greater in a situation where its philosophy and that of the individual do not match.

The data show that my role was governed also by expectations of relevant-others, sometimes by demands and the amount of time I could ascribe to the role. I showed that individuals sometimes experienced role conflict usually caused by having too little time and having to make decisions between undertaking training, getting on with their daily tasks or attending meetings.

It seems that individuals were keen to take advantage of staff development initiatives, not only because they had some interests in 'flying the organisational flag' - a type of patriotism (was it a family-based patriotism?) but also because they needed recognition within the meritocratic society in which they worked. Furthermore they strove for personal satisfaction in 'getting things done' and in excellence of output'.

The data suggest that individuals were powerful, expert and individualistic but that they also strove to foster the interests of the organisation. The existentialist approach would suggest that people as individuals had found a way of satisfying their needs for personal growth and recognition of their capabilities. Within existentialism the themes of freedom, decision and responsibility are seen as the core of personal being and that humans are constantly expanding their world - making it more complex and updating technology. To a great extent I viewed myself as a facilitator (albeit in a small way) as the enabler of such self-fulfilment of individuals at work as inherent in the concept of lifelong education (see Allman 1982; Dewey (1975) Jarvis 1988).

In the next Chapter I shall discuss future areas of research which may be beneficial.
CHAPTER 34

FUTURE AREAS OF RESEARCH
34 FUTURE AREAS OF RESEARCH

34.1 INTRODUCTION

The present research has focused on the roles of the training officer within a component scientific research Institute within the Natural Environment Research Council. In describing my activities as Training Officer and investigating the cost-effectiveness of the training function there have been many issues which I have discussed at length in previous Chapters. In turn, the discussions have led to several major questions which require further investigation. These are discussed below in relation to the following:-

a. The career structure of training professionals
b. Role enactment, role conflict and role fragmentation
c. The role of line-managers
d. The concept of continuing education in organisations
e. The effectiveness of training systems within organisations
f. Evaluation: costs of staff development initiatives
g. Action research

34.2 THE CAREER STRUCTURE OF TRAINING PROFESSIONALS

It is not clear whether most training officers working in Britain and other European Union countries are graduates, hold formal educational qualifications or indeed, the extent to which they are regarded by employers as professionals. Those employed at the component institutes of the Natural Environment Research Council (NERC) varied in their qualifications. Most within Institutes were often of graduate status but this situation was to be expected where the majority of staff recruited for scientific research were graduates and the Training Officer was recruited from this field. Furthermore in NERC it was apparent that such training professionals were usually recruited from other departments within the organisation rather than directly from the labour market. Some training officers had focused their energies on the training function but this was not always seen by colleagues or their line-managers as their primary function in situations where they had other non-training responsibilities.

I have attempted to show that Training Officers undertake a wide range of responsibilities and have described the practicalities of such events at a British science research institute. It is not known how the qualifications of such professionals compare with those undertaking similar roles and responsibilities in other commercial or government-sponsored organisations either in Britain or in the European Union.

Little is known about whether training officers in Britain and the European Union enjoy career progression and if so what constitutes a career pathway. During the
period of the research I encountered only one individual who was studying for formal Institute of Training and Development qualifications. A wide range of job-titles for training staff are given in advertisements in the national press but often the precise responsibilities of such professionals are not listed. One might expect a hierarchical arrangement of job titles such as 'Human Resource Developer' or 'Training Director' (at the top), and 'Training Adviser', 'Training Manager', 'Training Officer' down to 'Training Assistant'. But from the advertisements surveyed it seemed that the job of the 'Training Manager' was seen by employers to be little different from that of 'Training Officer. Hardly any information was readily available on the pathways for career progression from Training Officer up to Training Director or beyond. Indeed the rationalisation for such job titles and the responsibilities to be undertaken were not always obvious. It is not known to what extent the titles of 'Training Officer', 'Training Manager' or 'Training Director' reflect the range of responsibilities which employers place on these training personnel respectively and what qualifications are perceived by employers as necessary to perform effectively the responsibilities assigned to specific job titles. Furthermore little is known about the extent to which training officers are permitted to be innovative within organisations.

I put forward the view that training officers should take advantage of the present pathways which provide the opportunity for them to achieve professional status. Formal qualifications can be achieved through various organisations including the Council for National Vocational Qualifications and the Institute for Personnel Development. More Institutes of Higher Education could provide such courses and further information is needed on this aspect and on the extent to which places could be expected to be filled.

It seems from advertisements for job vacancies that many employing organisations do require training officers to hold formal qualifications but it is not clear how many practising training officers within the United Kingdom could satisfy these requirements. On the other hand small organisations might find it difficult to fund a specialist training officer, though in terms of the latter's potential contribution to staff learning and organisational development, this could prove to be a false economy.

One can only predict on future changes which might affect the roles of training officers. In the present economic and social climate several authors (e.g. Sredl and Rothwell 1987:429), have indicated that the role of training professionals is changing. In my experience over the three year period of my research at IOS, I found that the several events including relocation of the Institute and the advent of National Vocational Qualifications had affected the roles which I undertook. For example, following the announcement of relocation several non-mobile staff asked me to advise them on where to enquire about career paths in jobs external to IOS. In the present economic climate a relatively large percentage of NERC staff are recruited on contracts of three or five years' duration and so towards the end of the period of their employment quite naturally look to external sources for work and so
require specialised career counselling.

It is not clear to what extent the competence-based standards of performance, if applied to training officers, will encourage them to enact a wider range of roles as they climb the HRD professional ladder.

It was also apparent that the advent of national vocational qualifications placed increased emphasis on competency-based training for the clerical staff at the Institute. I initiated events leading to the supervision of such initiatives by a local college but I did have the option of becoming an assessor. There is every likelihood that in the future, training officers may become assessors or verifiers for such competence-based formal qualifications. This aspect requires monitoring.

It is apparent that the culture of organisations plays a major part in promoting the idea of continuing learning. I have shown that as Training Officer I had some input into promoting the idea that IOS had a learning culture. Other training officers with whom I discussed the job seemed to be reactive rather than proactive in promoting a learning culture. Further research is needed into the role of training officers in general in promoting the learning culture within their employing organisations. Leading from this question one might also consider whether the role of culture has overriding influence on learning or whether the excellence of tutors, colleagues, peers or line-managers is more influential.

Bramham (1989:38) considers that a 'centre stage' role is emerging for training professionals as a result of competence-directed learning. He suggests that they will have to recognise the shift from knowledge-directed training to skills-based training and standards of competence. They may have to persuade line-managers or other staff to play a greater role in the facilitation of competence-based learning rather than to input knowledge-based information themselves. Furthermore, as discussed above, they may have to act as assessors and administrators for National Vocational Qualifications and other on-the-job training. On the other hand I have shown that many of the roles which I undertook, for example, resource-gathering, programme administration and evaluation were not related to competence-based training and were more concerned about maintaining a cost-effective approach to the staff development function by ensuring that staff were given relevant training at the right time in their careers at reasonable cost. More information is needed on the changing roles of training professional as a consequence of an increase in competence-based training.

34.3 ROLE ENACTMENT, ROLE CONFLICT AND ROLE FRAGMENTATION

The research has shown that a potential exists for training officers to perform a variety of roles. I have described not only prescribed roles but also some which are non-prescribed. Further information is needed on the way other training officers perform their function and their attitudes to it, for instance whether they feel that
they are working mainly for the good of staff or for the organisation.

The present data suggest that role-occupants employ a wide range of cognitive and behavioural skills in the process of role enactment. Several roles may be enacted at any one time. One role may entail a series of behaviours. Roles may be subsumed within roles. Furthermore fragments of roles rather than the total role may be enacted. It is clear that the role of the training officer may become fragmented if many different roles are enacted in fast succession within the normal course of daily activities. Role conflict and role overload may occur particularly in situations where a training officer is expected to undertake, in parallel, multiple training or non-training-related responsibilities. Further information is required about the extent to which training officers experience role fragmentation, role conflict and role overload in various types of commercial and governmental organisations and the level at which these phenomenon may occur before the roles become so diverse or the pressure becomes so intense that the training professional becomes ineffective. More information is also needed about the balance of power between training officers and their clients or peers and any possible tensions which may exist. Whether each individual attempts to conform to roles expected of her/him or whether s/he tends to 'play the system' creatively. Indeed do individual training officers always tend to follow an organisation's prescription? and how do they spend their time?. To what extent are they instrumental in sculpting the learning organisation? (see Watkins and Marsick 1991). How do they view their role, what does it mean to them?.

Conversely it is not entirely clear to what extent 'relevant others' i.e. staff and colleagues perceive or even recognise the various different roles enacted by training professionals. More data are needed on how others within the organisation view their training officer.

I have shown that at IOS, which employed approximately 180 staff, I needed at least 19 hours per week in order to achieve a wide-variety of staff training- and development-related tasks including some needs analysis, implementation of training initiatives, evaluation and production of reports for the Management Team. The present data suggest that this is the least amount of time which should be allocated to the job. Although I was given some limited help with needs analysis by line managers, I sometimes experienced role overload. Some other training officers employed by NERC and other Research Councils Research indicated that they were allocated much less time than this for the job of Training Officer, though similarly their line-managers also took some of the responsibility for coaching staff and assessing the latters’ training needs. More information is needed on the number of hours that training professionals in commercial and government-run organisations within the United Kingdom spend in performing their various roles and the optimum length of hours which are needed per week for, say, every 50 or 100 employees, also whether it is better to have part-time or full-time working.
34.4 THE ROLE OF LINE-MANAGERS

I pointed out that line-managers within IOS performed a wide range of activities including project management, team-management and financial management and also advised on Health and Safety matters. They also helped to assess the training needs of staff and undertook coaching, mentoring and appraisal. Most also undertook scientific research and participated in formal and informal seminars so as to inform the wider scientific community. The evaluation data suggest that line-managers were sometimes criticised by staff for not taking a more active part in helping their staff to transfer their newly learned management techniques to the workplace. There may be several reasons for this but because of the wide range of responsibilities encountered by line-managers in the current economic climate, they may also suffer from role conflict and role overload. This aspect could be investigated further from a comparative point of view, say every two or three years.

34.5 THE CONCEPT OF CONTINUING EDUCATION IN ORGANISATIONS

At NERC Institutes human resource development was an integral part of strategic planning thus promoting the idea of continuing learning for staff. Several authors including Jarvis (1983) promote the idea of continuing learning throughout adulthood so that people can update skills for work- and leisure-related activities. Indeed it is clear from the work of Tough (1979:1-2) that many people do engage in self-learning activities annually. It is not clear to what extent this applies to staff in British organisations. From my research as Training Officer it seemed that many of the younger staff at IOS and many of the professionals, most of whom happened to be graduates, were keen to participate in the training opportunities provided. However, although the IOS policy was for all staff to receive training as applicable to their needs, the attitude of some of the long-serving male and female staff in clerical positions was that they felt that they were too set in their ways to learn. If this attitude is also true of long-serving staff in other employing organisations within the European Union then it is probable that those staff may not be achieving their full potential at cost to themselves and the employing organisation. More information is needed about the aspirations of long-serving unskilled and semi-skilled staff and the extent to which they are helped to progress within organisations through continuing learning. What are the alternatives? What are their preferred ways of learning? How can continuing learning be enhanced in newly redundant or newly retired staff.

34.6 THE EFFECTIVENESS OF TRAINING SYSTEMS WITHIN ORGANISATIONS

Kenny and Reid (1986:11) questioned whether the recruitment of labour might be affected by an organisation's training policy. It seemed that at IOS this question was certainly applicable to graduate recruitment. The data showed that although it was
relatively simple to recruit graduates and post-graduates to the field of Oceanography, at interviews often potential staff enquired about the training policy of NERC component Institutes. However it is not known to what extent this is generally true of the United Kingdom workforce. Moreover it is not clear whether current employers are tending to promote training so as to develop a smarter, efficient workforce or whether it is being cut back due to lack of funds. It may be better for firms to take on higher-paid staff with relevant experience and qualifications rather than lower-paid staff who need intensive training.

I have shown that IOS promoted the idea of a learning organisation in that it presented a well-balanced curriculum from which staff benefit. Courses included 'Health and Safety', 'Time-management', 'Project-management', 'Team-management', 'Total Quality Management' language training and basic management skills. All were designed to promote individual and organisational development by adopting a policy of good managerial techniques, shared values and objectives and also continuing learning by staff. From discussions with other training officers and a survey of commercial training literature it seems that this type of curriculum presents the norm for organisations to pursue. However one would expect that, just as other systems evolve, so training and development systems would also evolve. From my research it was clear that some of the longer-serving staff viewed much of the time-management and basic management training as common sense and that some participants had already learned some of the concepts as a part of acquiring normal life skills. Other less-experienced staff seemed to view the prospect of management training as awesome. Several questions seem to arise from these perceptions:

a. In the future, should basic training in management-related skills such as negotiation, delegation and interpersonal effectiveness occur as part of the post-16 curriculum in Further- and Higher Education so as to prepare school leavers for work?

b. What factors could help to reduce the aura of most kinds of management training perceived by less-experienced employees.

c. What are the best ways to develop further, the processes for increased organisational development. For example, various authors including Peters and Waterman (1982), Deming (1992) and Handy (1985;1994) and Senge (1990) have produced various detailed publications on ways to achieve organisational excellence including increased quality management. It is not clear whether training officers within the United Kingdom are currently putting these concepts into effect. If so it would be advantageous for other training professionals to become informed about the types of training initiative which are most likely to meet such demands, the practicalities of implementing them and whether such processes have been deemed as successful by organisations. Senge (1990:68-69) has argued that human resource professionals in learning organisations need to develop the
discipline of systems thinking (i.e. seeing all aspects of the organisation and the staff development systems within it), so as to maximise their potential, that of staff and colleagues and that of the organisation. Methods to expose employees to this concept should be investigated so that all members of a group are able to contribute to ideas and problem-solving activity.

d. Which type of managerial, language or vocational training will be most helpful to scientists and technologists in the future. What are the best structures for self-development?

e. Which method are most appropriate to empower staff

f. How can the transfer of learning to the work-bench be improved

g. To what extent is on-the-job informal training efficient and effective. It is expensive in staff time but little is known about its effectiveness.

h. Do organisations such as IOS need to participate in a system whereby young technical staff are offered formal modern apprenticeships?. Currently at least ten of the younger graduate scientists and technologists at IOS are provided with post-graduate courses which are linked to learning-on-the-job. Could such a formal system be devised for technicians or other technical staff at undergraduate level.

i. To what extent will the trend towards competence-based training affect the attitude of line managers towards the training function?

34.7 COSTS OF STAFF-DEVELOPMENT INITIATIVES

The present research suggests that many of the problems faced at IOS were linked with a chronic shortage of funds. In this respect the Institute was probably no different to other organisations which were functioning within the recession of the early 1990s. Certainly my efforts to reduce costs of staff development initiatives by participating in shared resources albeit in a small way worked reasonably well. In effect I was able to borrow films and computer-assisted learning disks from other NERC sponsored organisations and, in return to lend them course material. I suspect that there are many small organisations such as IOS with fewer than 200 staff in Surrey and Hampshire who might benefit from setting up a system of shared training resources such as video-tapes, computer-assisted learning disks and experienced tutors in a range of work-related activities. This aspect could be explored further.

It is clear from the present evaluation data that computer-assisted-learning systems worked well at IOS and were relatively cost-effective. It would be useful if this method of learning could be enhanced by increasing the type and amount of
information held on disks and to make them more interactive.

I showed that the short-term work-experience at IOS was valued by college and university students and that in turn, students with proven ability often contributed to basic scientific research. More data are needed to determine to what extent commercial and governmental organisations employ such students and the amount of benefit mutually derived.

34.8 ACTION RESEARCH

One well-known means of problem-solving in organisations is by action research which can be used to solve difficulties such as lack of communication between various levels of management staff. This type of research could be extended further to include the monitoring and evaluation of various staff development strategies which in the long-term could lead not only to improved communication but also to improved appraisal systems and quality management.

In summary, Sredl and Rothwell 1987:406-410) point out that futuring by HRD professionals should be linked to changes related to the economic environment, new technology and changing conditions within the organisation. Further research strategies should help to monitor these aspects.
CHAPTER 35

CONCLUSIONS
CONCLUSIONS

In the preceding Chapters I have explored the roles of the training officer and the extent to which s/he may contribute to the cost-effectiveness of staff development programmes with particular reference to my activities as training Officer at the Institute of Oceanographic Sciences (IOS).

It is clear that training officers undertake many complex social roles so as to ensure that staff development initiatives meet the needs of staff and organisations. Fifteen key-roles and 92 tasks are described, based on my own experience, and that of other Research Council Training Officers. key-roles within training and development activities put forward by McLagan 1983 and Pinto and Walker (1978) are confirmed. My daily activities including other subsidiary roles derived from ethnographic data are described. I put forward an additional role of 'Communicator in non-routine events' as a key role for training officers. The roles were very diverse and in some instances impinged on each other. Similar roles were undertaken by training officers employed by other external organisations.

The data support the views of Pettigrew et al (1982:6-12) who argue that each role-occupant brings to the position his/her own values, perceptions and experience. Training officers need to exhibit good boundary management so as to obtain support from Management Teams and from the staff themselves. The data suggest that it was necessary to retain some element of marginality and neutrality when undertaking daily activities.

The present data support Turner’s 1962 argument that role is a refinement of conformity theory but they also imply that role has a creative and functional aspect. It seems that Turner’s view of role-occupants’ actions tends to be simplistic. Not only may training officers be role-taking and role-making, they may also enact fragments of roles or several roles at any one time. Role conflict may occur also. Further research is needed into the extent to which this occurs in various types of commercial and governmental organisations and the level to which these phenomenon may occur before the roles become too diverse and fragmented.

It is suggested that the ability to cope with pressures and remain resilient is an essential attribute of training officers. Good personal relationships are essential. The survey of Research Council training officers showed that good communication skills and effective personal relationships were place high on the list of attributes which they felt were needed. Some outstanding attributes required of them include, credibility, confidence and ability to problem-solve.

Roles and competencies of training professionals appear to be undergoing some changes linked partly to competence-based learning. There is every likelihood that in the future, they may become assessors or verifiers for such competence-based formal qualifications.
Training Officers are seen as a useful resource in that they need to devise a balanced curriculum which is acceptable to the sponsoring organisation and to staff within it. The job requires a professional approach and they need to be trained for their complex role. They also need to achieve a balance of funds for the various initiatives which sponsor vocational, management, computing skills or personal development. The present relatively new system of 'Management by Objectives' may not work well in periods of severe recession where lack of funds for personal or vocational training may prevent individuals from participating in training and in meeting their work objectives.

It is concluded that during 1991-1993 staff development programmes at IOS were cost-effective and most staff benefitted from them. Resources available included staff themselves, library services, computing support and self-help groups. Individuals were keen to participate in such initiatives so as to enhance their professional competence and versatility whilst also remaining loyal to the organisation. The success of the IOS strategy for staff development was demonstrated by various factors including a doubling of external income over a three year period and increased publication rates. Health and Safety video-based training was sometimes forgotten by some staff and so it is recommended that refresher sessions need to be run on a regular basis.

I concluded that cost-effectiveness of courses was maintained by a. Sharing of resources with other NERC organisations and b. the willingness of staff to exchange information with others, sometimes acting as tutors, seminar/workshop facilitators or lecturers. Areas for further research have been put forward. For example further data are needed so as to inform about how training officers in organisations manage their role and the extent to which they contribute towards a learning culture in the workplace. Moreover research should focus on the development of HRD planning, the development of new curricula and new learning methods.

It was estimated that the basic cost of formal courses amounted to 1.5-2% of the IOS salary excluding participant's time and accommodation.

I have shown that at IOS, which employed approximately 180 staff, there was a need to spend at least 19 hours per week in order to achieve/enact a wide-variety of staff training- and development-related tasks and roles.

Training officers need to be provided with education and training which will help them to cope with the various pressures which they are likely to meet in their daily activities. They need to develop problem-solving skills, business acumen and, marketing ability. Furthermore they need to undertake research regularly into the best methods for promoting learning. They should take advantage of the present pathways which provide the opportunity for them to achieve professional status.

The data suggest that it is cost-effective for organisations to employ training officers.
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Appendix 2.1  The Institute of Oceanographic Sciences mission statement.

The IOSDL Mission

IOSDL's mission is to advance understanding of the oceanic environment and the processes of environmental change in the ocean, and to predict future change.

IOSDL will achieve its mission by continuing:

- to carry out high quality research on the ocean through multidisciplinary studies of the oceans and their boundaries with the air and seabed, on regional and global scales
- to develop the novel equipment and enabling technology that such research requires now and in the future
- to focus on strategic problems approved by the NERC Marine Sciences Committee
- to integrate its research into the national and international fabric of science and technology
- to report and publish the results of its research
- to undertake applied research under contract for UK and overseas customers
- to transfer its technology to industry
- to provide expert advice to government and others
Appendix 2.2  The Joint Training Service mission statement.

JOINT TRAINING SERVICE

MISSION STATEMENT

TO PROVIDE A PROFESSIONAL AND COMPETITIVE MANAGEMENT AND
DEVELOPMENT TRAINING SERVICE BY WORKING IN PARTNERSHIP WITH THE
RESEARCH COUNCILS TO MEET THEIR STRATEGIC AND BUSINESS AIMS

By - ENABLING LINE MANAGERS AND STAFF TO MEET IDENTIFIED TRAINING
NEEDS
- PROVIDING EXPERTISE IN THE MANAGEMENT OF RESEARCH AND
DEVELOPMENT IN A CHANGING ENVIRONMENT
- SUPPLYING AN INDEPENDENT ORGANISATIONAL AND STAFF
DEVELOPMENT CONSULTANCY SERVICE

BACKGROUND

The Joint Training Service (JTS) was established in 1988 to provide central training for the
Agricultural and Food, Economic and Social, Natural Environment and Science and
Engineering Research Councils (AFRC, ESRC, NERC, SERC). In 1989, to meet the needs of
the Swindon based Research Councils, a Joint Services Unit (JSU) was formed and JTS
became a part of the newly formed Unit.

TRAINING ADVISORY COMMITTEE

In 1989 a Training Advisory Committee (TAC) was formed. Each Research Council is
represented on the Committee. The Head of the JSU, and the Head of JTS, are also members.
The TAC coordinates the needs of the four Research Councils and approves the JTS
programme.

The Terms of Reference are as follows:

1. The Committee will work in partnership with JTS.
2. To inform JTS on the central training requirements of AFRC/ESRC/NERC/SERC
   and to receive their proposals thereon, including the financial and manpower
   implications.
3. To meet half-yearly, or more frequently as required.

THE PROGRAMME

This programme outlines the training which JTS offers. In addition, workskills and
vocational training is carried out locally. Local Training Officers (LTO's) can give guidance
on what is available

The programme has been designed to provide staff with appropriate and necessary training
as and when required and full discussion between line managers, LTOs and, in appropriate
circumstances, JTS, can greatly assist in the identification of training needs.

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INTRODUCTION

These notes on the completion of Annual Staff Report (ASR) forms are provided for the guidance of each member of staff being reported upon (the Job Holder), the Reporting Officer (RO) and the Countersigning Officer (CO). They are designed to help the Job Holder to complete certain parts of the ASR and, where he/she is not also a reporting officer, to better understand the consideration given to performance appraisal and promotion assessment. These notes are important both as instructional material for new reporting and countersigning officers, and as a reference document for those who are experienced in staff reporting.

New ROs and COs should work through these instructions with a blank ASR form before completing any real ASRs.

All ROs and COs should refer to the instructions whilst completing ASRs.

Training

Staff Reporting Seminars for Reporting Officers are organised by the Research Councils' Joint Training Service. Reporting Officers should attend such training on first assuming line management responsibilities.

Equal Opportunities

It is the policy of the Natural Environment Research Council that all staff should have equal opportunity for employment and advancement on the basis of their ability, qualifications and fitness for work. Reporting and Counter-signing Officers must be careful when appraising performance and promotion, to guard against discrimination, including the more subtle and unconscious varieties, on grounds, for example, of sex, sexual orientation, marital status, race, colour, disablement or religion.
PART 1 - PERSONAL DETAILS AND JOB DESCRIPTION

1.1 Personal Details - This section has been completed by Personnel Sections using information from the computerised personnel system. The Job Holder should check it and notify the local personnel section of any errors.

