VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

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ABSTRACT

The study examines Government policies for vocational education and training (VET) between 1981 to 1991 against the changes in labour market supply and demand and curriculum theories, notably vocationalism, core skills and competence-based curricula. The research uses data from Government reports, official papers and commentary at the time the policies were enacted. It includes a Case Study into the effects of planning Work-Related Further Education in London in 1990 in terms of labour market intelligence. The research identifies the characteristics of Government policies