1.2 Disclosure - It is good management practice that staff should be made aware of the assessments of performance and promotability made by their line managers. It is important that such disclosures should be both timely and take place in the course of constructive discussions between Job Holder and Reporting and Countersigning Officers. There is no reason why Reporting Officers should not fully disclose their assessments to Job Holders. Countersigning Officers will be able to give a fuller disclosure, including their own assessment of the Job Holder's performance and promotability. Job Holders requiring such disclosure should tick the box in section 1.2.

Further information concerning the arrangements for disclosure are contained in Staff Notice 8/88 issued on 26 March 1988. Guidance to Countersigning Officers is reproduced as Annex 1 to these Notes. These arrangements have been discussed and agreed with the NERC Union Side.

1.3 Job Description - To be completed by the Job Holder

(a) Present Job

(i) A job description which accurately reflects the work done during the year is the key to the completion of a balanced report. It should be comprehensible to people not familiar with the work, such as members of promotion panels. The duties should be recorded in separate numbered paragraphs and the RO should number the assessments in Section 2.1(b) of the ASR to correspond.

(ii) The Job Holder's duties should be agreed in a separate Forward Job Plan (see Annex 3) at the beginning of the period to be covered by the report. If the duties change during the period, an agreed revised description should be shown on the form. In any event, the description should be agreed between the Job Holder and the Reporting Officer immediately before the report is made.

(iii) The approximate percentage of the time spent on each duty should be shown.

(iv) Accredited Trade Union activities and tasks such as welfare, training, or safety adviser duties should be included in the job description.

(b) Resources

Give an idea of the responsibilities of the job in terms of control of resources, cash spend, financial estimates and numbers of staff managed.

IN ADDITION:

(a) where appropriate the job description should be supplemented by completion of Annex 1 which asks for details of papers, reports etc. published during the year in question.

(b) the Job Holder's attention is drawn to the need to complete Annex 2 - Qualifications, Training and Career Development.

(c) should the Reporting Officer and the Job Holder not be able to agree the list of duties, or the time spent on them, it is important that any disagreement should be recorded; a person's own opinion about what his/her job comprises needs to be on record.

continued
PART 2 - PERFORMANCE APPRAISAL

The following notes are for the guidance of Reporting and Countersigning Officers when completing this section of the report.

Equal Opportunities

Be careful to ensure that performance ratings and comments are based only on the performance of the Job Holder and are not influenced by, for example, matters such as sex, sexual orientation, marital status, race, disablement or religion.

2.1 Narrative Assessments

Use this page to explain how effectively each of the main duties described in section 1.3 has been carried out and specific objectives achieved. Give examples of work well done and areas where performance could be bettered. You are aiming to give a clear and objective picture of how the job has been done during the year under review, and of the Job Holder’s strengths and weaknesses. Use this space to make any additional comments on performance not covered by sections 2.2 and 2.3.

2.2 Performance Assessments by the Reporting Officer

Using The Rating Scale

When considering the aspects of performance, the best approach is to:

- decide what you are looking for in terms of the normal requirements of the grade in each aspect;
- use available information sources to identify relevant incidents and behaviour which indicate an appropriate rating;
- consider the information and decide on your box marking.

In deciding which box to tick:

- first decide what is the normal requirement of the grade. Box 3 - you need to build up in your mind (through experience, discussion with your manager, and your colleagues) the level of performance which meets this mark;
- once you have decided this, then move to Box 5 (unacceptable) and establish what you, your manager and colleagues, consider to be unacceptable;
- then move to Box 1 (outstanding) and go through the same process.

So, the pattern is to establish the standard in this order: Box 3, Box 5, Box 1.

By doing this, you will build up a uniformity of standards which will make your assessment more objective, more effective and more helpful to the member of staff and to Personnel staff.

You should bear in mind that an individual who is very effective overall might merit a Box 4 or Box 5 marking on some aspects. Equally, a much less effective person may have abilities which deserve a Box 1 or Box 2 marking in some areas. Remember that Box 3 does mean “fully meets the normal requirements of the grade.” People very rarely fall into the same category of marking for all aspects of performance.

In some cases, the aspect will not be appropriate in that the individual will not have had an opportunity to demonstrate ability. State “not tested” in such cases.

Standards for the Grade

The rating scales are meant to give shape and precision to your subjective judgements on the overall job and aspects of it. They should help focus attention on where the individual stands, in your view, as a member of a grade. But remember that the rating scale refers to the standard expected for the Job Holder’s grade.

This of course, ought to match closely the performance in the job, but there can be reasons for variation: an easy or highly-loaded job, for example. You may wish to discuss your views with the Countersigning Officer before you come to a final view. This wider view could help to solve the perpetual problem of ensuring consistent reporting standards across NERC.

continued
Aspects of Performance

Work Activity

Quality of Work

This aspect deals with how far the individual consistently produces work of the standard you would expect of someone in the grade, with little intervention from you. Any comments should be concerned with accuracy, finish, acceptability, clarity, effectiveness, achievement of objectives, relevance, problems resulting from inadequacy of the work.

Output of Work

You should assess how fast the Job Holder gets through an allocation of work but don't ignore its quality altogether. What you are looking for is the extent to which a high or low level of output of work of acceptable quality is achieved.

So, your comments should be concerned with volume of work produced and whether measured objectives were met.

Planning of Work

You need to assess the ability to look ahead, to plan to meet potential problems and to order work according to priority - using all the information which is available, eg planning to meet peaks and troughs; organising the flow of work to subordinates.

Comment on how the Individual's own work is planned, how the individual plans other people's work, how many avoidable last-minute crises occur, whether bottle-necks happen, whether what is needed is there when needed.

Management

Management of Staff

This should be completed, if at all possible. Even if the person only has partial responsibility for staff, or acted as a manager or supervisor for only part of the period, an assessment of managerial ability is useful, though in such a case, an appropriate comment should be added.

When commenting, consider the person's leadership, organising, delegating, planning, training, motivating and staff appraisal abilities, and concern for the needs of subordinates in their jobs.

Effective Use of Other Resources

You need to consider how the individual has demonstrated effective and economical use of available resources such as money, capital facilities and equipment, training, stores, transport, accommodation, and other services. Use of time and effective use of collective or individual knowledge of other staff should also be considered under this category.

Communication

Oral Communication

You need to determine whether the individual has a clear, concise, correct delivery which is thoroughly understood by the listeners.

Your comments need to cover both face to face and telephone communication with colleagues and the public.

You need to assess the manner as well as the matter (although this is also considered under relationships with others).

You also need to assess the speed of thought/speed of response exhibited by the individual in question eg meetings, explaining facts to the public, giving evidence.

Written Communication

You need to determine whether the individual can write clearly, succinctly, correctly and persuasively. Is material well ordered and well set out? Have the needs and capabilities of the recipient been properly taken into account?
Working Relationships

Relations with Other Staff/The Public

Assess the extent to which the member of staff commands the respect and liking of colleagues and the public, appreciates personal difficulties and suggests appropriate solutions. This involves the manner in which the individual treats other people when, for example:

- managing staff;
- collaborating with other members of the scientific community;
- dealing with enquiries and complaints;
- dealing with difficult personnel issues;
- under pressure

Your comments should deal with the individual's ability to be helpful and to show sensitivity and interest.

In this context 'Relations with the public' may be used to describe interactions at work with people other than working colleagues, eg 'customers', both public and private sector, contractors, and the general public.

Knowledge/Skills

Professional and Technical Knowledge

A person's initial professional qualification is a matter of record. However, the efforts made to expand knowledge and keep abreast of current thinking tell a good deal about motivation and the potential usefulness of that knowledge.

Application of Knowledge and Skills

You should consider not the knowledge and skills but the competence shown by the person in applying knowledge and skills in getting the job done. Academic knowledge is of little value until it is applied and used.

Numerical Ability

When assessing, remember that the assessment of numerical ability goes further than the ability to add up a column of figures correctly - particularly when calculators are used widely. The standards required will vary greatly according to grade, staff group and nature of the work, and will range from the need to do straightforward arithmetic with speed and accuracy, through the handling of larger sets of numbers with ease and understanding, to the application of more complex mathematical techniques. The assessment should indicate where the requirement falls in this rough scale.

2.2 Rating of Overall Performance

By the time you have completed the ratings of individual aspects of performance and the narrative assessment, you should be close to deciding an overall rating which is a balanced summary of all aspects of performance. If you are in doubt you might consider whether the individual's performance at least meets the standard for the grade, or whether performance is below the standard. This emphasises the fact that the assessment must partly be based on a comparison with others. The Countersigning Officer, with broader knowledge, has an important contribution to make here. Of course, you also need to relate the assessment to any objectives which were set during the year. However, even if an individual has met all the agreed objectives, this does not necessarily mean that a high mark is merited. There may be important parts of a job for which objectives could not be set, or the objectives may have been set with an eye to the individual's capabilities, not the standard for the grade.

As before, determine what level of performance is the normal requirement of the grade. Then consider whether, overall, the individual shall rate more highly or lower than this. Don't be afraid to use the extreme ends of the scale if this is justified. Many staff (perhaps around half) will merit a rating of 3, but it is no use to anybody if everybody is given this! Some - say the top five to ten per cent - should be considered outstanding. Others will perform clearly above or below normal requirements. Consider all the information that is available to you, seek help if you are unsure, from colleagues or the Countersigning Officer, and then decide!

Your marking should reflect the performance actually achieved in the circumstances which prevailed. It should not make allowances for any factors such as ineffectiveness, ill health and unusually high turnover of staff. You also need to take into account the difficulty of the job and note any relevant points.

Any factors affecting the rating should be stated in the space provided on the form so that anyone, eg a Board or Personnel Manager, using the form later will be aware of them.
Inadequate Performance

You will, if you identify inadequate performance, need to give a rating of 4 or 5. There is not necessarily any stigma attached to these ratings. For various reasons staff may not be able to perform as required, but it is important that you understand what has to be done when you use either of these ratings.

You need to write on the Report why the rating of 4 or 5 was appropriate and details of what action you intend to take or recommend. After consultation with the Countersigning Officer and other more senior staff if necessary, you must make sure that the individual reported on is informed specifically by you or your manager in writing in the case of a rating of 5, and told why the marking was given and what action is proposed. A copy of such notification or note of an interview must be attached to the Report to form part of the permanent record.

You, as Reporting Officer, should use an overall rating of 4 for -

i) staff whose performance is expected to improve, eg because they are new in the post or newly promoted, or because performance has been affected by other special temporary factors such as health or domestic problems;

ii) identifying staff who may be considered for limited efficiency action in due course;

iii) drawing attention to performance which is deteriorating and may attract an unacceptable rating 5 at the next report, requiring formal warnings and inefficiency action.

A Box 4 mark is a transitional marking and not necessarily adverse. If performance is less than satisfactory, then the reportee should be helped to improve it so that performance becomes at least of a Box 3 standard. A Box 4 (or Box 5) performance mark should not come as a surprise to the reportee at the time the annual report is prepared. It should be the culmination of deficiencies identified and discussed with the reportee throughout the reporting period.

A report of unsatisfactory work (overall performance marking 4 or 5) should be made at any point during the year if the Reporting Officer considers it warranted, where formal action or consideration by other parties is required.

Don’t avoid using these markings if they are deserved. It does nobody, including yourself, any good in the long run.

2.4 Countersigning Officer’s Comments on Performance

The role of the Countersigning Officer is to provide a second opinion, to maintain and to monitor standards of reporting, and to assist the Reporting Officer. The Countersigning Officer may not share the Reporting Officer’s opinions of the Job Holder, and if agreement cannot be reached both opinions must be recorded on the Report. In particular the Countersigning Officer must indicate at the end of this section whether or not there is agreement over the rating of overall performance (section 2.3). If disagreement remains after discussion, then the Countersigning Officer must enter his/her own rating in the box provided.
Appendix 3.1  A diagrammatic representation of a matrix structure within an organisation (from Hardy, 1976 originally adapted from Galbraith 1971)

A Matrix Structure

key:

--- = technical authority over the product

- - - - = formal authority over the product

(in product organization, these relationships may be reversed)

Figure 12.2 summarizes key points of the four primary theories of learning.

**Figure 12.2  Major learning theories**

<table>
<thead>
<tr>
<th>Theorists</th>
<th>Pedagogy</th>
<th>Behavioral</th>
<th>Cognitive</th>
<th>Developmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>John B. Watson</td>
<td>Ivan Pavlov</td>
<td>Wolfgang Kohler</td>
<td>Jean Piaget</td>
</tr>
<tr>
<td></td>
<td>Edwin Guthrie</td>
<td>Edward Thorndike</td>
<td>Edward Tolman</td>
<td>Carl Rogers</td>
</tr>
<tr>
<td></td>
<td>Clark Hull</td>
<td>Kenneth Spence</td>
<td>Kurt Lewin</td>
<td>Malcolm Knowles</td>
</tr>
<tr>
<td></td>
<td>B. F. Skinner</td>
<td>Albert Bandura</td>
<td>Jerome Bruner</td>
<td></td>
</tr>
<tr>
<td>Definition of Learning</td>
<td>General awareness of knowledge; information received</td>
<td>Conditioning</td>
<td>Development of internal classification schemes</td>
<td>Problem-solving; influenced by stages of development</td>
</tr>
<tr>
<td>Human Nature</td>
<td>Passive, reluctant learners</td>
<td>Influenced by the environment</td>
<td>Influenced by individual interpretations of external events</td>
<td>Active, eager learners</td>
</tr>
<tr>
<td>Role of the Instructor</td>
<td>Crucial</td>
<td>Model</td>
<td>Provides environment suitable to learning</td>
<td>Facilitator</td>
</tr>
<tr>
<td>Role of Learner</td>
<td>Unimportant</td>
<td>Shaped by environment</td>
<td>Crucial</td>
<td>Crucial</td>
</tr>
</tbody>
</table>

Logically, theories of instruction are based on theories of learning. There are thus what might be called four general theories of instruction:

1. **The subject-centered.** Based on pedagogical principles, it focuses on what will be taught.
2. **The objectives-centered.** Based on behaviorism, it focuses on observable and measurable outcomes of instruction.
3. **The experience-centered.** Based on cognitivism, it focuses on what learners experience during instruction.
4. **The opportunity-centered.** Based on developmentalism, it focuses on matching individual needs to appropriate instructional experiences.
The 97 items or tasks which Pinto and Walker were able to divide by factor analysis into 14 separate factors.

---

**Factor 1: Program Design and Development**

<table>
<thead>
<tr>
<th>Loading</th>
<th>Item Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>.727</td>
<td>18</td>
<td>Design specific programs to satisfy needs (e.g., management development, supervisory training, technical development).</td>
</tr>
<tr>
<td>.707</td>
<td>21</td>
<td>Apply adult learning theory/instructional principles in developing program content and materials.</td>
</tr>
<tr>
<td>.698</td>
<td>19</td>
<td>Determine program content (topics).</td>
</tr>
<tr>
<td>.697</td>
<td>20</td>
<td>Apply concepts of human development and growth in designing training and development programs.</td>
</tr>
<tr>
<td>.582</td>
<td>17</td>
<td>Establish objectives for programs (e.g., behavioral or learning objectives).</td>
</tr>
<tr>
<td>.564</td>
<td>22</td>
<td>Develop training materials (e.g., workbooks, exercises, cases).</td>
</tr>
<tr>
<td>.542</td>
<td>23</td>
<td>Evaluate alternative instructional methods (e.g., videotape, role-play, demonstration).</td>
</tr>
<tr>
<td>.541</td>
<td>24</td>
<td>Revise materials/programs based on evaluation feedback.</td>
</tr>
<tr>
<td>.521</td>
<td>28</td>
<td>Determine program structure (length, number of participants, choice of techniques, existing configurations).</td>
</tr>
<tr>
<td>.402</td>
<td>40</td>
<td>Design questionnaires for evaluating training and development programs (feedback).</td>
</tr>
<tr>
<td>.393</td>
<td>37</td>
<td>Develop self-assessment tools (checklists, manuals, exercise).</td>
</tr>
<tr>
<td>.390</td>
<td>39</td>
<td>Experiment with new training and development techniques (innovate or pilot tests).</td>
</tr>
<tr>
<td>.374</td>
<td>36</td>
<td>Develop exercises and tests for measurement of learning.</td>
</tr>
<tr>
<td>.352</td>
<td>35</td>
<td>Write cases based on personal experiences or observation (research).</td>
</tr>
<tr>
<td>.348</td>
<td>32</td>
<td>Determine appropriate sequences of courses or programs (e.g., prerequisites, curricula).</td>
</tr>
<tr>
<td>343</td>
<td>38</td>
<td>Conduct training programs/activities.</td>
</tr>
<tr>
<td>322</td>
<td>39</td>
<td>Decide whether to use an existing program, purchase an external program or create a new one to satisfy needs.</td>
</tr>
</tbody>
</table>

**Factor 2: Manage External Resources**

<table>
<thead>
<tr>
<th>Loading</th>
<th>Item Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>.746</td>
<td>80</td>
<td>Obtain/hire external instructors/program resource persons.</td>
</tr>
<tr>
<td>.733</td>
<td>81</td>
<td>Evaluate external instructors/program resource persons.</td>
</tr>
<tr>
<td>.741</td>
<td>82</td>
<td>Obtain (contract with) outside consultants.</td>
</tr>
<tr>
<td>.626</td>
<td>83</td>
<td>Evaluate proposals from outside consultants.</td>
</tr>
<tr>
<td>.661</td>
<td>84</td>
<td>Contract with outside vendors (purchase materials, programs).</td>
</tr>
<tr>
<td>.632</td>
<td>85</td>
<td>Identify and evaluate external training and development programs.</td>
</tr>
<tr>
<td>.594</td>
<td>86</td>
<td>Obtain internal instructors/program resource persons.</td>
</tr>
<tr>
<td>.559</td>
<td>87</td>
<td>Arrange for participation in external training and development programs.</td>
</tr>
<tr>
<td>.355</td>
<td>88</td>
<td>Decide whether to use an existing program, purchase an external program or create a new one to satisfy needs.</td>
</tr>
<tr>
<td>.350</td>
<td>89</td>
<td>Evaluate internal instructors/program resource persons.</td>
</tr>
<tr>
<td>.349</td>
<td>90</td>
<td>Develop programs or courses in collaboration with colleges, universities, or other institutions.</td>
</tr>
<tr>
<td>.347</td>
<td>91</td>
<td>Evaluate &quot;off-the-shelf&quot; courses or materials as to their applicability.</td>
</tr>
<tr>
<td>.326</td>
<td>92</td>
<td>Prepare/disseminate internal and external training and development program announcements.</td>
</tr>
<tr>
<td>.312</td>
<td>93</td>
<td>Arrange program logistics (facilities, lodging, meals, communications, etc.).</td>
</tr>
</tbody>
</table>

continued
## FACTOR 3
### Job/Performance-Related Training

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Techniques: on-the-job training/job instruction training.</td>
</tr>
<tr>
<td>47</td>
<td>Identify skills and knowledge requirements of jobs.</td>
</tr>
<tr>
<td>56</td>
<td>Assist managers in implementing on-the-job training.</td>
</tr>
<tr>
<td>56</td>
<td>Identify training and development needs through analysis of job requirements (job descriptions, task analysis, observation, etc.).</td>
</tr>
<tr>
<td>48</td>
<td>Evaluate training and development needs to set program priorities.</td>
</tr>
<tr>
<td>42</td>
<td>Analyze performance problems to determine any applicable training and development solutions.</td>
</tr>
<tr>
<td>47</td>
<td>Assist others in implementing training and development programs.</td>
</tr>
<tr>
<td>50</td>
<td>Identify the impact of training and development on other personnel programs or policies.</td>
</tr>
<tr>
<td>43</td>
<td>Techniques: coaching/counseling.</td>
</tr>
<tr>
<td>43</td>
<td>Techniques: job rotation.</td>
</tr>
<tr>
<td>49</td>
<td>Identify training implications prior to implementing other personnel programs (benefit programs, recruitment training, labor relations, etc.).</td>
</tr>
<tr>
<td>66</td>
<td>Assess performance before and after training to measure training effects.</td>
</tr>
<tr>
<td>45</td>
<td>Identify training and development needs through interviews or informal discussions.</td>
</tr>
<tr>
<td>43</td>
<td>Techniques: programmed instruction/self instruction.</td>
</tr>
<tr>
<td>36</td>
<td>Counsel managers and supervisors on training.</td>
</tr>
<tr>
<td>89</td>
<td>Counsel with managers and supervisors on training and development.</td>
</tr>
</tbody>
</table>

## FACTOR 4
### Individual Development Planning and Counseling

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Counsel individuals on career development.</td>
</tr>
<tr>
<td>73</td>
<td>Administer tuition reimbursement program.</td>
</tr>
<tr>
<td>68</td>
<td>Arrange for participation in external training and development programs.</td>
</tr>
<tr>
<td>72</td>
<td>Maintain records of participation in training and development programs.</td>
</tr>
<tr>
<td>88</td>
<td>Counsel with employees on training and development matters.</td>
</tr>
<tr>
<td>67</td>
<td>Prepare/disseminate internal and external training and development program announcements.</td>
</tr>
<tr>
<td>71</td>
<td>Apply criteria for selecting program participants.</td>
</tr>
<tr>
<td>69</td>
<td>Counsel with managers and supervisors on training and development.</td>
</tr>
<tr>
<td>66</td>
<td>Identify and evaluate external training and development programs.</td>
</tr>
<tr>
<td>65</td>
<td>Establish/maintain a library (training resources, career development information).</td>
</tr>
<tr>
<td>52</td>
<td>Determine managerial/employee awareness of the availability of programs.</td>
</tr>
<tr>
<td>93</td>
<td>Keep abreast of EEO/Affirmative Action regulations and related training and development practices.</td>
</tr>
<tr>
<td>70</td>
<td>Design data collection procedures to maintain privacy or confidentiality.</td>
</tr>
<tr>
<td>82</td>
<td>Arrange program logistics (facilities, lodging, meals, communications, etc.).</td>
</tr>
</tbody>
</table>
### FACTOR 3

**Training Research**

<table>
<thead>
<tr>
<th>Loading</th>
<th>Item Number</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>.690</td>
<td>99.</td>
<td>Present statistics and data (e.g., charts, tables).</td>
</tr>
<tr>
<td>.689</td>
<td>98.</td>
<td>Interpret statistics and data (e.g., scatter plots, time series).</td>
</tr>
<tr>
<td>.681</td>
<td>58.</td>
<td>Interpret data/statistics on training and development.</td>
</tr>
<tr>
<td>.655</td>
<td>102.</td>
<td>Write speeches relating to training and development.</td>
</tr>
<tr>
<td>.644</td>
<td>100</td>
<td>Write reports or manuals relating to training and development.</td>
</tr>
<tr>
<td>.472</td>
<td>103.</td>
<td>Write articles (for periodicals, internal publications).</td>
</tr>
<tr>
<td>.405</td>
<td>92.</td>
<td>Communicate with government personnel on training and development matters (e.g., meetings, conversations, correspondence).</td>
</tr>
<tr>
<td>.604</td>
<td>30.</td>
<td>Design data collection procedures to maintain privacy or confidentiality.</td>
</tr>
<tr>
<td>.385</td>
<td>93.</td>
<td>Keep abreast of EEO/Affirmative Action regulations and related training and development practices.</td>
</tr>
<tr>
<td>.379</td>
<td>69.</td>
<td>Design or use information system for data on programs, projects, participants, instructors, materials, etc.</td>
</tr>
<tr>
<td>.377</td>
<td>101.</td>
<td>Write proposals for programs or projects.</td>
</tr>
<tr>
<td>.355</td>
<td>94.</td>
<td>Keep abreast of OFHA regulations and related training and development practices.</td>
</tr>
<tr>
<td>.318</td>
<td>49.</td>
<td>Identify training implications prior to implementing other personnel programs (e.g., benefit programs, recruiter training, labor relations, etc.).</td>
</tr>
<tr>
<td>.315</td>
<td>50.</td>
<td>Identify the impact of training and development on other personnel programs or policies.</td>
</tr>
<tr>
<td>.301</td>
<td>59.</td>
<td>Project future training needs (relating to management succession, organization change, etc.).</td>
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</tbody>
</table>

### FACTOR 4

**Group and Organization Development**

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<thead>
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<th>Item Number</th>
<th>Content</th>
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<tbody>
<tr>
<td>.665</td>
<td>63.</td>
<td>Techniques: behavior modeling.</td>
</tr>
<tr>
<td>.647</td>
<td>61.</td>
<td>Use organization development intervention techniques (e.g., team building, inter-group meetings).</td>
</tr>
<tr>
<td>.610</td>
<td>60.</td>
<td>Techniques: organization development techniques.</td>
</tr>
<tr>
<td>.569</td>
<td>59.</td>
<td>Techniques: role playing.</td>
</tr>
<tr>
<td>.519</td>
<td>58.</td>
<td>Techniques: simulations/advanced gaming.</td>
</tr>
<tr>
<td>.477</td>
<td>47.</td>
<td>Techniques: laboratory education/sensitivity training.</td>
</tr>
<tr>
<td>.556</td>
<td>46.</td>
<td>Techniques: discussions (cases, issues, etc).</td>
</tr>
<tr>
<td>.444</td>
<td>44.</td>
<td>Techniques: coaching/counseling.</td>
</tr>
<tr>
<td>.372</td>
<td>39.</td>
<td>Experience with new training and development techniques (innovative or pilot tests).</td>
</tr>
<tr>
<td>.316</td>
<td>39.</td>
<td>Apply concepts of human development and growth in designing training and development programs.</td>
</tr>
</tbody>
</table>

*continued*
### FACTOR 7

**Develop Material Resources**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Content</th>
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<tbody>
<tr>
<td>.683</td>
<td>Prepare scripts (for films, videotapes, etc.)</td>
<td>...</td>
</tr>
<tr>
<td>.690</td>
<td>Supervise production of training and development materials (slides, films, cassettes, manuals, etc.)</td>
<td>...</td>
</tr>
<tr>
<td>.577</td>
<td>Prepare artwork and copy for slides.</td>
<td>...</td>
</tr>
<tr>
<td>.512</td>
<td>Develop programmed learning or computer-managed instructional materials.</td>
<td>...</td>
</tr>
<tr>
<td>.483</td>
<td>Operate audio-visual equipment.</td>
<td>...</td>
</tr>
<tr>
<td>.451</td>
<td>Develop training materials (e.g., workbooks, exercises, cases).</td>
<td>...</td>
</tr>
<tr>
<td>.369</td>
<td>Technique: programmed instruction/self instruction.</td>
<td>...</td>
</tr>
<tr>
<td>.333</td>
<td>Contract with outside vendors (purchase materials, programs).</td>
<td>...</td>
</tr>
<tr>
<td>.331</td>
<td>Identify equipment and supplies required for training and development program.</td>
<td>...</td>
</tr>
<tr>
<td>.323</td>
<td>Develop self-assessment tools (checklists, manuals, exercises).</td>
<td>...</td>
</tr>
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</table>

### FACTOR 8

**Professional Self Development**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>95.</td>
<td>Attend seminars/conferences on training and development (e.g., ASTD meetings).</td>
</tr>
<tr>
<td>97.</td>
<td>Attend seminars/conferences for your own professional development.</td>
</tr>
<tr>
<td>96.</td>
<td>Keep abreast of training and development concepts, theory, techniques, and approaches.</td>
</tr>
<tr>
<td>91.</td>
<td>Keep abreast of training and development activities in other organizations (e.g., competitors, other local firms).</td>
</tr>
</tbody>
</table>

:continued
### FACTOR 9

**Manage the Training and Development Function**

<table>
<thead>
<tr>
<th>Loading</th>
<th>Item Number</th>
<th>Content</th>
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<th>Item Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>.724</td>
<td>62.</td>
<td>Prepare budgets (plans) for training and development programs and projects.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.688</td>
<td>60.</td>
<td>Organize and staff training and development function or department.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.657</td>
<td>61.</td>
<td>Make formal management presentation plans for training and development programs and projects.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.617</td>
<td>63.</td>
<td>Maintain information on training and development costs and/or benefits.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.596</td>
<td>90.</td>
<td>Supervise the work of others (plan, organize, schedule, etc.).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>.507</td>
<td>59.</td>
<td>Project future training needs (relating to management succession, organization change, etc.).</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>.354</td>
<td>101.</td>
<td>Write proposals for programs or projects.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.342</td>
<td>48.</td>
<td>Evaluate training and development needs to set program priorities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.327</td>
<td>91.</td>
<td>Keep abreast of training and development activities in other organizations (e.g., competitors, other local firms).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>.317</td>
<td>55.</td>
<td>Explain recommendations to gain acceptance for them.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.313</td>
<td>89.</td>
<td>Counsel with managers and supervisors on training and development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.302</td>
<td>58.</td>
<td>Interpret data/statistics on training and development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.301</td>
<td>57.</td>
<td>Conduct needs assessments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.300</td>
<td>56.</td>
<td>Manage training-related expenses and contracts.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>.299</td>
<td>55.</td>
<td>Coordinate various programs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.298</td>
<td>54.</td>
<td>Authorize training.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.297</td>
<td>53.</td>
<td>Train others (e.g., trainers).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.296</td>
<td>52.</td>
<td>Oversee the training function.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.295</td>
<td>51.</td>
<td>Serve on training committees.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.294</td>
<td>50.</td>
<td>Manage the training function.</td>
<td></td>
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<td></td>
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</tbody>
</table>

### FACTOR 10

**Manage Internal Resources**

<table>
<thead>
<tr>
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<th>Item Number</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>.534</td>
<td>79.</td>
<td>Evaluate internal instructors/program resource persons.</td>
</tr>
<tr>
<td>.515</td>
<td>78.</td>
<td>Obtain internal instructors/program resource persons.</td>
</tr>
<tr>
<td>.392</td>
<td>33.</td>
<td>Train or coach trainers/program leaders.</td>
</tr>
<tr>
<td>.246</td>
<td>34.</td>
<td>Train managers and supervisors how to train.</td>
</tr>
<tr>
<td>.241</td>
<td>90.</td>
<td>Supervise the work of others (plan, organize, schedule, etc.).</td>
</tr>
</tbody>
</table>

continued
### FACTOR 11
Maintain Working Relationships with Managers

<table>
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<tr>
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<th>Item Number</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>.356</td>
<td>54.</td>
<td>Establish and maintain good working relationships with managers as clients.</td>
</tr>
<tr>
<td>.323</td>
<td>55.</td>
<td>Explain recommendations to gain acceptance for them.</td>
</tr>
<tr>
<td>.262</td>
<td>89.</td>
<td>Counsel with managers and supervisors on training and development.</td>
</tr>
<tr>
<td>.234</td>
<td>93.</td>
<td>Keep abreast of EEO/Affirmative Action regulations and related training and development practices.</td>
</tr>
<tr>
<td>.227</td>
<td>36.</td>
<td>Develop exercises and tests for measurement of learning.</td>
</tr>
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</table>

### FACTOR 12
Conduct Training and Development Needs Analysis

<table>
<thead>
<tr>
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<th>Item Number</th>
<th>Content</th>
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<tbody>
<tr>
<td>.562</td>
<td>15.</td>
<td>Construct questionnaires for analysis of training and development needs.</td>
</tr>
<tr>
<td>.528</td>
<td>16.</td>
<td>Conduct needs analysis interviews.</td>
</tr>
<tr>
<td>.501</td>
<td>44.</td>
<td>Identify training and development needs through questionnaire surveys (perceived needs, attitudes).</td>
</tr>
<tr>
<td>.409</td>
<td>45.</td>
<td>Identify training and development needs through interviews or informal discussions.</td>
</tr>
<tr>
<td>.402</td>
<td>40.</td>
<td>Design questionnaires for evaluating training and development programs (feedback).</td>
</tr>
<tr>
<td>.299</td>
<td>55.</td>
<td>Explain recommendations to gain acceptance for them.</td>
</tr>
</tbody>
</table>

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<tr>
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<th>Item Number</th>
<th>Content</th>
<th>Item Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>.314</td>
<td>38</td>
<td>Conduct training programs/activities.</td>
<td>298</td>
<td>Evaluate &quot;ready-made&quot; courses or materials as to their applicability.</td>
</tr>
<tr>
<td>.412</td>
<td>87</td>
<td>Operate audio-visual equipment.</td>
<td>276</td>
<td>Use organization development intervention techniques (e.g., team building, inter-group meetings).</td>
</tr>
<tr>
<td>.601</td>
<td>28</td>
<td>Determine program structure, length, number of participants, choice of techniques seating configurations</td>
<td>276</td>
<td>Use organization development intervention techniques (e.g., team building, inter-group meetings).</td>
</tr>
<tr>
<td>.383</td>
<td>43</td>
<td>Technique: discussions (cases, etc.).</td>
<td>270</td>
<td>Technique: programmed instruction/self instruction.</td>
</tr>
<tr>
<td>.361</td>
<td>82</td>
<td>Arrange Program logistics (facilitate) Lodging, meals, communications</td>
<td>264</td>
<td>Technique: organization development techniques.</td>
</tr>
<tr>
<td>.352</td>
<td>43</td>
<td>Technique: lecture with or without media</td>
<td>41</td>
<td>Technique: videotape/closed-circuit television.</td>
</tr>
<tr>
<td>.337</td>
<td>73</td>
<td>Identify equipment and supplies required for training and development program.</td>
<td>4</td>
<td>Develop programmed learning or computer-managed instructional materials.</td>
</tr>
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</tbody>
</table>
Appendix 5.2 Critical outputs of training professionals as described by the American Society for Training and Development (ASTD), (McIagan 1983:31-33)

THE CRITICAL OUTPUTS FOR THE TRAINING AND DEVELOPMENT FIELD

The following are the outputs which Study respondents said are critical now and/or in five years. Some outputs are produced for internal use by the training and development functions. Others describe end products which go to the user (learners or client organizations).

Evaluator:
1. Instruments to assess individual change in knowledge, skill, attitude, behavior, results.
2. Instruments to assess program and instructional quality.
3. Reports (written and oral) of program impact on individuals.
4. Reports (written and oral) of program impact on an organization.
5. Evaluation and validation designs and plans (written and oral).
6. Written instruments to collect and interpret data.

Group Facilitator:
7. Group discussions in which issues and needs are constructively assessed.
8. Group decisions where individuals all feel committed to action.
9. Cohesive teams.
10. Enhanced awareness of group process, self and others.

Individual Development Counselor:
11. Individual career development plans.
12. Enhanced skills on the part of an individual to identify and carry out his/her own department needs/goals.
13. Referrals to professional counseling.
14. Increased knowledge by the individual about where to get development support.
15. Tools, resources needed in career development.
16. Tools for managers to facilitate employees' career development.
17. An individual who initiates feedback, monitors and manages career plans.

Instructional Writer:
18. Exercises, workbooks, worksheets.
19. Teaching guides.
20. Scripts (for video, film, audio).
22. Computer software.
23. Tests and evaluation forms.
24. Written role plays, simulations, games.
25. Written case studies.

Instructor:
27. Case studies, role plays, games, tests and other structured learning events directed.
28. Lectures, presentations, stories delivered.
29. Examinations administered and feedback given.
30. Students' needs addressed.
31. An individual with new knowledge, skills, attitudes or behavior in his/her repertoire.

Manager of Training and Development:
32. T&D department or project operating objectives.
33. T&D budgets developed and monitored.
34. Positive work climate in the T&D function or project group.
35. Department/project staffed.
36. T&D standards, policies and procedures.
37. Outside suppliers/consultants selected.
38. Solutions to department/project problems.
39. T&D actions congruent with other HR and organization actions.
40. Relevant information exchanged with clients/departments (internal and external).
41. Staff evaluated.
42. Staff developed.

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Marketer:
43. Promotional materials for T&D programs and curricula.
44. Sales presentations.
45. Program overviews.
46. Leads.
47. Contracts with T&D clients (internal and external) negotiated.
48. Marketing plan (developed and implemented).
49. T&D programs/services visible to target markets.

Media Specialist:
50. T&D computer software.
51. Lists (written and oral) of recommended instructional hardware.
52. Graphics.
53. Video-based material.
54. Audio tapes.
55. Computer hardware in working order.
56. AV equipment in working order.
57. Media users advised/counseled.
58. Production plans.
59. Purchasing specifications/recommendations for instructional/training software.
60. Purchasing specifications/recommendations for instructional/training hardware.

Needs Analyst:
61. Performance problems and discrepancies identified and reported (written/oral).
62. Knowledge, skill, attitude problems and discrepancies identified and reported (written/oral).
63. Tools to assess the knowledge, skill, attitude, and performance level of individuals and organizations.
64. Needs analysis strategies.
65. Causes of discrepancies inferred.

Program Administrator:
66. Facilities and equipment selected and scheduled.
67. Participant attendance secured, recorded.
68. Hotel/conference center staff managed.
69. Faculty scheduled.
70. Course material distributed (on-site, pre-course, post-course).
71. Contingency plans for back-ups, emergencies.
72. Physical environment maintained.
73. Program follow-up accomplished.

Program Designer:
74. Lists of learning objectives.
75. Written program plans/designs.
76. Specifications and priorities of training content, activities, materials, and methods.
77. Sequencing plans for training content, activities, materials, and methods.
78. Instructional contingency plans and implementation strategies.

Strategist:
79. T&D long-range plans included in the broad human resource strategy of the client organization.
80. Identification (written/oral) of long-range T&D strengths, weaknesses, opportunities, threats.
81. Descriptions of the T&D function and its outputs in the future.
82. Identification of forces/trends (technical, social, economic, etc.) impacting T&D.
83. Guidelines/plans for implementing long-range goals.
84. Alternative directions for T&D.
85. Cost/benefit analyses of the impact of T&D on the organization.

Task Analyst:
86. Lists of key job/unit outputs.
87. Lists of key job/unit tasks.
88. Lists of knowledge/skill/attitude requirements of a job/unit.
89. Descriptions of the performance levels required in a job/unit.
90. Job design, enlargement, enrichment implications/alternatives identified.
91. Sub-tasks, tasks, and jobs clustered.
92. Conditions described under which jobs/tasks are performed.

Theoretician:
93. New concepts and theories of learning and behavior change.
94. Articles on T&D issues/theories for scientific journals and trade publications.
95. Research designs.
96. Research reports.
97. Training models and applications of theory.
98. Existing learning/training theories and concepts evaluated.

Transfer Agent:
99. Individual action plans for on-the-job/real world application.
100. Plans (written/oral) for the support of transfer of learning in and around the application environment.
101. Job aids to support performance and learning.
102. On-the-job environment modified to support learning.
Appendix 5.3 Competencies needed for excellent performance in the Training and Development field. (Mclagan 1983:35-38)

The following model describes the knowledge/skill areas which the ASTD Competency Study has identified as important for excellent performance in the Training and Development field.

There are thirty-one (31) competencies in this model:

1. Adult Learning Understanding ... Knowing how adults acquire and use knowledge, skills, attitudes. Understanding individual differences in learning.
2. Audio/Visual Skill ... Selecting and using audio/visual hardware and software.
3. Career Development Knowledge ... Understanding the personal and organizational issues and practices relevant to individual careers.
4. Competency Identification Skill ... Identifying the knowledge and skill requirements of jobs, tasks, roles.
5. Computer Competence ... Understanding and being able to use computers.
6. Cost-Benefit Analysis Skill ... Assessing alternatives in terms of their financial, psychological, and strategic advantages and disadvantages.
7. Counseling Skill ... Helping individuals recognize and understand personal needs, values, problems, alternatives and goals.
8. Data Reduction Skill ... Scanning, synthesizing, and drawing conclusions from data.
9. Delegation Skill ... Assigning task responsibility and authority to others.
10. Facilities Skill ... Planning and coordinating logistics in an efficient and cost-effective manner.
11. Feedback Skill ... Communicating opinions, observations and conclusions such that they are understood.
12. futurology Skill ... Projecting trends and visualizing possible and probable futures and their implications.
13. Group Process Skill ... Influencing groups to both accomplish tasks and fulfill the needs of their members.
14. Industry Understanding ... Knowing the key concepts and variables that define an industry or sector (e.g., critical issues, economic vulnerabilities, measurements, distribution channels, inputs, outputs, information sources).
15. Intellectual Versatility ... Recognizing, exploring and using a broad range of ideas and practices. Thinking logically and creatively without undue influence from personal biases.
16. Library Skills ... Gathering information from printed and other recorded sources. Identifying and using information specialists and reference services and aids.
17. Model Building Skill ... Developing theoretical and practical frameworks which describe complex ideas in understandable, usable ways.
18. Negotiation Skill ... Securing win-win agreements while successfully representing a special interest in a decision situation.
19. Objectives Preparation Skill ... Preparing clear statements which describe desired outputs.
20. Organization Behavior Understanding ... Seeing organizations as dynamic political, economic, and social systems which have multiple goals; using the larger perspective as a framework for understanding and influencing events and change.
21. Organization Understanding ... Knowing the strategy, structure, power networks, financial position, systems of a SPECIFIC organization.
22. Performance Observation Skills ... Tracking and describing behaviors and their effects.
24. Presentation Skills ... Verbally presenting information such that the intended purpose is achieved.
25. Questioning Skills ... Gathering information from and stimulating insight in individuals and groups through the use of interviews, questionnaires and other probing methods.
26. Records Management Skill ... Storing data in easily retrievable form.
27. Relationship Versatility ... Adjusting behavior in order to establish relationships across a broad range of people and groups.
28. Research Skills ... Selecting, developing and using methodologies, statistical and data collection techniques for formal inquiry.
29. Training and Development Field Understanding ... Knowing the technical, logical, social, economic, professional, and regulatory issues in the field; understanding the role T&D plays in helping individuals learn for current and future jobs.
30. Training and Development Techniques Understanding ... Knowing the techniques and methods used in training; understanding their appropriate uses.
31. Writing Skills ... Preparing written material which follows generally accepted rules of style and form, is appropriate for the audience, creative, and accomplishes its intended purposes.
How the Standards in Training & Development were derived

Standards are derived by analysing functions within an occupation. This is a top-down process that starts with agreeing the Key Purpose of the occupation. The key purpose of training and development is:

```
Develop human potential to assist organisations and individuals to achieve their objectives
```

The key purpose is then analysed and through a series of stages is broken down into more and more specific aspects or functions. Once these sub-divisions are small enough to be ascribed to individual performance, assessable criteria are attached to them and they form elements of competence. A standard is an element of competence. There are 106 such standards within the TDLR's framework.

The logic of the Standards

The process of analysing the key purpose and its sub-divisions is guided by a set of rules. Sometimes called [somewhat dauntingly] disgregporation rules, these are logical principles used to derive a consistent classification of functions, units and elements at each stage of the analysis. The use of agreed rules or principles to break down the key purpose into its components is vital, if the resulting standards are to be comprehensive and consistent. There are a number of different kinds of rules used in deriving occupational standards:

* stages in a process or system - like "input/process/output"
* processes which are circular or cyclical - such as the systematic training cycle, or the problem solving cycle
* types of outcome which are critical to the achievement of the purpose or function: for example outcomes related to people, outcomes related to physical objects
* different methods which will require different standards
* different strategies or approaches which will require different standards
* different outputs or products that require different standards

The selection of rules or principles to use in splitting the key purpose is guided by the criterion that applies to all classification systems:

- it generates categories which are exclusive (as far as is practical)
- it is a credible reflection of what happens in the occupation

Source: Designing Occupational Standards - Bob Hesfield - Project briefing paper - Barbara Shelbourn Development 1989

The Key Purpose of training and development was split by using the systematic training cycle. To this was added a fifth stage which was defined as a result of the field work carried out when the standards were developed. This new stage represents an integrative function which enables the four more familiar stages of the training cycle to be organised, delivered and managed. The Training Standards are, therefore, derived from the stages in the cycle and the relationships between these stages: i.e.

```
Identify training and development needs

Evaluate the effectiveness of training and development

Support training and development strategies and practice

Design training and development strategies and plans

Provide learning opportunities, resources and support
```

Roles in Training and Development

At the next level of analysis, further rules or logical principles were used. The five functions in the training and development cycle were split as follows:

1. The Key Purpose statement refers to T&D's purpose in relation to both organisations and individuals. No assumption is made that the interests, needs and values of both will be identical. Indeed, it is not uncommon for them to diverge or to be in conflict.

2. To recognise this, each stage of the systematic training cycle was split to separate organisational from individual emphasis.

Appendix 5.4(1) The Training and Development Lead Body Framework
Appendix 5.4(II) Units and elements which contribute to NVQ level 4 training and development

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<td>and Make Decisions</td>
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## ELEMENT A123 SPECIFY TRAINING AND DEVELOPMENT NEEDS TO SUPPORT CURRENT ORGANISATIONAL STRATEGY

### Performance Criteria

- **a** specifications clearly and accurately distinguish between training and development needs and other types of need
- **b** specifications clearly and correctly identify the aspects of organisational strategy to which needs relate
- **c** relevant inter-dependencies between training and development needs and other needs are specified clearly and accurately
- **d** specifications clearly and accurately describe the learning outcomes required to support the current organisational strategy
- **e** specifications clearly and accurately identify the categories or specific groups of people who require help to learn and develop
- **f** evidence from which the specification is derived is valid and reliable
- **g** specifications and the evidence on which they are based are stored securely and made available to those who have a right to them

### Range Statements

1. **Organisational strategies:**
   - demand led
   - supply led
2. **Timescales to which needs apply:**
   - immediate
   - short term
   - long term
3. **Types of evidence:**
   - quantitative
   - qualitative

### Performance Evidence Required

1. Specifications of training and development needs (all forms)

### Assessment Guidance

Specifications produced for each type of organisational strategy. Both types of evidence obtained, using both sources of evidence. In each specification, timescales to which needs apply are identified. Specifications produced orally and in written form.

### Notes

On completion of evidence collection (performance and supplementary) there is evidence, overall, that all three types of timescale to which needs apply have been addressed.

### Supplementary Evidence Required

**Knowledge of methods to:**

- Differentiate training and development from other organisational needs
- Select criteria to raise training and development needs to organisational strategy
- Assess and interpret the significance of inter-relationships between needs

**Knowledge of data/information about:**

- Characteristics of training and development needs
- Elements of current organisational strategy
- Types of inter-relationships between different needs
- Types of learning outcomes
- Personnel who have training and development needs

### Role of Supplementary Evidence

If performance evidence produced (as above) does not, at that time, provide full evidence of the range assessments, further evidence to supplement that which is available will be necessary.
Appendix 6.1 Some examples of my entries into a diary showing dates. Entries are coded according to content.

MAN180491 Received letter from JTS giving me list of topics covered in SERC intro courses e.g. finance, work of labs, health and safety, appraisal system.

THE230491 I read details of a users view on Administrative Productivity Training (APT) it looked quite interesting

PAD220491 RH sent me a note thanking him for my details of Potters Heron Hotel at S'hampton - asked for a map of JRC -

PAD220491 (cont) H confirmed dates for courses (14 Oct and 3 June - asked me to meet him before course starts on 3 June

MAN220491 C asked me if I could get information for him on project management courses - I am sending him several brochures including Brunel.

MAN2204 C cont I asked S'ton University for info on a project management course (they combine with IBM to run it)

NEE230491 Received copy of letter from CPS to M suggesting that the latter should go on a course on 'Office staffing levels' (funds from MASD for sen trg) to implement it

NEE230491 (letter from cps to ME cont ) S said he would like APT system at IOS.
Appendix 6.2  The codes which were used in my diary.

COU  Counsellor
CON  Communicator
VCM  Consultant
FAC  Facilitator
MAN  Manager of Training and Development
MAR  Marketer of Training and Development
NEE  Needs analyst
PRA  Programme Administrator
PRD  Programme Designer
PSD  Professional Self-developer
STR  Strategist
STA  Statistician
THE  Theoretician
TRA  Trainer
INS  Instructor

TRAINING OFFICER
6 MONTH CONTRACT WEST MIDLANDS

If you would like to broaden your training experience and have previously worked in an engineering environment, this temporary post with a subsidiary of a major UK company may well be ideal.

The plant's main business is the assembly and fitting of components manufactured by other parts of the group, requiring a workforce of some 350 skilled and semi-skilled operators.

You will be responsible for planning, co-ordinating and monitoring the training of apprentices, graduates, manual workers and staff, which will require a wide range of training techniques and stretch your abilities to the limit.

Ideally educated to degree level, you should have had some 2/3 years experience in this field and be seeking an opportunity to apply your ideas.

An attractive salary and benefits package will be offered and there is a possibility of the post developing into a permanent role.

Please send a detailed cv to Jane Goldsmith, Dial Consultancy Services, 2 Dial Street, Warrington, Cheshire WA1 2NX. Tel: 0925 232974, Fax: 0925 232975.

TRAINING AND DEVELOPMENT OFFICER
PUBLIC RECORD OFFICE
(Grade 9)
£17,015 to £19,654 Inc.

The Public Record Office changed to Executive Agency status on 1 April 1992. The organisation is currently undergoing a period of significant change as it adjusts to the new demands of Agency status.

We are seeking a Training and Development professional to work with the Training Manager in implementing our strategy for change.

Ideally IPM or ITD qualified, you should have at least 2 years experience of design, delivery and evaluation of Training in a progressive environment. A working knowledge of the latest training issues such as Total Quality Management, NVQs and Competency Frameworks, is essential.

This is a challenging role which requires excellent presentation and influencing skills, a high level of enthusiasm and a determination to produce visible results contributing directly to the key corporate objectives of the Public Record Office.

The appointment is for an initial period of 3 years.

Further details of the selection process and an application form can be obtained from Chris Niblock, Personnel Management Department, Public Record Office, Kew, Richmond, TW9 4DU. Tel: 081 876 3444 ext. 2516.

The closing date for receipt of completed application forms is 28 September 1993.

The Public Record Office is an Equal Opportunities Employer.
Appendix 6.4  Codes which I used to categorise the requirements of employers when recruiting training professionals, the letters 'JB' refer to the tasks listed by employers within the range of jobs offered and 'PQ' to personal qualities and QL to qualifications required.

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Appendix 6.5

An extract from a sorted computer listing showing the names of firms, job-titles and codes for the job required.

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Appendix 6.6

A completed questionnaire received from a Research Council Training Officer giving the tasks which he undertook (listed under key roles) and the ten attributes which he considers are most needed by training officers.

KEY TRAINING AND DEVELOPMENT ROLES

Please can you give me the benefit of your experience as training officers/tutors. At present I am conducting research on the role of training officers in the U.K. using IOS (NERC) as a case study. Within the term 'Staff development' I include 'training', 'development' and 'education'. The roles or tasks listed below describe the major functions of training professionals which emerged in a study on training and development by the American Society of training and development in 1983. In addition I have listed a few based on my own research.

Individual jobs may consist of just a few or many roles/tasks depending on job descriptions e.g. Training Manager, Training Officer, Training Advisor, and on available resources, size and staffing of the organisation. It seems very unlikely that any one individual would have the time, opportunity or resources to undertake all of the 92 listed below!

Please can you help me to get some idea about the type of training and development work, undertaken by Training Officers/Tutors in the Research Councils by completing the following questionnaire. Please indicate which Research Council/external organisation you work for and your job title in training and development. There is a space for your name and grade but if you prefer please remain anonymous.

Thank you for your help

Pat Hargreaves

1 March 1994

Please return the questionnaire to:
Pat Hargreaves
Institute of Oceanographic Sciences
Brook Rd:
Worsley,
Surrey
GU8 9UB
(Tel. (0428) 684141 ext 348).

Please see over ...
QUESTIONNAIRE

NAME ...................... GRADE ..........

JOB (e.g. Local Training Officer):........ TRAINEE:........

RESEARCH COUNCIL .............

QUESTION 1. Below are listed key roles (in capitals) of training officers in USA. These headings are based on research from several sources but particularly on that of the American Society of Training and Development. Below the 21 main headings are listed subsidiary roles/tasks (1-91) based on several sources from America and the U.K. and from my own research.

Please tick only those items (1..91) which you undertake as part of your work as training officer.

NON-Routine ACTIVITIES

STRATEGIST PLEASE TICK ( )

1. Make non-routine, long-range/future plans for staff development programmes (more than 12 months ahead) linked to mission statements/organisational policy/EC legislation

2. Monitor organisational development

3. Adopt strategies for coping with change within the organisation e.g. Quality management, mass redundancy

4. Adopt strategies for changing/promoting culture of the organisation e.g. equal opportunities

5. Innovate techniques for training and development, running pilot schemes where necessary

ROUTINE ACTIVITIES

TASK ANALYST.

7. Identify activities, tasks, sub-tasks necessary to accomplish a job

8. Identify human resource and support requirements necessary to accomplish results/undertake tasks in a job or organization.

NEEDS ANALYST

9. Assess job competencies (so as to define needs)

10. Identify gaps between ideal and actual performance (diagnose needs) from information on Annual Staff Reports or by discussions with line-managers/other staff

11. Discuss with line managers ways of remedying the gaps.

12. Inform staff of link between staff training needs and the appraisal/career system in the organisation

13. Monitor number and type of requests for training informing managers where appropriate

MANAGER OF TRAINING AND DEVELOPMENT

14. Manage administration systems within the organisation

15. Communicate/liaise with NERC/JTS/NCS-Managers/staff/students about routine events (written or verbal)

16. Ensure that organisation training policy is applied

17. Maintain a broad awareness of resources which might be available e.g. JTS non-routine initiatives, NERC/SERC/NCS staff/materials, Training & Enterprise Council etc

18. Develop a core-curriculum

19. Keep abreast of developments in training techniques e.g. computer-assisted learning, distance learning, interactive video

continued
20. Maintain broad awareness of commercial/other external training initiatives by perusing brochures, newsletters, etc. 
21. Determine appropriate training approach by matching training demand as outlined in needs analyses with relevant supply 
22. Plan/organise/control staff development sessions on or off site 
23. Consider special arrangements made for staff transfer or promotion 
24. Plan/organise/control cross-team/department training and development operations across the organization (including management development) 
25. Prepare budgets, advising staff of costs where necessary 
26. Submit bids for funds 
27. Maintain central files of staff development activities 
28. Make arrangements with external organisations for staff to obtain National Vocational Qualifications 

PROGRAM DESIGNER. 
31. Prepare/define, objectives, content of courses, selecting and sequencing activities for a specific programme. 
32. Develop materials and tools for training sessions 
33. Evaluate and select instructional methods 
34. Prepare scripts for training sessions 
35. Prepare artwork/overheads 
36. Coordinate/coordinate/coordinate training sessions 

INSTRUCTIONAL WRITER. 
37. Prepare distance-learning materials 
38. Produce for and using audio, visual, computer and other hardware-based technologies for training and development. 
39. Book commercial trainers/tutors 
40. Negotiate for reduction in trainers/tutors fees 
41. Manage resources e.g. funds, materials, staff 

MEDIA SPECIALIST. 
42. Produce software for and using audio, visual, computer and other hardware-based technologies for training and development. 
43. Book commercial trainers/tutors 
44. Negotiate for reduction in trainers/tutors fees 
45. Manage resources e.g. funds, materials, staff 

PROGRAM ADMINISTRATOR. 
46. Book commercial trainers/tutors 
47. Negotiate for reduction in trainers/tutors fees 
48. Manage resources e.g. funds, materials, staff 
49. Book commercial trainers/tutors 
50. Negotiate for reduction in trainers/tutors fees 
51. Manage resources e.g. funds, materials, staff 

FACILITATOR FOR GROUP AND ORGANISATIONAL DEVELOPMENT. 
52. Assist with on-the-job training and development 
53. Conduct/deliver staff development courses 
54. Lead discussions during staff development sessions 
55. Operate audio-visual equipment 
56. Cope with learning groups 

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STATISTICIAN

57. Remain up to date with information technology e.g. e-mail, basic computing.
58. Maintain staff development records on computer
59. Present and analyze statistics and data relating to staff development
60. Communicate through reports and proposals the results of analysis and experience so as to influence future training and development activities.

EVALUATOR (POST-EVENT)

61. Evaluate commercial/governmental 'ready-made' courses or materials
62. Evaluate programmed instruction
63. Evaluate video/audiotape/interactive video sessions
64. Evaluate customised courses
65. Monitor attendance at seminars
66. Evaluate job exchange/mentoring programmes

The term evaluate includes identifying the impact of an education or training programme and measuring its cost-effectiveness.

ASSESSOR FOR NVQs

67 Assess competencies for NVQs
68. Monitor NVQs

COMMUNICATOR

69. Liaise with NERC/JTS/ providing an overview of training
70. Liaise/consult with Local Managers/Directors keeping them informed of initiatives/non-routine events which might be of interest to their staff
71. Work proactively with all grades of staff advising them of new training initiatives/options in which they might like to participate
72. Manage working relationships with Health/Safety officers to provide training in accordance with EC Directives
73. Interact/communicate with Unions
74. Liaise/communicate with external government and external organisations e.g. commercial organisations, local Universities, Colleges
75. Liaise with local schools link officer to monitor short-term student/work experience training

COUNSELLOR.

76. Help individual(s) to assess personal competencies, values, and goals
77. Help individual(s) to plan/develop his/her career.
78. Arrange staff development programmes in response to individual needs as perceived from counselling sessions

MARKETER.

79. Publicise/promote options for staff development e.g. learning packages/programmes
80. Motivate staff to engage in staff development
81. Target audiences outside one's own work unit
82. Use business strategies

THEORETICIAN.

83. Test and develop theories of learning in training and development.
84. Conduct Research on staff training and development initiatives

continued
PROFESSIONAL SELF DEVELOPMENT

85. Attend seminars/conferences
86. Keep up to date with practices and concepts for staff development
87. Regularly meet/discuss/exchange ideas for staff development with other training officers

CONSULTANT

88. Advise Management teams and line managers about training strategy for all staff including new recruits
89. Advise staff of all grades of course content
90. Advise managers of the best course of action so as to train and educate their staff.
91. Advise external organisations on training and development matters

TRANSFER AGENT

92. Help staff to apply learning, gained from education and training initiatives, to their job

QUESTION 2. Is there anything you would like to add to the above list?

QUESTION 3. Please place in rank order only the 10 (or less) roles/tasks listed above which you undertake most often in, say, a year, starting with 1 for the task most often undertaken.

Please complete:

I undertake the following ten roles/tasks more often than the rest:

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<th>Item</th>
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<td>10</td>
<td>(Undertaken less often than the other nine items listed)</td>
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QUESTION 4. The following are attributes of a good training professional as outlined by various external employers. Please can you tick the main ten attributes which you consider are the most important in the job of training officer:-

1. Good Communicator
2. Able to negotiate
3. Has prestige within the organisation
4. Has good interpersonal skills
5. Flexibility
6. Able to handle groups
7. Possess management skills
8. Possess personal credibility
9. Show integrity
10. Be proactive
11. Fit in with the organisation
12. Be creative/original
13. Maintain a high profile
14. Be articulate
15. Lively personality
16. Show initiative
17. Cope with pressure
18. Display drive
19. Think ahead
20. Be determined
21. Display confidence
22. Be dynamic
23. Retain motivation
24. Have an influential style
25. Possess strong social skills
26. Remain energetic
27. Possess resilience
28. Build-up good working relationships
29. Remain enthusiastic
30. Possess an ability to solve problems
31. Assimilate new ideas
Appendix 8.1 A staff notice outlining personnel procedures for the NERC Management and Development training strategy

Staff Notice

PERSONNEL PROCEDURES: NERC MANAGEMENT AND DEVELOPMENT TRAINING STRATEGY

1. Establishments Division at Headquarters have been carrying out a review of training within NERC and, as a result, have developed a Training Strategy for management and developmental training. This has received approval by NERC Senior Officers. It has also been welcomed by NERC's Institute Directors and Trade Union Side, and their comments have been taken into consideration in the completion of the Strategy. The aim is to help managers learn to manage better, and for individuals to be given the chance to better develop both themselves and their careers.

2. The implementation of the Strategy will begin on 1 April 1992. The objective is to meet the targets set out in the Strategy within a period of three years, and the Research Council's Joint Training Service (JTS) have designed an appropriate programme of courses. These are designed to remove existing backlogs and meet the increased demand generated by the Strategy. Additional resources have been earmarked to fund the implementation.

3. The general background, principles and details of the key targets are set out in the attached Training Strategy policy statement.

MARCH 1992

ESTABLISHMENTS DIVISION

6/92
NERC STRATEGY FOR MANAGEMENT AND DEVELOPMENT TRAINING

Introduction

1. Training is a key factor in making the best use of Manpower. It creates and develops the skills needed to do the job more effectively, provides an opportunity for people of different backgrounds, grades and qualifications to mix and exchange experiences, is a significant feature in preparing people for promotion and helps to foster good morale and corporate spirit. Training is an investment for the future which should help to ensure that there is sufficient scientific, technical and managerial talent to fill the next generation of senior posts. It is arguable that, until now, NERC has not had a sufficiently organised and systematic approach to training. Many feel that whilst the Joint Training Service (JTS) provides good facilities and courses, insufficient NERC staff receive appropriate management training. This probably stems from a combination of backlogs on certain core courses, past disinterest in training, and insufficient resources allocated to training.

Current NERC Training

2. In many areas of work it is NERC policy to recruit suitably trained staff. However, it is recognised that this is not always possible. Also it is clear that an important factor in the retention of trained staff is the availability of further training to keep their skills up to date and relevant to the work needs and to enable career development. This will be particularly important during the demographic changes forecast for the 1990's.

3. Training within NERC HQ and its Institutes can be broadly divided into three categories, namely:
   a) management/developmental training;
   b) scientific/technical/professional training;
   c) further education for NERC staff.

The Research Council's Joint Training Service

4. The Joint Training Service (JTS) provides a service to AFRC, ESRC, NERC and SERC covering management and developmental training and consultancy services. It runs a core management training programme, together with development courses for non-managers, staff reporting and appraisal training, introductory courses, together with a range of specialist (but not scientific or technical) short courses and seminars. The JTS is steered in the formulation of its annual training programme by the Training Advisory Committee (TAC) which has members from each of the participating Councils. It is currently chaired by NERC.

5. Within NERC, the JTS is supported by a network of Local Training Officers (LTO) throughout Institutes and in HQ. The role of LTOs is to provide a local focus for training matters, to advise managers and staff on the types of training available, to advise JTS on their perception of local training needs, and to provide a route for nominations for course attendance.
Non-JTS Training

6. The costs of non-JTS scientific, technical and vocational training and re-training, and those of the further education of NERC staff, are set from the appropriate Institute or HQ budget according to the location of the staff. It is considered that these specialist needs are best addressed at the local level and Institutes will continue to develop their arrangements to complement the strategic, NERC-wide plans, set out in this document.

Management/Development Training Profiles

7. As a member of staff progresses through a career in NERC the demands of the job change. As a general rule the more senior a person becomes the greater are the management responsibilities which need to be carried. These can include the management of staff, money, capital facilities and other resources. These responsibilities arise at different levels and stages in peoples' careers according to the nature of their work. For example, staff in the Executive Grades normally take on staff management roles at the EO level, whereas in the Science Group such responsibilities might come considerably later in a person's career.

8. Therefore it is necessary, so far as is possible, to anticipate training needs so that staff enter new posts, gain promotion or take on new responsibilities well prepared for the tasks in hand. The following targets are set out for guidance. The responsibility for achieving these targets rests largely with line managers and it is they who should identify individual's training needs and, if necessary, send staff to the appropriate courses. However, the targets are not mandatory in the sense that absence of certain training will not be an absolute bar to promotion or to taking on certain tasks. Some staff will not have been able to complete all the necessary courses, perhaps because of pressure of work or because of the non-availability of certain courses at the right time. However, promotion and selection boards, and those responsible for posting staff, will look closely at each person's training record when making decisions.

9. The proposed targets are:

a) Central Introductory Course all staff within six months (preferably three months) of recruitment.
b) Reporting Officers Course all staff prior to assuming the Reporting Officer role.
c) Job Appraisal Course all staff prior to assuming the Countersigning Officer role.
d) Development for Junior Grades Course AD/ASO and equivalent before promotion to EO/50 and equivalent.
e) Management I Course (basic) Management II Course (follow-up) staff in fluid graded posts prior to promotion to Span A (SSO/SPTO); staff in other posts prior to promotion to HSO or Span B (HSTO/HPTO and equivalent).
f) Management III Course within three years of taking Management I.
g) Management Course for within one year of appointment to
Senior Grades (internal or
external)

h) Other courses on assuming particular relevant responsibilities.

It is reiterated that the above targets, whilst not mandatory, should be considered the norm and it is line management's responsibility that they are met rather than that of the individual member of staff.

10. Extra funding is being provided to JJS to set up the additional courses which will be necessary to remove existing backlogs and ensure that these targets can be met. The additional funds have been set by redeploying existing training funds and not by reducing research spending. A three year programme of courses has been designed to meet this objective.

Line Management and Personal Responsibilities

11. It is the responsibility of all line managers to be aware of, and to take action concerning, the training needs of their staff. Such needs should be identified during the normal dialogue between managers and their staff, and reinforced during the course of the formal annual reporting/job appraisal procedures; during career development reviews; or during career interviews. Line managers should follow up the necessary actions, taking advice from Local Training Officers (LTOs) and senior colleagues where necessary. It is recognised that this commitment to training will result in staff being absent more frequently from the work place with some short term disadvantages. This must be seen against the greater long term benefit of having a well trained workforce and line managers must not put barriers in the path of staff development.

12. However, it is also the responsibility of each individual to consider his or her own training needs, and to discuss these with line management and with LTOs.

13. Having identified training needs it is essential that this be recorded and acted upon. Facilities will need to be developed locally and centrally (ideally the same database) to record which individual has attended which course, produce lists of outstanding training commitments and call staff forward for particular courses.

Follow-up after Training

14. It is important that the value of training given be monitored to ensure that it is of the right type, relevant, undertaken effectively and has had some influence on the person trained. This may best be achieved by short and simple questionnaires to the person concerned and his/her line manager at, an agreed interval after the training has been received. Work is also in progress on proposals for means of evaluating the effectiveness of training.
Withdrawals from Courses

15. There have been a number of occasions when NERC staff have withdrawn from courses at the last minute, when it is impossible to find replacements. This results in nugatory costs and lost training opportunities neither of which can be afforded. To act as a deterrent, it has been agreed at the TAC that where such withdrawals are made without a reasonable cause JTS will levy a cancellation charge on the employing Institute.

Development and up-dating of a Strategic approach to Training

16. Within the broad framework described above, HQ Establishments Division will be seeking information and holding discussions with the management of individual Institutes, Laboratories and HQ Divisions and with JTS to try to ensure that as much progress as possible is made towards achieving the strategic objectives. Such discussion will include the identification of individual training needs, say, during the course of career development reviews. Such identification will be aided by input from the members of staff concerned and from their line managers.

17. There will be a need to keep the strategic plan under review to ensure that it continues to reflect the changing needs of NERC. During the course of review comments will be sought both from Management and from the Trade Union Side. Discussions will also take place with other Research Councils with the hope of achieving a common approach.

ESTABLISHMENTS DIVISION

MARCH 1992
Appendix 8.2 A copy of a letter from the IOS Director informing senior staff that he required their input to a new strategy for planning future projects and bids for funding linked to the move to Southampton University during 1995.

MEMORANDUM

From: C P Summerhayes
Institute of Oceanographic Sciences
Deacon Laboratory
Wormley
Godalming
Surrey GU8 5UB

To: Science Staff HSO and above
N Fleming
D T Pugh & D Billett
HPTO Staff
Hon. Senior Visiting Research Fellows
R Paul

Our Ref.

16 May, 1991

Your Ref.

Re: Developing the IOSOL of the Future

As our Southampton move draw near and many of our projects are already halfway through their lives it is time to think again about where we ought to be in our science and technology in 10 years time and how we plan to get there. You should be a part of the discussion leading to a new strategy for IOSOL which will be the basis for planning future projects and bids for extra funding. Our strategy must have a large bottom-up element, so I want your views on the way forward for the next decade, on how we can best exploit our strengths, on what the important scientific questions are, on how we can best combine (eg. across discipline boundaries or with outsiders) to tackle these questions, on what technologies we need. We must not let the future happen to us, we must create it.

The attached document is the framework for our discussions. Please read it: discuss it with your colleagues; talk to people in different disciplines; and let me have what comments you have. It is incomplete, so don't be mad if something you feel strongly about happens to be missing or underplayed. Tell me what you want to see. You can either send me notes or scribble on the manuscript. I don't mind, so long as you copy your contribution to your Group Head.

When I have all the feedback I will get together with the Senior Management Team to decide what our strategy should be and how best to present it. I anticipate considering your feedback in the summer and producing a new draft strategy in the early autumn for further discussion with you.

The time frame is as follows:

1. draft to staff by May 21
2. comments back to me (copied to Group Heads) by July 22

This should allow plenty of time for you to have meetings across discipline boundaries: eg. about setting up new interdisciplinary research projects. I hope it will be a stimulating period full of brainstorming sessions, and I greatly look forward to seeing the end results.

C P Summerhayes
Appendix 8.3  My proposal to set up a training video library within the Natural Environment Research Council.

27 November, 1992

Draft letter to all Directors NERC-wide

Dear ......

Proposal to set up a NERC Training video library

Attached is a proposal put forward by the training officer at IOSDL for the setting up, by NERC, of a central video library for training purposes which could be accessed by Institutes NERC-wide. The proposal, discussed recently at a meeting of local training officers, has been well received so far. Many of those LTOs present at the meeting supported the view that training videos could provide a cost-effective means of supplementing existing training and could provide some back-up to formal and informal in-house staff-development programmes.

I need to assess whether the proposal would receive support from Institute Directors NERC-wide and to what extent a central training video library would be of value to local Training Officers and other managers in their day-to-day training activities.

If you support the proposal in principle, could you give me some idea of your video requirements i.e in terms of management training, stress management, other categories.

Approximately £2.5K per year would be made available by NERC to put into the scheme. Final choice of videos would be decided by ballot.

Yours sincerely

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ANNEX 2

ANNUAL STAFF REPORT

PLEASE COMPLETE IN BLACK INK OR TYPESCRIPT

Name
Institute
James Russell Centre
Grade
80

QUALIFICATIONS, TRAINING AND CAREER DEVELOPMENT.

Period of report from April 1991 to March 1992

1. TO BE COMPLETED BY THE JOB HOLDER

(i) Please record any academic, professional or technical qualifications or membership of professional or scientific bodies awarded during the year and courses currently being undertaken including the full title of a thesis.

Qualification/institution  Date Awarded  Subjects  Classification/Grades

Continuation of part-time MPhil from the University of Southampton.

"Nutrients and oxygen as tracers of Ocean Circulation and mixing".

(ii) Please record any other training undertaken during the year.

Scientific and technical writing course.
Occasional speakers course.
HPLC course

(iii) Please state if you think any particular training would enable you to do your job more effectively. This could be 'on the job' training or courses.

Courses on mathematical modelling and computer graphics.

(iv) Do you wish to be considered for a change of job and/or location?
If so, please specify

2. TO BE COMPLETED BY THE REPORTING OFFICER (with additional comments from Senior Line Managers if necessary)

(i) Please say if you agree with the views expressed above.

(ii) If you think any other training could improve performance or potential please specify.

(iii) What action has been, or will be, taken to implement the recommendations?

I am sure courses on mathematical modelling and computer graphics will be helpful to Susan. Courses outside JTS may have to be found.
Appendix 9.2  An example of a questionnaire which I sent to staff about their computing needs.

**QUESTIONNAIRE**

In order for us to assess your training needs, please complete the questionnaire and return it to Pat Hargreaves by 1 Nov 1991.

Please tick boxes as appropriate:

1. **DO YOU NEED TRAINING IN COMPUTING?**
   - YES
   - NO

2. **PLEASE INDICATE IN WHICH ASPECT(S) YOU WOULD LIKE FUTURE TRAINING?**
   (Please tick as appropriate)
   - A. Introductory MS DOS
   - B. UNIX Basic commands
   - C. General operation of sun workstations
   - D. Basic DOS + Basic CAD
   - E. Intermediate CAD
   - F. Advanced CAD
   - G. CAD/CAM
   - H. CNC machining
   - I. Vetrex
   - J. EM + RAW frame
   - K. Spreadsheets
     e.g. Lotus, Excel
   - L. Other computing
     (please specify)
   - IMAGE PROCESSING AND ANALYSIS

3. **PLEASE SUMMARIZE YOUR COMPUTING TRAINING NEEDS IN A FEW SENTENCES.**
   - Training on [fill in the two column: software and language] realistic training in techniques that have to be learned before the job is done. On-the-job training in techniques that will have to be done at a later date. The problem with on-the-job training is that and can be forgotten especially with frequent computing failures and therefore we need less attention than realistic training. Thus training comes in therefore permanent.

4. **WOULD IT HELP SPLIT WORK STATION USERS OR PC USERS IF SEPARATE SELF HELP GROUPS WHERE TO BE ORGANIZED AT LOCAL SO THAT MEMBERS WITH VARIOUS SKILLS COULD INFORM OTHERS?**
   - YES
   - NO

5. **HOW MUCH MONEY ARE YOU ABLE TO SPEND ON COMPUTER TRAINING THIS YEAR OR NEXT?**
   - NOT MUCH

THANK YOU FOR YOUR VALUABLE INPUT TO OUR ASSESSMENT OF TRAINING NEEDS.

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Appendix 10.1  A summary of requests for finance and contract training submitted by IOS to NERC between 1989 and 1991.

Table IOSDL Finance and Contracts Training Requests
(excludes MSA and FISM)

<table>
<thead>
<tr>
<th>Date</th>
<th>Request to</th>
<th>Requested courses</th>
<th>For whom</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/89</td>
<td>V Foley JTS</td>
<td>Finance</td>
<td>A Fisher, J Brooks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(IOSDL training programme list)</td>
<td>Contracts</td>
<td>K Tipping, M Somers, K Cripps, S Hockley, R Clement, J Brooks, M Harris</td>
<td></td>
</tr>
<tr>
<td>12/89</td>
<td>ASR request</td>
<td>Finance</td>
<td>K Cripps</td>
<td>received Accounts Dept. Supervisors (1 day) 12/90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contracts</td>
<td>K Cripps</td>
<td></td>
</tr>
<tr>
<td>05/89</td>
<td>JTS Forms</td>
<td>Finance</td>
<td>J Brooks</td>
<td>not received</td>
</tr>
<tr>
<td>10/89</td>
<td>JTS Forms</td>
<td>Finance</td>
<td>A Fisher</td>
<td>not received</td>
</tr>
<tr>
<td>04/90</td>
<td>JTS Forms</td>
<td>Contracts</td>
<td>K Tipping</td>
<td>received 12/90</td>
</tr>
<tr>
<td>(7)</td>
<td>HQ Finance</td>
<td>Accounts Payable</td>
<td>D Massey, L Wallace, F Castle</td>
<td>received 10/90</td>
</tr>
<tr>
<td>10/90</td>
<td>JTS Forms</td>
<td>Finance</td>
<td>K Goy</td>
<td>not received</td>
</tr>
<tr>
<td>03/91</td>
<td>IOS Estabs</td>
<td>Finance</td>
<td>D Massey</td>
<td>not followed up by IOSDL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(via Career-review panel)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04/91</td>
<td>JTS Forms</td>
<td>Finance</td>
<td>A Fisher</td>
<td>request passed from JTS to NERC LTO who said possible course in Autumn 1991, not received</td>
</tr>
<tr>
<td>04/91</td>
<td>IOSDL in-house</td>
<td>Special Topic</td>
<td>C Stone</td>
<td>given by K Cripps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Finances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05/91</td>
<td>JTS</td>
<td>Special Topic</td>
<td>C Stone</td>
<td>passed to MASD dealt with 11/91 (see next page)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Finances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06/91</td>
<td>JTS Forms</td>
<td>Finance</td>
<td>A Fisher</td>
<td>not received</td>
</tr>
<tr>
<td>06/91</td>
<td>D Griffiths (and V Foley)</td>
<td>Finance</td>
<td>N Reynolds, A Fisher, S Hall, K Tipping, M Harris, D Griffiths (and V Foley)</td>
<td>not received</td>
</tr>
<tr>
<td></td>
<td>(IOSDL training programme lists)</td>
<td>Contracts</td>
<td>N Reynolds, M Harris, R Clement, T Turner</td>
<td></td>
</tr>
</tbody>
</table>

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Appendix 10.2  A note routinely sent to new recruits pointing out their opportunity to participate in training sessions.

MEMORANDUM

From: P. M. Hargreaves
Training Officer
Institute of Oceanographic Sciences,
Dewan Laboratory,
Wormley,
GODALMING,
Surrey, GU8 SUB.

To: All new IOSDL staff
at the Brook Rd. and
Hambledon sites and
at the Rennell Centre

Our Ref.  

Date: 23 October 1990

Training at IOSDL

At IOSDL we ensure that all staff have the opportunity to participate in job-related training courses throughout their career.

Much of the training for NERC staff is undertaken by its Swindon-based Joint Training Service (JTS) which offers a variety of courses including management training as shown in the enclosed booklet. In addition IOSDL arranges for staff to attend a wide variety of vocational courses on many different subjects including sea-survival, computing, computer-aided design, technical writing and occasional speaking. Also it is sometimes possible for staff to participate in undergraduate or post-graduate training.

As the IOSDL Training Officer I undertake research into the different types of course and their content, arrange for staff to participate in courses, maintain records and run training-awareness programmes at the various IOSDL sites. Generally your line managers will review your training needs periodically but if you have particular requirements he or she will be happy to discuss this with you. Once you have agreed on a course please complete an application/nomination form (available from your secretary) regardless of whether or not it is a JTS-run course. Once your line manager has signed it please send it to me so that I can finalise details. Often the costs for courses and for travelling and subsistence are set against your departmental funds and so your line-managers will need to know precisely the costs likely to be incurred.

Within the next year you might be thinking about applying for a course to help you in your job. If you cannot find a suitable course or need general advice please contact me at Wormley (0428) 684141 Ext. 348, or see me during one of my frequent visits to your department.

Pat Hargreaves
Appendix 10.3 A note which I sent to a senior manager supporting one of his staff in the latter’s request for management training.

MEMORANDUM

From: Pat Hargreaves
Institute of Oceanographic Sciences,
Deacon Laboratory,
Wormley,
GODALMING,
Surrey, GU8 5UB.

Our Ref. PH. smt

Date: 14th January 1993

To: Co.

Your Ref.

Management Training -

Thank you for your note of 9th January 1993 raising the point about training.

The IOSDL policy is that all science and technical grades should be given the opportunity to attend Management courses, indeed this is written into the IOSDL core training curriculum. Usually JTS automatically place staff on Management II courses about a year after they have completed Management I. This is a normal NERC procedure.

I note your comment that, “since has no subordinates he has not had any real opportunity to put Management I into practice”. I must point out that the Management I course he previously completed included topics such as:

- communication, feedback skills, motivation,
- delegation (upwards, downwards or sideways), assertiveness,
- problem-solving, managing resources, managing change - all skills which are useful to scientists and engineers whether they have subordinates or not.

A further point is that the Management II course for which was booked, heavily concentrates on team work and the role of the individual as member of a group. There is also the opportunity for individuals to receive feedback about how others in the group perceive him or her during the 5 days of the course. I would have thought this would have been useful to as part of a team.

From a wider point of view, it must be emphasised that staff development is an on-going process and individuals have a right to it. As I am sure you will agree, our staff are of great value in helping to promote excellence at IOSDL and we should do everything we can to support them.

I suggest that should attend a Management II course in July when he has fewer domestic commitments. Meanwhile, have you any other course of training in mind for him? so as to promote his personal or technical development.

JTS courses are free of charge - most others are payable from your project.

Quite right,

Pam 4/1/93
Appendix 10.4  A forecast of the 'incidents' budget needed for the period 1 April 1992 to 31 March 1993. This represented a 'contingency' budget.

MEMO

From
P.M. Hargreaves
Training Officer

To
M.
cc. Director

10.2.92

Allocations for General Training 1992/93

The needs for training during the next financial year are as follows :-

<table>
<thead>
<tr>
<th>Service</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hire of videos</td>
<td>250</td>
</tr>
<tr>
<td>Health and Fitness seminars/courses</td>
<td>400</td>
</tr>
<tr>
<td>Stress/assertiveness training of 4/5</td>
<td>650</td>
</tr>
<tr>
<td>Key IOSD staff by NHS Trainer</td>
<td>650</td>
</tr>
<tr>
<td>Project management course - pilot</td>
<td>600</td>
</tr>
<tr>
<td>French</td>
<td>1000</td>
</tr>
<tr>
<td>Travel, subsistence, course refreshments</td>
<td>500</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3400</strong></td>
</tr>
</tbody>
</table>

Estimates for computer training for all IOSDL staff will be submitted separately.
Appendix 10.5  A copy of a letter which I sent to a member of JTS staff requesting information and a course on team-training.

To:
Dave Goss
JTS
NERC HQ
Polaris House
North Star Avenue
Swindon, SN2 1EU.

From:
Ruth Tilley
Training Officer
James Rennell Centre

Date: 3rd February 1994

Dear Dave,

Paul and I had a discussion today on various aspects of training at IOS and he mentioned that you have some experience in team-building courses.

We are going to start a video exercise on team building at IOS as a lead into future team training.

Could I come over to NERC for the day and pick your brains, borrow a video etc. At present I'm not sure what is available in the way of literature, videos, (or there might be something that you could send by post?).

Bill Slade of NCS is also very interested and needs info on team-building exercises.

Following from that, is it possible for you to run a JTS course on team-building for us, say:-

September/October 1994 as a pilot scheme?.

At present we have four potential groups of staff in four main projects and we are exploring ways of training for team-work.

Ruth Lilley had started a project on team-building at the Rennell Centre for a volunteer group run by Trevor Guymer. It stopped when Ruth left to join AFRC. However, I know Trevor is still very interested and would like a course for his team at the James Rennell Centre.

Best wishes,

Yours sincerely,

Ruth Tilley
Training Officer

P.M. Hargreaves
Training Officer

Cc: Paul Douglas
Appendix 11.1 An extract of an evaluation report on some training videos.

SUNDAY TIMES VIDEOS
There are three videos in the series:-
1. Quality: Achieving excellence through quality
2. Quality: Change through teamwork
3. Quality: Total Customer Service

BACKGROUND:
The introduction to each of the three titles starts with a fictional scene in which the MD of Lampters is shown how to build quality into the work place by Clare Fox a consultant. The first video (a) runs for approx 15-20 mins. There is a second video (b) in each series which runs for 44 mins which gives real case studies from:- Federal Express, Digital, Texaco, British Airports Authority, Cala Homes)

SUMMARY - The first short video about the fictional Lampters is very well presented in all three sets of videos and is useful. The case studies presented in the second video of each set are interesting but tend to be too long and repetitive. For IOS needs it is probably better to use just one example from each 'b' set i.e. each one emphasising excellence, teamwork and customer care to achieve TQM.

MESSAGE
Cost-cutting does not necessarily mean job cutting.
Lack of trust between managers and staff must be overcome
A quality programme may highlight a weakness in the management structure.
Managers roles may need to broaden so as staff may take responsibility for own work and make changes as appropriate.

VIDEOTAPE 1 QUALITY - ACHIEVING EXCELLENCE
This shows how firms started their own TQ programme
The course defines the meaning of quality and describes procedures to arrive at it.
Video a. At Lampeters Publishers) Jack Lampeter is retiring and handing over to his son. Lampeters believe in quality but there are serious shortfalls. The son Robert was giving a strong lead to the company but was making decisions without all the info. The culture was wrong. It had to be changed.
Appendix 11.2 An example of a written comment about the excellence of a tutor.

Please return questionnaire to Pat Hargreaves.
Your Name

<table>
<thead>
<tr>
<th>QUESTIONNAIRE - WRITING/PRESENTATION SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF THE COURSE</td>
</tr>
<tr>
<td>DATE</td>
</tr>
<tr>
<td>TUTOR</td>
</tr>
</tbody>
</table>

1. SINCE COMPLETING THE COURSE, HAVE YOU FOUND IT TO BE GENUINELY USEFUL IN YOUR WORK/LEISURE ACTIVITIES (PLEASE GIVE GENERAL REASONS). YES, IN BOTH OF THEM

2. PLEASE GIVE TWO OR THREE SPECIFIC INSTANCES WHEN THE COURSE HAS HELPED YOU IN YOUR WORK.
   - IT HAS HELD THE IDENTIFICATION OF A PROBLEM WHERE LEARNING CAN ACTUALLY HELP YOU SEE THE DIME DONE!!

3. LIST THE THREE MOST IMPORTANT THINGS YOU LEARNED DURING THE COURSE.
   - THAT LEARNER IS IMPORTANT.
   - THAT DICE IS IMPORTANT.
   - THAT LEARNER AND IT CAN LEARN CO-OPERATED.

4. WHAT HELPED OR HINDERED YOUR LEARNING DURING THE COURSE. ACTUALLY
   - Helped
   - Hindered
   - N/A
   - HELP TO SEE OTHER'S OUT OR YOU SELF.

5. WHAT DO YOU THINK ABOUT THE BALANCE OF TOPICS COVERED.
   - GOOD

6. DO YOU THINK THAT IOS/HERC BENEFITS FROM ITS STAFF ATTENDING THESE COURSES.
   - a. To a great extent /
   - b. To a moderate extent
   - c. Not at all
   (Please give reasons)

7. HAVE YOU ANY OTHER COMMENTS YOU WOULD LIKE TO MAKE ABOUT THE COURSE - (PLEASE USE SEPARATE SHEET IF NECESSARY).
   - MUS X IS AN EXCELLENT TUTOR
   - AND HIS ENTHUSIASM SHOWS THROUGH IN HIS WELL MATERIIZED COURSES.

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### SPRING SEMINAR PROGRAMME 1992

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 Jan</td>
<td>Animated Autosubs: Long Distance Tracking of Marine Mammals</td>
<td>Dr. John Harwood (Sea Mammal Research Unit, Cambridge)</td>
</tr>
<tr>
<td>6 Feb</td>
<td>Fluxmanche II: Research into Sedimentary Dynamics.</td>
<td>Dr. Mike Collins (Dept. of Oceanography, University of Southampton)</td>
</tr>
<tr>
<td>13 Feb</td>
<td>Studies of Submarine Methane Seeps</td>
<td>Dr. Paul Dando (Marine Biological Association, Plymouth)</td>
</tr>
<tr>
<td>20 Feb</td>
<td>Electrical resistivity structure of the East Pacific Rise at 13°N from controlled-source electromagnetic sounding.</td>
<td>Dr. Martin Sinha (Bullard Laboratories, University of Cambridge)</td>
</tr>
<tr>
<td>27 Feb</td>
<td>Preparation of the FRAM Atlas</td>
<td>Dr. David Webb and Dr. Andrew Coward (Department of Marine Physics, IOS Deacon Laboratory)</td>
</tr>
<tr>
<td>5 Mar</td>
<td>Fluxmanche III: Fluxes and Geochemistry of Trace Metals and Nutrients in the Straits of Dover</td>
<td>Dr. Peter Statham (Department of Oceanography, University of Southampton)</td>
</tr>
<tr>
<td>19 Mar</td>
<td>The Oceanographic Instrumentation Industry: Fact or Fiction?</td>
<td>Mr. John Wheaton (Chelsea Instruments, E. Molesey)</td>
</tr>
<tr>
<td>25 Mar</td>
<td>Air Sea Chemical Exchanges and Their Effects on Atmospheric and Ocean Chemistry</td>
<td>Prof. Peter Liss (School of Environmental Sciences, University of East Anglia)</td>
</tr>
</tbody>
</table>

All Seminars will be held in the CONFERENCE ROOM, IOSDL.

Visitors are welcome to attend, but it is advisable to check dates and times with the seminar organiser before travelling.

**CHRIS GERMAN**  
Seminar Organiser  
9 December 1991
Appendix 11.4  Extracts from a list of the informal seminar programme arranged by the Physics Department during Autumn 1993.

Institute of Oceanographic Sciences, Deacon Laboratory

Marine Physics Department

Informal Seminar Programme, Autumn 1993

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 September</td>
<td>John Gould</td>
<td>Acoustic Thermometry of Ocean Climate; what is it?</td>
</tr>
<tr>
<td>30 September</td>
<td>Mike Griffiths</td>
<td>The ADOX Picture Show</td>
</tr>
<tr>
<td>14 October</td>
<td>Peter Macintosh</td>
<td>3 Months at IOSDL</td>
</tr>
<tr>
<td>28 October</td>
<td>Peter Saunders</td>
<td>Current, Winds and Eddies</td>
</tr>
<tr>
<td>11 November</td>
<td>Simon Thompson</td>
<td>To be advised</td>
</tr>
<tr>
<td>25 November</td>
<td>David Carter</td>
<td>Wave Heights from Satellites</td>
</tr>
<tr>
<td>9 December</td>
<td>Ilse Hamann</td>
<td>To be advised</td>
</tr>
</tbody>
</table>

Informal seminars to be held on Thursday lunchtimes at 12.45pm in the main Conference Room at Wormley. All from IOSDL and IRC are welcome. Updates to the programme will be sent out on email.

IOSDL
Brook Road
Wormley, Godalming
Surrey, GU8 5UB
Tel: 0428 684141 ext 214
Fax: 0428 683065
Email: npb@wwu.ac
Appendix 12.1 An example of an end-of-course questionnaire:

**COURSE ASSESSMENT**

**NAME:**

**COURSE TITLE: MANAGEMENT**

1. What were your objectives for this course?
   (a) To improve my communication skills
   (b) To appreciate the role of a manager

2. To what extent were your objectives achieved?
   (a) Speaking to a group is always difficult. I was pleased with my efforts.
   (b) I would like to learn more.

3. List the 3 most important things you learnt during the course:
   1. Communication, importance of, and approach.
   2. Brainstorming.
   3. Feedback from others.

4. What helped and hindered your learning on the course?
   
<table>
<thead>
<tr>
<th>Helped</th>
<th>Hindered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being able to retreat from the classroom (not residential)</td>
<td></td>
</tr>
<tr>
<td>Practice of principles (not all theory)</td>
<td></td>
</tr>
</tbody>
</table>

5. If there are any comments about the effectiveness or appropriateness of this course that you would like us to pass on to Senior Management and Union Side please write them below. (These comments will be forwarded in typed script without identification).

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Appendix 12.2  An example of a post-course questionnaire

FROM  Pat Hargreaves  
     Training Officer  
     Institute of Oceanographic Sciences, Wormley.  

TO  Participants in  
     Management Courses.  

29 March 1994

Questionnaire on Training Courses
(Management)

It is now some time since you completed your management course(s). As you are aware, at IOS we are constantly monitoring our staff development programmes, so as to provide for you the best means of updating and improving personal and work-related skills, we need to know what you think about the courses in which you have participated and if it has helped you in your work or leisure. If you have suggestions for improving elements in the programme. Please let us know.

So, to help us to help you, please complete the questionnaire overleaf about your recent course(s).

The results of individual questionnaires will remain confidential - only a general summary of the total results will be made available for general perusal.

Please return questionnaire to Pat Hargreaves.

Your Name .......

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QUBJwrnw w r g* -  JOH A CaO ST OOCRSES

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Typewriter on the course Managed by the course, saved to be useful in your work or leisure. (Please give reasons).

a. To a large extent
b. To a moderate extent
b. Not at all

(please give reasons)

5. What are the three most important things you learned during the course?

That I was better at management and men

6. What helped or hindered your learning during the course?

Hindered

7. What do you think about the balance of topics covered?

8. Have you any other comments you would like to make about the course? (Please use separate sheet if necessary).
Appendix 12.3 A completed questionnaire on the success of the total IOS staff development programme

Please return this questionnaire to Pat Hargreaves.
Your Name ........ Grade .... Date 17.5.94

QUESTIONNAIRE - STAFF DEVELOPMENT CURRICULUM

1. CAN YOU SAY WHETHER, IN YOUR OPINION, THE IOS STAFF DEVELOPMENT COURSES HAVE ENABLED YOUR STAFF TO DEVELOP THEIR POTENTIAL IN TERMS OF THE FOLLOWING:- (PLEASE GIVE EXAMPLES).
   a. MANAGEMENT ABILITY. YES NEGOTIATING SKILLS
   b. TECHNOLOGICAL OR SCIENTIFIC ACHIEVEMENTS.
   c. WRITING/PRESENTATION/MARKETING ABILITY. YES CUSTOMER PERCEPTION

2. CAN YOU GIVE THREE OTHER WORK-RELATED INSTANCES WHERE THE IOS STAFF DEVELOPMENT PROGRAMME HAS HELPED EITHER YOU OR YOUR STAFF OR YOUR TEAM.
   INTERPERSONAL SKILLS
   INDIVIDUAL MANAGEMENT - PRIORITISING WORK
   TIME MANAGEMENT

3. TO WHAT EXTENT DO YOU THINK THAT IOS BENEFITS FROM ITS STAFF ATTENDING COURSES (PLEASE GIVE REASONS).
   a. To a large extent
   b. To a moderate extent 
   c. Not at all

4. HAVE YOU ANY OTHER COMMENTS YOU WOULD LIKE TO MAKE ABOUT THE CURRICULUM?
Appendix 12.4  A completed questionnaire on 'Time-management' courses

Please return this to Pat Nargreaves only.

Grade: HEO........

QUESTIONNAIRE - TIME MANAGEMENT COURSE

1. Did you find the course genuinely useful for organizing work and leisure time or not? (Give reasons).
   Yes. Whilst not a great course it was well worth it.
   It's a principle that applies to everyone - although in different ways and to different degree. It's common sense but in one or two areas that1s past it out requires your mind on it. It's a topic once covered it comes back to your mind quite.

2. Can you give a work-related instance where the course has helped you to manage your time more effectively?
   Case 4.

3. a). Did you read the book on Time-Management given to you as part of the course?
   Yes/No. But I have glanced thru and read bits.

   b). Did you find it helpful?
   Yes/No. Very little. Mostly more of a read fully.

4. List the three most important things you learned during the course.
   Not really. Rather to date to pick up things particularly for me see 5.

5. What helped or hindered your learning during the course? (Give reasons).
   Helped
   My role is largely organisational and better to apply some of the principles (eg set times etc). The course probably did not reflect this role enough.

   Hindered

6. What did you think about the balance of topics covered?
   OK

7. Have you other comments you would like to make about the course?
   Judging from the balance of many scientific preparations the principles have not generally been learnt.

   Very a bit bits

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Appendix 12.5  A note from one member of staff who did not complete the questionnaire.
She expresses concern about her workload

Dear Pete,

I found difficult to fill the questionnaire as it is since in the past few months, my workload and pressure from various sources simply dictates what I do each day. I had to drop some other things I would love to do. There is no way around it because I really need to do what I have been doing in order to make some progress with the project and not to hold up other people. The problem I guess is simply that there is a huge demand on me during this past period, perhaps beyond my ability.

I am hoping this intense period will soon be over and I can go back to my normal weekly plan (which I made at the beginning of the year).

The important thing I want to say is, I haven't been able to practice what I learned from the course. There are many good points discussed during the course, but it is not always easy to put into practice when there is specific pressure upon me.
Appendix 13.1  An example of an individual's training records held on computer which needed verifying.

P.M. Hargreaves  
Training Officer

All Staff
2 Jan '92.

Dear 

Record of Courses undertaken by IOSDL Staff  
up to 31 December 1991

Attached is a copy of your staff-development record held on an ORACLE database at IOSDL. It has been compiled from questionnaires completed by you and from previous training files. Hopefully it should include all courses you have completed since leaving school including vocational courses as ONC, HNC, BTEC, first and postgraduate degrees, secretarial, refresher, computing, languages, management skills etc.

So as to help us to help you please check the list for any inaccuracies adding additional data overleaf and return this to me by 9th January 1992. It would be helpful if any additions could include the dates of the duration of the course as well as the year. Please also let me know if there are no alterations required.

066  R J. SSO  Structured Prog.  1990
066  R J. SSO  Occasional speaking  1991
066  R J. SSO  Interactive skills  1991
066'  R J. SSO  Time management  1991
066  R J. SSO  IEE vac sch. dig sig proc.  1990
066  R J. SSO  Management I  1990

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Training & Publications

Staff Development and Training

The Institute is only as good as its people can make it. Investment in staff development and training is vital because it helps people to improve their own performances, and manage themselves and their teams better, thereby improving the performance of the group as a whole.

Three graphs show our history of investment in courses on staff development and training in recent years. Each column represents a calendar year; the column for 1993 represents only the first quarter (up to the end of the period covered by this report). The top graph shows that a substantial increase in staff development and training that began in 1988 has been sustained despite some ups and downs, and looks set to continue into 1993. The middle graph shows that despite financial difficulties we managed to maintain investment in the management courses necessary to ensure the smooth functioning of our research teams and their administration. The Research Councils’ Joint Training Scheme (JTS) people were a great help in sponsoring this continuing high level of staff development and training. The lower graph shows that the decline in 1992 was mostly due to a fall in personal development courses. In part this was because all staff have completed basic training in time management, and because most of those who needed training in presentation skills and technical report writing had been on a course.
Appendix 14.1

An example of a letter which I sent to a member of JTS staff following a meeting in 1992 and in which I discuss arrangements for JTS to run local courses.

Memo

From
Pat Hargreaves
LTO IOSDL, Wormley.

To
L
JTS, Polaris House

cc
C. P. Summerhayes
V. Foley
J. Hansford
S. Hall

6th August 1992

Dear D

Local Management Courses IOSDL/JRC

Thanks for your note about summarizing our discussions on 14th July. The meeting was very useful and I feel that we covered a lot of ground. Since returning from holiday I have concentrated on getting a list of firm nominations for management courses and am now in a position to give you more information. Nominations are given overleaf and at present numbers are as follows:

Management I 14
Management IA 17
Management II 9
Management III 2 (courses arranged off-site for 1992)

There are eight other members of staff who are away at present but who will participate in these courses. I anticipate that further Management III courses will be needed in approximately 18 months' time.

As discussed, due to our lack of funds for travel and subsistence it seems best that these courses are run mainly during normal office hours at hotels local to IOS Deacon Laboratory at Wormley or to the James Rennell Centre (JRC) at Chilworth, Southampton. Response to local training has been good, staff pointing out that they will have the benefit of less travel and yet not be worried by work-related interruptions. Spring 1993 seems a good time to hold the courses as most staff are back from sea by the end of April. This would give you time to book tutors and hotel conference rooms etc.

continued
With regard to Management I several of the young potential participants have requested training in 'interpersonal/interactive' skills and I wonder if it is possible to combine an element of this as I suspect most would be interested. Indeed the need for 'interpersonal/interactive' skills could be met by including this as a topic in all the local management courses I, IA and II. In two instances we feel that staff would benefit more if they had the opportunity of studying 'interactive' skills together with participants from other sites and exceptionally we have made arrangements to pay travel costs. Thus I have submitted these two nomination forms separately through the usual channels.

You will see that most of the candidates for Management IA are very experienced staff mainly of HSO - Grade 7 but with little formal management training. As we discussed previously they require advanced management training which will contain information new to them, make them think creatively about their managerial role and improve their managerial capabilities. I think perhaps elements of Management I, II and 'Senior Management' might be appropriate. They could follow this up with Management III/IV during 1994 and then perhaps a full senior management course during the following year. We shall need your advice on this - perhaps we could discuss the content further with you and the other tutors.

As you will see there are nine participants for management II but there will probably be at least four others who will register in due course. It may be necessary to get a couple of participants from other sites to make a full complement but I can't be sure of this yet. I had wondered whether we should wait until Autumn next year to hold this course but some participants have been waiting several months already and so it would be best if it could be held in spring '93.

At previously discussed I am presently compiling a list of staff who require a course in 'Presentational skills' and it looks as though at least one course will be needed this year. There is also the need for one or two courses on 'Stress management/ assertiveness', one here at IOSDL and one at JRC would seem appropriate. Staff at the latter are on average younger with less work experience than those at IOSDL and so we should give those priority. Is it possible to provide at least one each of these two types of course preferably before December '92 ?.

Although several of the long-serving experienced personal secretaries are anxious to do a Management I or IA course, and will be included once nomination forms have been signed, others with less experience are a little afraid of it. You mentioned that you might run a 'Role of Secretary Course'
which would lead into Management I - this seems a good idea and there is much support for this from the secretarial staff. I think that a short course might be helpful to them. Also I know that you have the 'Advanced admin skills' training in hand for some of our junior admin staff can you let me know of your preferred dates for this?

With regard to 'Technical Writing/Report Writing.' courses I know that at present this is not included in the JTS curriculum. However if it is to be included, say, next year, please can you let me know. We have six requests so far for this year and I don't anticipate that we shall be able to fund this.

I hope that I have given you enough information to enable you to go ahead to make firm arrangements. It seems unlikely that we will have the funds this year or next to pay for participants' travel costs and so we are especially grateful to you all at JTS for providing training local to our sites.

If you wish come down to Wormley to view the local hotel conference rooms and to finalise arrangements. I shall be away for a couple of weeks in October but otherwise shall be around. Further nomination forms for management courses will be sent within two weeks.

Looking forward to further discussions,

Best wishes,
1. **Report of Last Meeting/Actions Arising**

The report of the meeting held on 24 March 1992 contained several outstanding actions:

1.1 It was agreed that consideration would be given to the notion of "top slicing" the overall NERC training budget to provide a defined training budget for each Institute. John Hansford considered this proposal but felt that it could be counter-productive to try to impose one method of handling training budgets upon Institute Directors. He preferred to encourage Institute Directors to consider the importance of training within their Institute and leave them to devise the most appropriate method of resourcing training for their Institute. Recent reports from the SMAG had alluded to the importance and need for separate training budgets. John Hansford would contact Directors raising the issue and asking them to consider the notion of an identified budget for their Institute training.

1.2 John Hansford had contacted the Finance Officer with a view to answering the outstanding need for financial training. The Finance Officer had reacted positively and Finance courses had been devised and had recently been successfully held.

1.3 The number of places allocated to the NERC on all Core Courses in the JTS programme had been incorporated in the draft JTS service agreement that had been circulated to all LTOs.

1.4 The intention to arrange this LTO meeting before the autumn Training Advisory Committee (TAC) meeting had proved impossible. Nevertheless, remained the objective to arrange future LTO meetings to occur before TAC meetings. The minutes of the TAC meetings would be circulated to LTOs.

1.5 The LTOs at the last meeting had requested a more formal definition of their role within the NERC Training System. This had not yet been formulated and remained an outstanding action. It was agreed that a draft definition of the role of the LTO would be prepared and circulated for consideration by LTOs in the next few weeks.
2. Management/Development Training Strategy

2.1 Paul Douglas gave a progress report on behalf of JTS. It was now six months into the first year of the Training Strategy and things seemed to be running smoothly. The resources of JTS were being stretched to the limit as the additional demand had not yet been matched by additional resources. Steps were in hand to recruit the additional tutoring staff needed.

2.2 A proposal had been agreed by the TAC to alter the structure of the Management 4 module of the management series as this element was not required by all staff completing Management 1 to 3. It was proposed to redesign Management 4 as a separate module to be run on demand.

2.3 It would be renamed "Managing for Business" and would take the form of a three day workshop which could be either residential or non-residential. This would, hopefully, answer the outstanding need for financial and contractual training. Work on the redesign of the module was underway using consultants. It was anticipated that it would be available as a course option in April 1993.

2.4 The recent TAC meeting had seen the announcement from the AFRC that it did not intend to follow the Core Management Programmes previously agreed with JTS. They argued that their training needs had changed and could be answered by a series of shorter, intensive modular courses of three day duration, targeted at specific individual participants. JTS had designed alternative management courses to comply with the changed circumstances and were in the process of running pilot courses. They would report back to the group on progress.

2.5 The LTGs agreed that the JTS Management Series should remain unchanged for NERC participants but the AFRC experiments would be monitored closely. The AFRC approach illustrated the need for JTS to remain flexible and responsive to changing customer needs.

2.6 JTS took the opportunity to announce their proposal Senior Management Training Course for Grade 6 and above.

continued
4. Evaluation of JTS Training

4.1 Evaluation of training courses was an important aspect of the training cycle. Evaluation was needed by:

a. JTS: To evaluate content to ensure that courses remained responsive and relevant to RC needs.

b. LTOs: To ensure that JTS courses were good value, appropriate and responsive to the needs of their Institutes.

c. Establishments Division, HQ: To ensure that JTS courses remained good value and relevant to the needs of NERC as a whole.

4.2 At present evaluation on a formal basis only took place in JTS with the completion of post course questionnaires. Some LTOs undertook their own evaluations but this was not NERC-wide. Although access to the results of the JTS evaluation was available, it was felt that independent assessment was required. To facilitate this a simpler form had been devised which would give an overview of the evaluation of JTS courses.

5. Training Video Library

5.1 The idea of establishing a NERC-wide Training Video Library, as proposed by Pat Hargreaves at IOS DL, was well received by LTOs. Training videos could provide a cost-effective means of answering some institute training needs although there are logistical problems inherent with the geographical dispersion of NERC sites. Indeed, a similar arrangement has been successfully set up with Health and Safety videos.

5.2 The training videos were seen as a supplement to existing training but experience has shown that support from Institute Directors was crucial to success. It was agreed that a letter should be circulated to Directors highlighting the proposed library and enlisting support. It was estimated that the library would cost approximately £2.5k per annum to run.

JH/PH
6. Quotas for JTS Course Places

6.1 At the previous meeting support had been expressed for a system of quotas for individual Institutes for JTS courses. The LTOs considered a paper on this subject which illustrated the problems inherent with introducing such a system.

6.2 The current system operated on a "first come first served" basis, allowing JTS to act as a co-ordinator for placing staff onto JTS courses. The major weakness with this arrangement was the difficulty in knowing exactly when staff would attend JTS courses. The idea of specific quotas was an attempt to reduce this uncertainty.

6.3 Generally, LTOs responded negatively to the idea of quotas. The smaller Institutes were apparently penalised by the low number of quota places recommended. It was considered to be an inflexible and inappropriate system for NERC and was rejected by the LTOs.

7. Non-Residential Courses

7.1 There was a feeling that demand was increasing for non-residential courses to meet the training needs of people who could not attend residential JTS courses. Non-residential courses could be arranged in various ways:

a. JTS could arrange courses on particular sites. This had been successfully done at IOS.

b. Specific site training can be arranged for individual Institutes but with the training arranged in a local hotel, allowing staff to return home daily. This has the advantages of residential courses but without the problems of travel.

8. Introductory Courses

8.1 This had been discussed with the Institute Heads of Administration in April but little progress had been made. Induction practice differed between Institutes with some running specific introductory courses and others offering a minimal package. JTS had passed responsibility for induction back to Institute LTOs offering advice and support but not running NERC-wide courses.

continued
8.2 It was confirmed that central resources were not available to resurrect the NERC Introductory Courses. It was felt that Institute-based induction was preferable with some input from the centre to give a NERC perspective to Institute staff. This could be in the form of a booklet/flyer describing the organisation of NERC as a whole. John Hansford agreed to find out for Commercial and Communications Group in NERC HQ whether such a document existed or could be produced.

9. Any Other Business

9.1 In response to a query from DML, it was confirmed that JTS were available for help in undertaking a training needs analysis with a view to formulating Institute level training strategies. It was important that the correct specification was agreed before inviting tenders for training needs analysis.
Summary of meeting P.M. Hargreaves/R.T. 12th April 1991

It was agreed that:

1. All recently appointed scientific staff in Marine Physics Dept. should be given the opportunity to participate in the following courses which are to be held in 1991:
   a. Occasional Speakers/Presentational Skills
   b. Technical Writing for Scientists
   c. A 'Management' course the type of which will depend on individual needs (PMH to discuss with appropriate line manager)

2. Some senior staff in Marine Physics Dept. will be given the opportunity to attend one of the 'Interpersonal effectiveness' workshops which are held frequently by Brunel University. (RTP and PMH to discuss further) Meanwhile PMH to arrange the course for G. Griffiths and possibly for D. Webb. (latter to be discussed with C. Summerhayes). Other possible participants include: - W.J. A. T. B. P.

3. PMH to supply training history profile for all Marine Physics staff which will help RTP/PMH/Line Managers to determine this year's training needs. (further discussion to continue in May/June 1991).

4. PMH to organise a Brunel 'Directing and Managing R&D' course for M.J. and for other members of staff as the need arises.

5. PMH to circulate list of potentially useful courses to all line managers at IOSDL at six-monthly intervals.

6. A 'Time management' course will be arranged at the Rennell Centre for those staff who were not able to attend the previous course. PMH/C. Summerhayes to arrange a suitable date.

7. PMH will arrange an IOSDL introductory series of talks for new staff. It is envisaged that various talks will be spread over approx. two days in late June 1991 when staff return from sea. Dates will depend on availability of speakers and may not run concurrently.
To: Director
From:
Date 22/10/92

I received this notification (see back) today and, quite frankly, am outraged by it. The attendees for the course are from this laboratory and therefore I see no justifiable reason why the course cannot be held on this site. After all we have two conference rooms.

I realise that JTS is a jointly-funded organisation, but that also implies they receive some monies that have been "top-sliced" from IOSDL. It is extremely galling to know that "our" money, no matter how small a percentage, is being used to hire facilities that we have available here for free. If JTS insist on paying for the facilities they use then let them hire our conference room!

Perhaps the organisers would benefit from a course in prudential finance management.

I strongly urge you to use all your influence to get this kind of extravagance halted. This will undoubtedly be seen as yet another example of HQ being insulated from the real world of financial hardship at the expense of institutes recurrent budgets (and not just this one).
Appendix 14.5  A letter from myself to the Director in which I justified my actions in planning to run a non-residential 'Management' course at a local hotel.

Institute of Oceanographic Sciences
Deacon Laboratory
Wormley
Godalming
Surrey GU8 5UB

Our Ref. 30 October 1992

Your Ref.

Local Non-residential Management Courses

I am disappointed that Mr X has expressed the view that he is 'outraged' by the fact that he received notification that a place has been reserved for him on a management course at a local hotel. It is a pity that he did not have the courtesy to discuss with me, as the Institute Training Officer, his perceived problems about arrangements for the course. I would then have been able to supply him with background details. My observations are as follows:-

The IOSDL core training curriculum, agreed by senior management during 1990, makes provision for all staff to have the opportunity to participate in the JTS series of management courses at some time in their career at IOSDL. During late 1990 a review of staff training records showed that relatively few staff had participated in any type of management course and so I was asked to provide staff with the opportunity to remedy this.

Following requests from IOSDL in 1990 JTS agreed to provide an on-site Management I course at the Wormley site to help ease the continuing backlog. An additional factor was that staff who for various reasons found it difficult to attend residential courses could be included in the on-site programme should they so wish. It is emphasised that on-site provision of management courses was exceptional and not usually undertaken by JTS. In addition IOSDL staff were offered the places on other JTS core courses as usual, in common with other NERC employees and staff of AFRC or SERC.

The Management I course held in the main conference room at Wormley in February 1991 was generally successful and most people liked the idea of a non-residential course. However there were problems in that there were not enough large syndicate rooms at IOSDL (there were often three groups who needed a room) and so group work had to be done wherever there happened to be an office available. One such comment is given below:-

"Course on the IOS site worked well but it was necessary to disperse to rather remote locations when groups split up."

There were also several comments from staff about distractions such as :-

"Don't hold this at IOS again - too many distractions or opportunities to miss something"

A further factor was that although participants were asked by the tutors to stay together during lunch, coffee and tea breaks, so that they would have the opportunity to discuss and reflect on newly-learned issues they didn't always do so. Several tended to go back to their offices for a few minutes to make phone calls and look at their 'in-trays' or talk to non-participants about work-issues rather than to fully concentrate on the course.

I subsequently received a letter from Diane Tunnicliffe of JTS who expressed some concern over us having too many courses on site:-

continued
Appendix 14.5 continued

'...as you know from the Management IM and I ran for you, the quality of the course and the learning was lost to some degree'.

The problem of distraction when running courses at work has also been highlighted recently by one of our staff when attempting to run a desk-top publishing course.

So far as NERC training money is concerned you will be aware that NERC pays to JTS its share of funds for training as does SERC, AFRC and ESRC, the courses are then shared between these research councils. In June 1991 in response to a request by NERC HQ for all Institutes to supply information on the extent of our training requirements we informed HQ that approximately 50 Management III courses would be required by IOSDL between 1992 and 1994. We also listed other courses which would probably be needed but pointed out that it was difficult to predict exactly our requirements. In November 1991 we were informed that w.e.f April 1992 that each council would agree with JTS a three year programme of training provision and would fund it accordingly. Thus JTS were to become essentially a contractor to SERC, ESRC, AFRC and NERC, each Council providing JTS with a level of funding for training its staff.

Within the NERC provision there are no formal Institute quotas for training although monitoring of places occurs on a less formal basis by both NERC and JTS. The level of existing provision for each Institute is dependent on the success of bids from local Training Officers (LTOs) the whole system to some extent working on a 'first come first served' basis but also on a 'give and take' basis. It is up to the LTO to ensure that staff from his/her Institute receives a reasonable proportion of core training as set out in the JTS programme. It is also, up to him or her to take advantage of consultancy services offered by JTS when needed. It is almost impossible for NERC to implement a system for precise allocation of courses to each Institute based purely on numbers of staff at each site. The advantages and disadvantages of providing Institute quotas has been set out and discussed recently at a meeting of NERC LTOs and HQ staff (October 1992 - see Appendix 1). It was unanimously decided by HQ and all LTOs that to have a quota system for Individual Institutes would be unworkable mainly because it is difficult to predict training needs and because such a system would be inflexible and would not necessarily reflect actual needs. A quota system would not take into account the needs of individual staff arising due to job changes, recruitment etc the timing of which may not fit neatly with that of the financial year.

Thus it is up to the NERC local training officers to ensure that each receives, for its Institute, a fair share of the allocation of JTS courses or JTS expertise on a first come first served but 'give and take' basis. Additional or special courses outside of the core programme i.e. non-residential management courses can be requested by local Training Officers. However these are provided at the discretion of JTS who have to find extra staff and funds to run them. Tutors with particular expertise have to be found in response to extra demand and often they are not available. Therefore while JTS are prepared to be flexible, requests for special courses extra to normal provision are negotiable and should not be considered by any Institute to be a right.

Following news of the IOSDL financial predicament in March/April 1992 it was decided that JTS should be informed that IOSDL was not able to take up its allocation of core residential management training off-site as there were difficulties in funding travelling expenses and residential allowances. It was further agreed that JTS should be asked to provide as a favour to IOSDL some courses extra to the core-curriculum either on-site or as local to Wormley as possible. However it was decided that those few staff for whom core-courses were already booked off-site should be allowed to participate provided that their respective projects were in a position to fund travelling expenses.

JTS, which was now viewed by NERC as a training contractor, responded magnificently and informed me that they would do everything they could to help IOSDL as they had always had a good relationship with its staff. Mr V. Foley and Ms D. Tunnicliffe visited the Wormley site in June 1992 and following a meeting with me, during which we discussed Institute training needs, suggested that the best course of action would be to provide two management 1 courses (total of 30 places) mainly for IOSDL staff - one close to JRC and one at Wormley. After discussion we agreed that the best course of action would be to run the courses daily at a local hotel. This would be advantageous in that it

continued
would enable staff to put their minds totally to the large amount of learning involved during the course while remaining free from the distraction of their usual work. Furthermore if places were not taken up by IOSDL staff they could be re-allocated to staff from other Institutes on a residential basis. I jointly agreed to this proposal as being in the best interests of IOSDL staff and still strongly maintain this position.

The present situation is that JTS has continued to respond to the IOSDL request for help. In addition to the 30 places offered on the local Management I courses to be held next March two JTS staff have also visited us recently with a view to providing an in-house 'stress workshop' next April. It has also planned to run a 'team-building/appraisal' pilot scheme with a small group of staff at JRC. Despite the fact that IOSDL has experienced difficulty in paying for travelling expenses to courses during 1992/93 it has been able to take up places on the following residential courses:

<table>
<thead>
<tr>
<th>Title</th>
<th>No. of places taken or booked before 31 Mar 93</th>
<th>JTS Costs £</th>
</tr>
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<tr>
<td>Management II</td>
<td>5</td>
<td>3750</td>
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<tr>
<td>Management III</td>
<td>4</td>
<td>3080</td>
</tr>
<tr>
<td>Pre-retirement</td>
<td>1</td>
<td>470</td>
</tr>
<tr>
<td>IOS/JRC Management I - Special</td>
<td>30</td>
<td>16500 *</td>
</tr>
</tbody>
</table>

* based on JTS costs of £750 per course - 30 staff (£22500) less the difference between cost of daily attendance as opposed to full residential attendance say £9000 at the most = £16,500

Thus during 1992/1993 IOSDL can expect to have received approximately £23,800 of training.

Recently NERC has supplied local Training Officers with information on costs and allocations for its core courses (Appendices 2 & 3). Based on this information I have calculated that NERC has made approximately £284,920 worth of JTS core training available to HQ and its 14 Institutes. The IOSDL 'allocation' amounts to approximately 8% of this. Thus IOSDL could have expected to receive approximately £22,600 of core training had it been able to pay travelling expenses etc. Under normal circumstances all senior Management and Management I-IV training would have been arranged at residential courses off-site as is usual for other NERC Institutes e.g. POL, PML etc.

It is interesting to note that through the good-will of JTS and with the support of NERC administration IOSDL has been offered at least £22,600 worth of training - rather than the £23,800 at which it might have expected. This is partly due to the fact that two of the management II courses listed above (worth £1500) had already been paid for by SERC but had been taken up by them and so were offered to LTOs within other Research Councils on a 'First come, first served' basis.

In summary I am satisfied that with regard to training we are doing the best for our staff at IOSDL. NERC has made provision for residential core management courses for all of its staff including those at IOSDL in parallel with those of AFRC and SERC and together with JTS it has found ways of allowing IOSDL to take up its training options. IOSDL also stands to save substantially on allowances for travelling.

The Management courses offered to us in March are intensive and will require full concentration by staff. I see no reason why our staff should not be given excellent conditions for learning on a level enjoyed by colleagues from other NERC Institutes. The least we can offer are

continued
conditions away from the daily distractions of the workplace and which are conducive to reflection
and group interaction.

If Mr X. feels so strongly about 'our' money I suggest that he should find a way of
repaying SERC the £1500 worth of their courses that we have accepted over and above our expected
allocation. If we don't take advantage of the proposed JTS arrangements for local non-residential
courses I'm sure that other NERC or SERC stall will.

I re-iterate that we were unable to take up our core training allocation in total and JTS helped
us out, I'm surprised that Mr X. has not expressed any gratitude towards their staff.
Appendix 14.6  Plans to implement procedures for staff to obtain National Vocational Qualifications.

Dear Mrs Hargreaves,

Thank you for coming in to see me concerning the training needs of your secretarial staff. I have pleasure in confirming the following information for you to distribute among those staff who may be interested in gaining an NVQ qualification.

As discussed during your visit, I or one of my colleagues would be pleased to give an introductory presentation and discussion session on how to obtain this qualification. We would focus on how to gain it by the alternative route to traditionally attending a normal college course (namely by collecting evidence of the skills and experience they already have and acquiring those they do not have but are necessary). The fee for this session would be £X per person, which would be redeemable against the programme fee should they enrol on the following programme.

The current fee for such a qualification would be approximately £Y which is the same as our part-time course fees. This would include registration, diagnostic assessment, tutoring, learning packs, workshop facilities and final portfolio assessment.

I am sure you appreciate, this is a very competitive package in today's training climate.

Please do not hesitate to contact me should any of your staff wish to take up this offer or if you have any other queries.

Yours sincerely,

Principal: Gail Anslow
Deputy Principal: Brian Shutebeworth
Guildford College of Further & Higher Education
Sooke Park, Guildford, Surrey GU1 1EZ
Telephone (0483) 31251 Fax (0483) 63409
Appendix 14.7 Some examples of courses offered by the University of Southampton Management School.

Dear Ms Hargreaves

Management Training Courses

Further to our telephone conversation recently I have pleasure in offering you places on the courses listed below at a special reduced rate of £250 per person. The courses will run for ten weeks starting in week commencing 14th October 1991 for two hours each week, and a booking form is enclosed for your assistance.

Tuesdays
2.00 p.m.-4.00 p.m. Human Resource Management A

Wednesdays
11.00 a.m.-1.00 p.m. Accounting and Control
2.00 p.m.-4.00 p.m. Management and European Institutions

Thursdays
2.00 p.m.-4.00 p.m. Management and Organisations
5.00 p.m.-7.00 p.m. Marketing Management

A brief description of each course is included in our Management Education guide, but if you have any further queries about the content please do not hesitate to contact me.

Yours sincerely

DEPUTY LECTOR (ADMINISTRATION)

cc: Mr A Fisher, The Reynold Centre,
Gamma House, Chilworth
Appendix 14.8  An example of publicity which is provided by the IOS newsletter

CAREERING AWAY

The IOSDL careers exhibition has been out on the road during March. A day at Tomlinscote School, Frimley, was attended by some 70 employers and several hundred pupils plus their parents and teachers. As usual, our "real" specimens attracted interest and plenty of genuine enquiries.

Ye were delighted to be invited for a second year to exhibit at the Degree Course Conference at the University of Surrey, one of only six organisations there, including the BBC, Ford and the RAF. About 2,500 Sixth Formers from Surrey schools had been invited to the Conference, and at times it felt as if most of them were round our stand.

MOVING PIGS

A big "Thank You" to Joint Training Section for providing us with a successful management course at IOSDL recently.

We learned techniques in leadership, assertiveness, etc., etc., but JTS must have had our future move to Southampton in mind when providing us with our project for the course. We were presented with a hypothetical agricultural institute, where, with few resources, we had to arrange for the livestock to be moved to a new location!

We had a wonderful time arranging a timetable for the move - could we transport sheep and goats in the same pen? Or pigs and goats? What would happen if we put cows and bulls together? If think we can guess.. . . .

We succeeded eventually - oh, if you would like any advice on the subject, Beverly [de Cuevas] is now the expert!

IOSDL CLOTHING BARGAIN BASEMENT!!

Following the keen buying of the last two batches, I will be sending off an order for new sweatshirts early in April. The main comment received on a previous sweatshirt was that the picture part of the logo was too small, and, your wish being our command, the new shirts will have a larger picture, but with the writing remaining the same size. Please let me know - by 10th April - what colour and size shirt you would like.

I am also planning to buy in some sports ('polo') shirts, as summer is (apparently) on its way, so some details required, please.

Either type of shirt will be £9 (no profits here). (The next order will probably be made in the Autumn.)

Full list of colours on notice boards in my office. Alison Gray (K2.242)

TWILIGHT ZONE

Anyone visiting a certain office in Marine Physics recently might have found David Smeed and Brian King busy designing and building new CTD components. A conductivity meter stood ready, a jumble of wires, an old cycle lamp and a 9v battery. Alongside this a hydrometer was taking shape - from a scintillation vial, ball bearings, Bluecoat, a Biro and a paperclip. Down at Hambledon, Peter Herring was reduced to making cardboard cut-outs of fish and shrimps, coloured with Letraset film and hanging by invisible threads to give an illusion of reality. No more Bio. courses then?

All became clear on the evening of 22 February, when David, Peter and Penny Hollow - accompanied by Jean Grossart and Sarah Lawrie - set off for Godalming Middle School to run an appropriately named "Twilight Session" for teachers. These sessions are voluntary - teachers come along in their own time to get advice and ideas to use in the classroom.

David had prepared entertaining demonstrations of the properties of seawater, using simple materials such as plastic bottles, cooking oil, food colouring, and, of course, water and salt. Peter followed with a short talk about light (or the lack of it) in the sea. The blacked-out classroom became the deep ocean and his cut-out fish obligingly appeared and disappeared in the beams of coloured torchlight.

All the teachers were delighted - most will be coming to Wormley for another session in April and have promised to tell us how their classes got on with the experiments (and if the red dye did wear off).

Number 20

Contributions to Colin Pelton or Alison Gray by the end of the month

April 1991.

continued
WHAT A BIND

Want to smarten up your ad-hoc reports with professional covers and comb binding? We now have a small Combi binding machine in the Xerox room for Institute use. Jane Conquer (Library) is our resident expert - talk to her if you want to use it.

HALT - WHO GOES THERE?

After much debate by the Health and Safety and Local Whitley Committees, and the Management Team, it has been decided that all staff at the Brook Road and Hambledon sites will wear and display their identity badges while on site.

It is recognised that not everybody welcomes this decision, but most of you will understand that it is to improve site security, and will help to avoid the kind of incident when complete strangers have entered the laboratories and have been found wandering about. If such a visitor - or anyone else - was hurt, the Institute would probably be held responsible. There has also been a spate of petty theft over the past year and it is hoped that the wearing of identity badges will help to identify strangers, and potential thieves.

The way in which bona fide visitors are treated has not changed. They are still required to sign in at Reception, where they are provided with a visitor's identity badge, which should be displayed at all times. It is hoped that, with everybody wearing identity badges, visitors will feel more at ease about being identified as strangers, and potential thieves.

The number of students, visitors and new staff on site means that it is unfortunately no longer possible for everyone to know who everyone else is. It is intended that with everybody properly identified it will be much easier and less embarrassing to challenge strangers.

Please remember - it is up to everybody to contribute to site security. If you see someone you do not recognise, and who is not identified, then challenge that person - or at least inform Reception that the person has been seen.

ARE YOU SITTING COMFORTABLY?

Pat Hargreaves arranged for a short course on stress management to be held recently in the Hambledon common room. Twelve members of staff attended, and the instruction included a few easy exercises - for which we did not even have to leave our chairs! We checked our pulses (those of us who have them...) and worried about our heart beat rates, which compared badly with the charts handed out; these charts show what the rates should be in healthy people of different ages - we had to check our range of heart-beat rates before and after exercise. This was followed by several cries of "I must be dead - my heart beat rate does not even appear on the chart!" and "I haven't got a pulse!"

The tutor did, of course, mention the perils of smoking; however, she also made a brave effort not to pick on the one person in the group who "owned up" to being a smoker.

We rounded off the morning with a 10-minute relaxation period; the curtains were closed, the lights switched off, and most of the group lay down on the floor on the blankets we had been instructed to take with us - some even had pillows. The tutor then talked us through a complete relaxation - which can be more relaxing for the mind and body than actually going to sleep. She admitted afterwards that she was the one under stress during that time as she was trying desperately (although silently) to get the tape recorder to work so that we could also listen to some very relaxing music! No-one noticed any snoring, but we all felt very relaxed as we left for lunch.

However, the stress level was back to normal by the end of the afternoon!! Fear not - this was only Part I of the course, so after a subsequent course or two, perhaps some of us will be able to survive a whole day!!

One male member of staff, who was not involved this time, has asked Pat if he can be invited to the next course because he, too, would like to "roll around in blankets"...

ALL CHANGE AT THE RESEARCHER

Candy Sorrell has taken over from Graham Kerr as editor of the NERC Researcher. As IOSDL contact, I seem to be writing most of the Institute copy - this tends to give a rather one-sided view of life at Wormley. So next time you are putting a scurrilous set of photos in the brown envelope for Open Ocean, why not aim higher? Write something that will appeal to the whole of NERC - and remember, they can use colour prints as well.

CoUnPelIon

"...so what made you swallow all these floppy discs, then?"
Appendix 14.9 A poster which advertises a 'Young-at-Heart' seminar for less experienced staff.

GENESIS OF OCEANIC CRUST:
MOUNTAINS OF FIRE THAT
ENCIRCLE THE EARTH

'YOUNG AT HEART' TALK
Bramley Murton

10 FEB '92

11.30 MAIN COND. ROOM.
Appendix 14.10  A poster which publicises video-based training on 'Presentation Skills'.

*DO YOU HAVE TO MAKE PRESENTATIONS??*  

Are you any good at them?  

*If not, come and see the video....*

*TODAY*
Appendix 14.11  My response to a request from a London University to provide the views of senior staff on a proposed technology-based course.

Institute of Oceanographic Sciences
Deacon Laboratory

Director: Colin Summerhayes DSc

29th April 1991

Dear Professor

International Postgraduate Course in Advanced Instrumentation

I refer to your letter of 4 March 1991 addressed to Mr. Russell Jones. The letter and course notes have been passed to our Ocean Instrumentation Group for comment and I as Training Officer have been asked to collate the replies.

You will see from the attached list that the planned course would be very well received. I hope this feedback is of help to you, meanwhile we still await your final decision on the appropriate method of provision.

Yours sincerely,

P.M. Hargreaves.

continued
Comments on Proposed International Postgraduate Course in Advanced Instrumentation - Brunel University

'I think that this is an excellent initiative and that a good proportion of the course options are very relevant to the work that we do or would like to do.

One or two IOS mature students might help to counter the justifiable criticism that training is too heavily focussed on non-technical areas.'

Dr. P.

'I note that admission to the course is to graduates in Physics, Electronic Engineering & Materials Science. "Certain other disciplines" is vague and I wonder what the organisers have in mind?

Have the institutions (Brunel Univ, Cork Tech & Einhoven Univ) run courses of this nature, regarding the extent of the curriculum, before? The core module syllabuses look quite ambitious to me, if they are to be covered in any depth and detail including G7+ laboratory work. In addition to this, each student has to complete 2 elective modules (some of which seem very relevant to IOSDL), design project module and 1/3rd of total time on an experimental project! This last area in my opinion, is where academic tutoring is really put to the test!'

Dr. K.

'I can see a national need to make our courses comparable with those of Europe, and the language element is a good idea.

From our point of view the part-time and/or distance learning method of enrolment could be very useful. The course content is central to our area of interest, and if we supported it we could be a more attractive employer for a young graduate (assuming we ever get to recruit more of them).'

Dr. M.

'This sounds an ideal course.'

Mr. P.

'600 hours (not including travel time) is a fair chunk of a year, but the contents are ideal for the sort of people we should be taking on. Indeed, attendance on one or more of the elective modules could well benefit established staff members if available separately. (Course module E2 seems rather specialised by comparison with the others).'

Dr. C.

'You will see that the comments are highly favourable. This fully confirms my judgement.'

Dr. P.
THE IMPACT OF "NVQ" ON BUSINESS IN THE FUTURE

"The aim of NVQs is to improve both the quality of our training and raise the effectiveness of the British employee force at all levels. This means developing competence and widening access to qualifications."

Dr Max Wilson, Managing Director of Hampshire Training & Enterprise Council Limited, has kindly agreed to present the case for "NVQ's" and their implications for industry and commerce. Previously a Director of Chloride Power Electronics, Dr Wilson has substantial knowledge and experience of human resource needs for the achievement of successful business operations.

We cordially invite you to attend a lunchtime meeting of Southampton University Management School's Human Resource Managers' Club, timed for 12-2pm, on Monday 15 June. A buffet lunch will be provided, followed by a welcome and introduction by the School's Director, Professor Bob Ryan. Dr Max Wilson will then give the presentation, after which there will be the opportunity for you to raise any questions.

Should you wish to suggest additional subjects for discussion at any of our future HRM Club meetings please let us know by completing the relevant part of the form attached.

HUMAN RESOURCE MANAGERS' CLUB

Quarterly Meeting on

Monday, 15 June 1992 at 12 midday until 2pm
at
Southampton University Management School
Enterprise Road, Chilworth

PRESENTATION BY

Professor Bob Ryan
of Southampton University Management School
&
Dr Max Wilson
Managing Director of Hampshire Training & Enterprise Council

Places @ £20.00 each (including VAT) may be booked by completing the attached booking form and returning it to Southampton University Management School by Tuesday 9 June 1992
Appendix 15.2 An example of a seminar designed to help training professionals to update their skills.

**HOW TO DEVELOP SUCCESSFUL TRAINING PROGRAMMES**

- Three important platform skills that will add power and impact to your presentations
- The effectiveness grid: what it is and how to use it to measure the results of your training programmes
- How to reduce training costs without sacrificing quality
- Trainer burn-out... how to keep it from happening to you
- "Backlashes" of training... and how to protect yourself

**AGENDA**

**Day One**
- Morning Session — 9:30 am-12:30 pm
  - How to develop more effective training programmes
- Lunch — 12:30 pm-1:45 pm
  - For all delegates
- Afternoon Session — 1:45 pm-3:00 pm
  - Increase trainee participation and achieve improved results

**Day Two**
- Morning Session — 9:30 am-12:30 pm
  - Gain more support for your programmes
- Lunch — 12:30 pm-1:45 pm
  - For all delegates
- Afternoon Session — 1:45 pm-3:00 pm
  - Strengthen your presentation style

You'll take home these valuable materials:

- The Course Notebook — This sturdy loose-leaf binder is filled with charts, examples, checklists, tips, and insights. Use it to take notes during the seminar, then take it back to the office as your definitive guide to better training programmes.
- The Presenter's Success Tool — This convenient planner will ensure that your next training presentation runs like clockwork. Compiled by our most experienced trainers, this checklist covers all the logistics — so you'll never again worry about last-minute problems.
- A Training Resource Guide — It is filled with the best sources for seminars, packaged programmes, audio/video cassettes and books. It is also a good way to start — or add to — your training library.
- The Certificate Of Training Excellence — Suitable for framing, this handsome certificate will set you apart from other training professionals as proof of your expertise. It will also serve as an invaluable addition to your personnel file.

Just look at what our satisfied customers are saying about PADGETT/THOMFSON training:

"I found the course content interesting and informative. I thoroughly enjoyed the two days."
- Adam Gilbert
  - John East Messenger
  - London

"The course has been of great benefit to me. It has given me more ideas and ways of presenting training to management."
- Linda Banks
  - L. Banks & Co. Ltd.
  - A. Bank

"A very good overview on how to assess training needs and how to prepare a programme around these analyses. Very enjoyable and interesting."
- Allan Bailey
  - C. T. Bowling
  - London
NERC - TRAINING COURSE EVALUATION

1. Please complete the report below in respect of the JTS course you attended and return to Personnel Section at NERC HQ in Swindon. Your assessment will be treated in confidence.

NAME OF COURSE:

DATE OF COURSE:

VENUE:

2. For each of the elements you are asked to assess the course on a scale of 1-5. 1 represents excellent and 5 very poor.

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<td>(before and during course)</td>
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<td>COURSE CONTENT</td>
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3. Any other comments?

Signature ................. Name ................. Institute .................
Appendix 17.2 A questionnaire about computing expertise of IOS staff.

Computer Software: 'Skills Resource Pool'

Questionnaire

1. Name: ........................................................
   Based at: ................................................
   Tel extension: ........................................

2. Do you use an IBM pc or Apple Macintosh, or other pc?
   IBM pc ........................................................
   Apple Mac ................................................
   Other (please specify) .................................

3. What software do you use?
   Please tick where appropriate:

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721
4. Offering help and/or providing some teaching

Would you be able to help someone get started with any of these software packages, or would you be able/willing to help individuals who come across a specific problem, or would you be able/willing to give a short course (beginners or more advanced) to a small group?

We are thinking in terms of a half-hour or so, on an occasional basis, to help someone get started with a particular software package or to help individuals with a specific problem. The 'short course' would be of (say) three hours' duration, for a group of 2 - 4 people, once or twice a year.

<table>
<thead>
<tr>
<th>Help someone get started?</th>
<th>Help sort out a basic problem?</th>
<th>Give a course to a small group?</th>
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<td>DOS</td>
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<tr>
<td>Others? (please specify)</td>
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Any further comments about software packages in use, and exchange of skills learnt?

[Blank space for comments]
5. Do you need help or training?

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<th>need help/training at intermediate level?</th>
<th>need help/training at advanced level?</th>
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6. Networking

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<th>Do you use?</th>
<th>Do you need more information?</th>
<th>Could you provide help?</th>
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<tr>
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<tr>
<td>b) Local Talk</td>
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<td>c) Tops</td>
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<td>e) FTP</td>
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Do you have any specific problems with Networking?

[Text about networking problems, if any]

continued
Microsoft Word

- is the most commonly used word processing software. Please indicate whether you are familiar with the use of the following Word facilities, and whether you could help someone who needs to be shown the basics or who has run into problems. Also, please indicate if you would like training or advice in the use of the following Word facilities.

The time involved in helping out an individual would be about half an hour, on an occasional basis. If you can offer some 'basic teaching', this would require about an hour, perhaps once a month.

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<thead>
<tr>
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Any further comments?

I would like to have access to a bit of help in Word, particularly with tables, assists, so that I can cut someone for help when I get stuck (instead of wasting a lot of time trying to find my way through the manual).
8. Importing/Exporting files

Do you import files:  yes / no

a) import from IBM to Macintosh
b) import from Macintosh to IBM
c) import from portable pc's, to Macintosh or IBM
d) import Graphics files into WORD (on IBM or Macintosh)
e) import from Wordperfect to Microsoft Word
f) import/export between WORD and Database
g) import/export between WORD and Spreadsheet

Would you be prepared to share helpful tips with others?

For example, could you make notes of what works and what doesn't work?  yes / no

Could you offer help in overcoming formatting problems?  yes / no

Any other comments about importing / exporting files?

9. Other software

Do you use (or know of) any additional software which others would benefit from knowing about?

Do you need more information about the various software packages now available for purchase?

10. Further comments

Do you have any further general comments, about computer software in use at IOSDL?
(Continue overleaf, if necessary.)

PLEASE RETURN TO PAT HARGREAVES

continued
I would also be grateful for a short course [new understanding about the basic system of the Apple Macintosh pet]. I need to understand a good deal more about it.

Incidentally, I have the Macintosh monitor, System 6.0.7.

It would also be helpful to know how to install new software without having to bother people like Peter Chalmers or Brian King.
To all work-experience students.

Dear

Work Experience Questionnaire

Thank you for choosing to come to this Institute for your work experience. We find that it is a rewarding experience to meet students and to have them working together with us on the many research projects in which we are involved.

However, we would like to know what you think about work experience in general, and about your time spent at this Institute. So to help us assess this please would you complete the enclosed questionnaire and return it to me by 18th September 1992.

Thank you for your help.

Yours sincerely,

Pat Hargreaves
Training Officer.
Appendix 18.1  A list of workshops and courses run by the Joint Training Service.

JTS
Joint Training Service

WORKSHOPS/MODULES

INTRODUCTION
ASSERTIVENESS
CUSTOMER CARE
EQUAL OPPORTUNITIES
  Awareness
  Sexual Harassment Counselling
DESIGNING AND RUNNING A TRAINING EVENT
DEVELOPMENT FOR SECRETARIAL GRADES
MANAGEMENT COUNSELLING
MANAGING CHANGE
MANAGING STRESS

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Appendix 19.1 The IOS staff development core curriculum.

First Year
1. IOSDL Introductory course (1 day) to include:-
   (a) Structure, funding and research work of NERC/IOSDL
   (b) Personnel management and conditions of service
   (c) Training and career development. Equal opportunities
   (d) Health and safety at work including COSSH
   (e) Trade Unions
   (new staff automatically are given information on using the Library)
2. Presentational/public speaking skills (2 days)
   (to be recorded on video)
3. Technical writing for scientists (3 days):
   (a) Identifying readership
   (b) Vocabulary and sentence construction
   (c) Paragraphs
   (d) Logical sequence
   (e) Page layout
   (f) Visual Aids
4. Time Management (half day)
5. Sea Survival (for seagoers)

Second Year, depending on responsibilities:-
6. Management 1 (5 days)
   (a) Leadership, team-work
   (b) Delegation
   (c) Motivation
   (d) Practice in managing a hypothetical project
7. Interactive skills (5 days JTS)
   (a) Listening, communication, feedback skills
   (b) Effectiveness in dealing with others
   (c) Values, beliefs, perception of others
   (d) Group interaction

Third Year
8. Management 2 (for those who have done Management 1)

Optional Extras (for new Project Leaders)
1. Project Management (5 days JTS)
   (a) Critical path analysis
   (b) Finance, budgets, accounts, team-work

Optional Extra for Line Managers
2. Interviewing Skills (grievance, discipline, counselling)

Essential for new Reporting Officers
3. Staff reporting course (1 day JTS)
4. Appraisal Interviewing Course (2 days JTS)

Essential for Senior Managers
5. Management for Senior Grades
6. Directing and Managing R & D

### JTS PROGRAMME 1992/93

*(March 92 - March 93)*

<table>
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<tr>
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<th>VENUE</th>
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<td>Jo D</td>
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<tr>
<td>3 - 4 March</td>
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<td>Merlewood</td>
<td>P, DG</td>
<td>F</td>
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<td>Jo, R</td>
<td>K</td>
</tr>
<tr>
<td>2 - 6 Nov</td>
<td>Management I</td>
<td>Wells</td>
<td>C, Jo</td>
<td>K</td>
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<tr>
<td>9 - 13 Nov</td>
<td>Management II (on site)</td>
<td>TBA</td>
<td>J, P</td>
<td>K</td>
</tr>
<tr>
<td>16 - 20 Nov</td>
<td>Management III</td>
<td>TBA</td>
<td>C, DG</td>
<td>K</td>
</tr>
<tr>
<td>23 - 27 Nov</td>
<td>Management I</td>
<td>TBA</td>
<td>H, D</td>
<td>K</td>
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<tr>
<td>30 Nov - 4 Dec</td>
<td>Int.Skills/Junior Development</td>
<td>TBA</td>
<td>Jo, R</td>
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<tr>
<td>7 - 11 Dec</td>
<td>Senior Management Part II</td>
<td>TBA</td>
<td>J, D</td>
<td>K</td>
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<tr>
<td>7 - 11 Dec</td>
<td>Management II</td>
<td>TBA</td>
<td>M, C</td>
<td>K</td>
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<tr>
<td>14 - 18 Dec</td>
<td>RO/AI Management II</td>
<td>TBA</td>
<td>Jo, J</td>
<td>P</td>
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<tr>
<td>14 - 18 Dec</td>
<td>Workshop</td>
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<td>H, DG</td>
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<th>VENUE</th>
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<tr>
<td>4 - 8 Jan</td>
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<td>TBA</td>
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<td>4 - 8 Jan</td>
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<td>TBA</td>
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<td>11 - 15 Jan</td>
<td>Management II</td>
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<td>11 - 15 Jan</td>
<td>RO/AI Management II</td>
<td>TBA</td>
<td>TBA</td>
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<td>18 - 22 Jan</td>
<td>Management II (on site)</td>
<td>TBA</td>
<td>TBA</td>
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<td>18 - 22 Jan</td>
<td>RO/AI Management II</td>
<td>TBA</td>
<td>TBA</td>
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<tr>
<td>25 - 29 Jan</td>
<td>Management III (on site)</td>
<td>TBA</td>
<td>TBA</td>
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<td>25 - 29 Jan</td>
<td>Management IV</td>
<td>TBA</td>
<td>TBA</td>
<td>K</td>
</tr>
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<td>1 - 5 Feb</td>
<td>Management IV</td>
<td>TBA</td>
<td>TBA</td>
<td>K</td>
</tr>
<tr>
<td>1 - 5 Feb</td>
<td>RO/AI Management II</td>
<td>TBA</td>
<td>TBA</td>
<td>F</td>
</tr>
<tr>
<td>8 - 12 Feb</td>
<td>Management II (on site)</td>
<td>TBA</td>
<td>TBA</td>
<td>K</td>
</tr>
<tr>
<td>15 - 19 Feb</td>
<td>Selection and Promotion</td>
<td>TBA</td>
<td>TBA</td>
<td>K</td>
</tr>
<tr>
<td>15 - 19 Feb</td>
<td>IntSkills/Junior Development</td>
<td>TBA</td>
<td>TBA</td>
<td>K</td>
</tr>
<tr>
<td>15 - 19 Feb</td>
<td>RO/AI Management II</td>
<td>TBA</td>
<td>TBA</td>
<td>K</td>
</tr>
<tr>
<td>22 - 26 Feb</td>
<td>Management III</td>
<td>TBA</td>
<td>TBA</td>
<td>F</td>
</tr>
<tr>
<td>22 - 26 Feb</td>
<td>Presentational Skills (on site)</td>
<td>TBA</td>
<td>TBA</td>
<td>P</td>
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</table>

Joint Training Service

CORE PROGRAMME

APPRAISAL:
Staff Reporting
Appraisal Interviewing
Appraisal for Non-Reporting and Countersigning Officers

MANAGEMENT
Senior Grades
Development Series:
  Introduction
  Week 1 - The Managers Role
  Week 2 - Group Management and Teamwork
  Week 3 - Understanding the Organisation

PROJECT MANAGEMENT

DEVELOPMENT FOR NON-MANAGERIAL GRADES

PRESENTATIONAL SKILLS

INTERVIEWING:
  Recruitment and Selection Interviewing
  Promotion Interviewing

PRE-RETIREMENT
Appendix 19.4  Course aims and objectives for 'Management for Senior Grades'

JTS
Joint Training Service

MANAGEMENT FOR SENIOR GRADERS

AIM:
To help participants to develop the awareness and skills needed to manage people successfully
To develop and increase awareness of management strategy and wider overviews
To develop consulting and advising skills

OBJECTIVES:
Participants will be able to describe how they should operate within the Managers Role
Participants will be able to devise their own management strategy
Participants will have greater insight into their own behaviour in relation to others in an organisational setting

CONTENT:
Senior Managers Role
Managing for Quality
Consulting and Advising
Management Strategy
Group Dynamics
Organisational Culture and Change

DURATION:
Two parts each of 1 week's duration.
Part two is 2-3 months after part one.

OPEN TO:
Recently appointed Unified Grades 6 and 7; 'S' Level Grades with significant Management experience.

JTS CONTACTS:
TUTOR: Paul Douglas
ADMINISTRATOR: Jo Cunningham

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### Appendix 19.5  
Course content for JTS Management series 1-4

<table>
<thead>
<tr>
<th>WEEK 1: The Managers Role</th>
<th>WEEK 2: Group Management &amp; Teamwork</th>
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</thead>
<tbody>
<tr>
<td>- The Role of The Managers</td>
<td>- Group Dynamics</td>
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<tr>
<td>- Communication Skills</td>
<td>- Roles in Groups</td>
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<tr>
<td>- Giving &amp; Receiving Feedback</td>
<td>- Formation of Groups</td>
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<tr>
<td>- Appraisal</td>
<td>- Group/Inter-Group Communication</td>
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<tr>
<td>- Management Counselling</td>
<td>- Negotiation</td>
</tr>
<tr>
<td>- Problem Solving</td>
<td>- Leadership</td>
</tr>
<tr>
<td>- Decision Making</td>
<td>- Management Styles</td>
</tr>
<tr>
<td>- Assertiveness</td>
<td>- Motivation</td>
</tr>
<tr>
<td>- Training, including</td>
<td></td>
</tr>
<tr>
<td>- Identification of training needs</td>
<td></td>
</tr>
<tr>
<td>- Delegation</td>
<td></td>
</tr>
<tr>
<td>- Resource Management</td>
<td></td>
</tr>
<tr>
<td>- Stress</td>
<td></td>
</tr>
<tr>
<td>- Equal Opportunities</td>
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<table>
<thead>
<tr>
<th>WEEK 3: Understanding the Organisation</th>
<th>WEEK 4: Developing the Organisation</th>
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</thead>
<tbody>
<tr>
<td>- Organisational Culture/Style</td>
<td>- Corporate Objectives</td>
</tr>
<tr>
<td>- Strategy</td>
<td>- Mission Statements</td>
</tr>
<tr>
<td>- Implementing Policy</td>
<td>- Corporate Image</td>
</tr>
<tr>
<td>- Power &amp; Influence</td>
<td>- Managing Change</td>
</tr>
<tr>
<td>- Managing Organisational Conflict</td>
<td>- Marketing</td>
</tr>
<tr>
<td>- Management Discipline</td>
<td></td>
</tr>
<tr>
<td>- Managing for Quality</td>
<td></td>
</tr>
<tr>
<td>- Customer Care</td>
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### WEEK 1: THE MANAGER'S ROLE

<table>
<thead>
<tr>
<th>DAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>managers role</td>
<td>communication</td>
<td>&quot;review&quot;</td>
<td>communication</td>
<td>&quot;review&quot;</td>
<td>training - needs analysis</td>
</tr>
<tr>
<td>• health and safety</td>
<td>• employment law</td>
<td>• presentations</td>
<td>• equal opportunities (power game)</td>
<td>• feedback practice</td>
<td>• feedback practice</td>
</tr>
<tr>
<td>♦ health and safety</td>
<td>♦ employment law</td>
<td>♦ presentations</td>
<td>♦ equal opportunities (power game)</td>
<td>♦ feedback practice</td>
<td>♦ feedback practice</td>
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<tr>
<td>♦ feedback practice</td>
<td>♦ communication skills</td>
<td>♦ feedback practice</td>
<td>♦ communication skills</td>
<td>♦ feedback practice</td>
<td>♦ communication skills</td>
</tr>
<tr>
<td>♦ appraisal</td>
<td>&quot;barriers&quot;</td>
<td>&quot;benefits&quot;</td>
<td>&quot;expectations&quot;</td>
<td>management</td>
<td>counselling</td>
</tr>
<tr>
<td>♦ stress</td>
<td>&quot;what causes it?&quot;</td>
<td>&quot;what are the effects?&quot;</td>
<td>&quot;what can we do&quot;</td>
<td>&quot;relaxation exercises&quot;</td>
<td></td>
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</table>

### WEEK 2: GROUP MANAGEMENT AND TEAMWORK

<table>
<thead>
<tr>
<th>DAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>training needs analysis</td>
<td>communication skills</td>
<td>group and how they work together</td>
<td>management styles</td>
<td>role set analysis</td>
<td></td>
</tr>
<tr>
<td>review from week 1</td>
<td>continuing from week 1</td>
<td>practical work involving recognizing group norms, developing creativity, building trust and confidence</td>
<td>leadership styles</td>
<td>as part of back to work planning</td>
<td></td>
</tr>
<tr>
<td>presentation skills</td>
<td>reinforcement of feedback, counselling and assertiveness skills</td>
<td>interventions and dealing with group conflict</td>
<td>leadership and motivation</td>
<td>(ie input practical work and clear instruction on following the RSA through back at the workplace)</td>
<td></td>
</tr>
<tr>
<td>themes for week 2</td>
<td>negotiation theory and practice</td>
<td>new power and influence relates to leadership</td>
<td>new power and influence relates to leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>clear explanation of shift of responsibility to group to develop their own objectives and themes for the course</td>
<td>management styles</td>
<td>management styles</td>
<td>management styles</td>
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continued
### WEEK 3 - UNDERSTANDING THE ORGANISATION

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
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<tr>
<td>9.00 am</td>
<td>CULTURE</td>
<td>CREATIVITY</td>
<td>MANAGING DISCIPLINE</td>
<td>STRATEGY</td>
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<td></td>
<td>ICEBERG MODEL</td>
<td>EQ: EQUATIONS PROG.</td>
<td>GETZELS THEORY</td>
<td>CONCLUSION</td>
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<tr>
<td></td>
<td></td>
<td>USE OF ANALOGIES</td>
<td>USE OF ANALOGIES</td>
<td>PRESENTATIONS</td>
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<tr>
<td></td>
<td></td>
<td>KIND MAPS</td>
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<td></td>
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<tr>
<td>7.00 pm</td>
<td>ORGANISATIONAL STYLE</td>
<td>DEVELOPING POWER AND INFLUENCE</td>
<td>MANAGING QUALITY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADAM (inc. QUESTIONNAIRE)</td>
<td>MANAGING ORGANISATIONAL COMPETENCY</td>
<td>CAUVIN</td>
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</tr>
<tr>
<td>8.00 pm</td>
<td>STRATEGY - HOW TO MANAGE POLICY</td>
<td>STRATEGY - HOW TO MANAGE POLICY</td>
<td>CUSTOMER CARE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAKE ELUSIVE</td>
<td>MADE ELUSIVE</td>
<td>ROLE SET ANALYSIS</td>
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</table>

### WEEK 4: THE DEVELOPMENT OF THE 'EXTERNAL' ORGANISATION

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
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</thead>
<tbody>
<tr>
<td>Development of the learning process and &quot;where are they now&quot; issues.</td>
<td>One change affecting the development of the organisation's external image, including a clear mission statement and vision for it's future development.</td>
<td>Steps towards a more customer orientated Corporate Culture.</td>
<td>Getting the image and message across with corporate design and corporate communications.</td>
<td></td>
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<tr>
<td>Introduction</td>
<td>Theme: MANGING CHANGE:</td>
<td>Theme: MANGING CHANGE:</td>
<td>Theme: MARKETING:</td>
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<tr>
<td>DOMESTICS</td>
<td>- Benefits of change</td>
<td>- Benefits of change</td>
<td>- Visual Image</td>
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<td>SELF MANAGED GROUPS</td>
<td>- Internal marketing of corporate aims and objectives</td>
<td>- Internal marketing of corporate aims and objectives</td>
<td>- Product design</td>
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<td>PRESENTATIONS</td>
<td>- gaining a commitment from all staff</td>
<td>- gaining a commitment from all staff</td>
<td>- Lines of communication</td>
<td></td>
</tr>
<tr>
<td>- FEEDBACK</td>
<td>- resistance factors and ways of overcoming them</td>
<td>- resistance factors and ways of overcoming them</td>
<td>- Advertising and PR plans</td>
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<td>REVIEW ROLE SET FROM W2</td>
<td>- coping with negative aspects of change</td>
<td>- coping with negative aspects of change</td>
<td>Getting the image and message across with corporate design and corporate communications.</td>
<td></td>
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<tr>
<td>NOTICEBOARD THE ORGANISATION</td>
<td>- Becoming an 'agent of change' and the development of shared values, beliefs, understanding, &quot;stories&quot; to support aims and objectives.</td>
<td>- Becoming an 'agent of change' and the development of shared values, beliefs, understanding, &quot;stories&quot; to support aims and objectives.</td>
<td>- The importance of people in marketing strategies.</td>
<td></td>
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<tr>
<td>- STRUCTURE</td>
<td></td>
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</table>
AIM: To improve personal effectiveness and to gain an appreciation of the role of managers in the organisation

OBJECTIVES: To enable participants to recognise and take steps towards realising their potential
To develop interpersonal skills
To understand what management entails and how it works within organisations
To understand the organisation and where they fit in

CONTENT: Communication
Giving and Receiving Feedback
Making Presentations
Working in Groups
Assertiveness
Appraisal
Time Management
Equal Opportunities
The Managers Role

DURATION: 1 week

OPEN TO: All staff in non-managerial grades
AIM:
To help participants understand and operate staff appraisal review procedures.

OBJECTIVES:
- To make a full and fair assessment of staff performance using the appraisal form appropriate to the employing Council.
- To establish a common standard of reporting with regard to aspects of performance and promotability.
- To assess an individual's job performance and promotability fairly and objectively.

CONTENT:
The Appraisal System
Roles Within the System
Reporting Standards for both Job Performance and Promotion
Practice completion of the Councils' Appraisal Form
This course is participative; it combines input by the course trainer(s) and discussion with participants based on a case study.

DURATION:
1 day

OPEN TO:
New Reporting Officers and Reporting Officers who require refresher training, in ESRC, NERC and SERC.
Appendix 19.9  Aims, content and objectives for the course 'Appraisal Interviewing'

JTS
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APPRAISAL INTERVIEWING

AIM: To help participants:
Understand and operate Staff Appraisal Review Procedures
Develop and improve skills in conducting appraisal interviews

OBJECTIVES: Participants will be able to:
State the purpose of an appraisal interview
Understand the appraisal principles
Demonstrate Listening, Questioning, Responding skills
Plan a flexible structure for an Appraisal Interview

CONTENT: The Appraisal System
Roles Within the System
The Appraisal Interview
Interview Skills/Techniques
Practice Appraisal Interviews

DURATION: 1½ days

OPEN TO: Reporting and Countersigning Officers who are required to conduct Appraisal Interviews with their staff.
Appendix 19.10  Aims, content and objectives for the course 'Appraisal for Non-reporting and Countersigning Officers

APPRAISAL FOR NON-REPORTING AND COUNTERSIGNING OFFICERS

AIM:  To help participants understand the staff appraisal review procedures.

OBJECTIVES:  Participants will:
Understand the principles and purpose behind the staff appraisal system
Know their role within the staff appraisal system
Understand the appraisal cycle
Be able to draw up their forward job plans and set objectives
Know how to prepare for and participate in their appraisal interview

CONTENT:  Purpose of Staff Appraisal
Key Principles of Staff Appraisal
Appraisal Cycle
Forward Job Plan
Setting Objectives
Job Holders Role within the Appraisal System
Preparation for and participation in the Appraisal Interview

DURATION:  ½ day

OPEN TO:  All non-reporting and countersigning officers.

JTS CONTACTS:  TUTOR: Jo Milsom/Dave Goss
ADMINISTRATOR: Melanie Slater

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Appendix 19.11  Aims content and objectives for the course 'Project Management'

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PROJECT MANAGEMENT

AIM: To help participants to plan, organise and control projects and recognise the activities involved in the building and maintaining of a project team

OBJECTIVES: Participants will:
Be able to identify the various stages of a project, forecast, plan and manage the resources needed
Have an increased understanding of the human factors involved in managing a project
Recognise the importance of managing change
Have an appreciation of the advantages of negotiating, and have knowledge of the skills and techniques involved
Have an increased understanding of and practice in the skills of presenting a project from inception to completion
Be aware of a selection of techniques available for problem solving and decision making
Have increased understanding of Quality Management
Have the opportunity to practice all of the above skills and techniques by completing a project

CONTENT: Project Management techniques, including:
- Critical Path Analysis
- Financial Management, including budgeting and costing
- Investment Appraisal
- Negotiation
- Problem Solving and Decision Making
- Setting Objectives and Managing for Quality
- Building and Motivating a team
- Selling the Project
- Identifying and Managing Resources - risk analysis, overview of contracts and tendering
- Managing Change
- Creativity

Part of the course will be spent using these techniques in carrying out a project and reviewing progress.

OPEN TO: Any staff who are, or will be, involved in Project Management.
AIM: To give participants the opportunity to:
Prepare for, structure and conduct selection interviews
Evaluate candidates from the answers given and information available.

OBJECTIVES: At the end of the course, participants will be able to:
Identify the stages of the recruitment and selection process
Prepare Person Specifications
Identify selection methods
State what is required in preparing for and conducting a selection interview.

CONTENT: Job Description
Person Specification
Short-listing
Panel Members' Roles and Responsibilities
Interview Structure
Interview Skills
Evaluation of Candidates
Equal Opportunities
Practice Interviews

DURATION: 2 days

OPEN TO: Staff who are involved in the recruitment and selection of personnel.
Appendix 19.13 Aims content and objectives for the course 'Interpersonal Effectiveness'

INTER-PERSONAL EFFECTIVENESS WORKSHOP
Developing the Skills of Self Assertion

Communication breakdown between people in organisations is often caused not so much by lack of understanding as by difficulties in making requests and giving directives in clear, straightforward ways.

The sources of these difficulties are numerous: previous experience, organisational pressures, lack of self-confidence and personal skill all play a part. Assertiveness training helps individuals to work on all these areas and to open up and develop new ways of communicating which facilitate getting on with the task at hand.

Assertive behaviour should not be confused with aggression. The purpose of aggression is to dominate, to get your own way at the expense of others. The purpose of self-assertion, however, is to communicate clearly and directly while respecting the right of others to do the same. Furthermore, unlike passive behaviour, self-assertion does not seek to avoid conflict. Rather, it provides a means whereby a workable compromise can be achieved.

Objectives
Participants are expected to learn:

- To handle criticism comfortably and turn it into a communication benefit
- To learn a thinking, flexible approach to communications
- To say what they mean and ask for what they want
- To improve inter-personal relationships at work
- To increase self confidence
- To understand non-verbal communications
- To organise, run and participate in effective meetings

Each participant will be expected to have a clear learning objective; to state it in writing and to participate fully in order to accomplish that objective. It is essential to discuss these learning objectives with your superior and it is the participant's responsibility to do so.

Method

The course is a mixture of theory and practice, with heavy emphasis on the latter. The expectation is that people will leave the course armed with experiences and vocabulary which will directly translate to work life.

Who Should Attend:
These workshops are particularly relevant to men and women who work in managerial or supervisory roles. The number of participants will be limited to 12.
Appendix 19.14  Aims and objectives for the course 'Managing Research Projects'

MANAGING RESEARCH PROJECTS

COURSE AIMS

Provide a forum to improve awareness of NERC's and MASD's research aims in both science budget and commissioned research.

To stimulate thinking about improving the integration of scientific and technical resources across MASD and NERC to achieve those aims.

To help to see how scientific and technical resources and projects can be managed better to achieve those aims.

To provide information about techniques to manage research projects more effectively.

To help to improve information transfer between people, units and organisations.

To provide tools to manage people and teams in changing circumstances.

To improve probability of successful application of research work.
Appendix 19.15 A description of the course 'Management of R & D'.

MANAGEMENT OF RESEARCH AND DEVELOPMENT

This two-week residential course has been designed specifically to meet the needs of scientists of any basic discipline who are occupying positions of middle management in research or development laboratories - typically those in charge of teams up to ten or a dozen strong and responsible for one or more projects at any one time. It owes its origin to a study of the management tasks of the scientists and engineers for whom it has been designed.

The course does not set out to teach any particular philosophy of management. Rather, it aims to provide a range of information, ideas and techniques from which each participant will be able to put together a "tool-kit" for tackling his/her own particular set of problems and opportunities. It is concerned with the selection and progress of work, with the behavioural aspects of R & D management, and with the matching of people and work.

The course affords a rare - perhaps unique - opportunity for research managers to stand outside their day-to-day job, to see it in context and to reflect on it with peers from other organisations. The pace of the course is deliberately designed to allow this reflection to take place without undue pressure.

There is regular participation by R & D Managers from mainland Europe and abroad.

OBJECTIVES

The overall objectives of the course are to help participants do their present job of managing R & D better and to develop their managerial skills so as to fit them for wider responsibilities.

To achieve these objectives the course aims to:
(a) increase participants' understanding of the human and administrative factors in successful R & D management;
(b) provide information about relevant techniques and methods;
(c) provide an opportunity for participants to analyse, share and assess their own managerial experience and increase their awareness of the way in which they function as managers.

LEARNING METHODS

The course is designed to provide a range of methods and experience, using an informal and participative approach in which there is ample opportunity for the sharing of experience and problems.

Informal Lectures - during the daytime, experts on the various topics to be covered provide informal lectures supported by comprehensive handouts. Every such session will allow time for question and discussion.

Syndicate Work - about one-third of the time will be spent in carefully planned syndicate and case study work, in which participants can examine and apply the lecture material and their own relevant experience. Each syndicate exercise will also result in a written report on a specific topic within the behavioural field or within the selection and control of work.

Visiting Speakers - in addition, there will be sessions addressed by distinguished research directors on such topics as the role of R & D vis-a-vis the parent organisation, the maintenance of a good R & D environment within a laboratory, actual selection and control practices, matrix organisation in R & D laboratories, and the ultimate application of R & D.

Follow-up - the course includes a one day follow-up meeting about 10 months later. This enables feedback and an exchange of experience in applying course material in the work place.

PARTICIPANTS

The course is intended for those who are running research or development teams and are in charge of one or more projects. They will have some managerial experience already and will therefore be able to contribute to the course as well as benefit from it. The total number will be restricted so as to ensure ample opportunity for participation.
Appendix 19.16 The outline of one of the video-based training courses which I ran for staff.
Appendix 19.17  Objectives for a course in 'Technical Writing'.

TECHNICAL WRITING FOR SCIENTISTS

A 3-day course

OBJECTIVES:
To help course members to write clearly and easily. The course is designed for those who write Scientific Papers and/or Reports.

METHOD:
There is no formal lecturing on this course. There is much discussion and many syndicate exercises to ensure that members can use ideas put forward.

CONTENT:
DAY 1
Establishing an Overall Plan:
- Deciding Purpose and Readership
- Collecting Relevant Material
- Structuring
- Writing the First Draft
- Checking Polishing and Editing.

DAY 2
Principles of Good Style:
- Use of words
- Structuring sentences
- Principles of Good Paragraphing
- The Readability Test.

DAY 3
Page Lay-out:
- Summaries
- Appendices
- Visual Aids
- The finished product.

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Appendix 23.1 An extract from the results of a questionnaire on the computing expertise which I collated with a view to promoting self-help groups.

RESULTS OF QUESTIONNAIRE ON COMPUTING EXPERTISE AT IOS

Thank you all for completing the questionnaire and to Christine Stone for taking care of the administration in compiling and distributing it. It seems that we have a tremendous amount of computing expertise at IOS. Guidelines of what we have are given below.

The present list aims to be comprehensive but will need updating from time to time partly because some people may have acquired new expertise since last February and partly because others may have listed only areas of their main interest.

This list has been compiled because it is recognised that current funding does not provide for sufficient NCS staff resources at Wormley to meet the demand for computing support. Where NCS staff are listed against a topic do feel free to consult them - depending on their own workload you might get a quicker answer to straightforward problems by asking someone else on the list first. If the topic you require is not listed here at all ask NCS first.

Many people have generously offered to help others, some have not been able to do so, often because their own knowledge about running a particular package is limited.

If you need help please approach the person who you think is most appropriate - of course this will depend on the machine he/she uses and the time available and particular expertise as listed below.

Please let me know if you think it is a good idea to set up formal user groups for any given package or machine. Meanwhile informal approaches for help may work well.

In the questionnaire we asked you to comment about specific problems or to raise specific questions. The analysis of these is not complete and they will be published within a week or so.

I hope this helps you. Please let us have some feedback within the next two months or so, on the extent to which it has helped you and the extent to which you have been able to help others.

Happy learning
Pat and Gwyneth
29.10.93

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Employee Development and Assistance Programme (EDAP) run by the Ford Motor Company.

Since the first EDAP-funded course was launched at Croydon on June 22nd 1989, literally hundreds of our people have applied, through each of the 22 local committees, for inclusion in the programme.

Their chosen courses and selected subjects are as varied as the individuals themselves. Only one thing is common to all applicants – the desire to take the unique opportunity EDAP represents and use a £200 grant for the purpose of personal development, advancement and progression.

Many of our Ford employees use EDAP to further their studies. Such a case is Henry Jacobs. An hourly-paid clerk in our engine department Jacobs has, with the help of EDAP, enrolled for a six year Social Sciences degree at Open University.

Other employees, like Michael Cox, an hourly paid jetty driver work with EDAP to develop relevant skills through courses like Advanced Driving. In the same way Melvyn Smith and John Cheshire, drivers of Heavy Goods Vehicles to Europe, are learning German to make communications easier on cross-border trips.

EDAP also provides employees with the opportunity to develop their potential in a favourite skill or interest. For secretary Debra Woods, EDAP is the route to advancing a talent for pottery. Area Foreman, John Smith has selected a qualification in photography, whilst hourly paid apprentice tradesmen Martin Reid is developing his interest in Sub Aqua.

Many applicants have chosen courses related to the arts. With the assistance of EDAP, people like Area Foreman William Andrews and Precision Grinder, Gregory Thompson will receive music lessons and Robert Cooper will participate in a writing course.

A joint initiative by Ford & the Trade Unions

continued
Employee Development & Assistance Programme
1989 vs 1990 Company Wide Participation

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<tr>
<th></th>
<th>Oct 89</th>
<th>Oct 90</th>
<th>E.D.A.P. Population</th>
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<tbody>
<tr>
<td>Total Company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.D.A.P. Population</td>
<td>5,951</td>
<td>20,028</td>
<td></td>
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<tr>
<td>as a % of total Company Employees</td>
<td>13%</td>
<td>44.6%</td>
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Source: E.D.A.P. Central Office
Quarterly Statistics Dec 1990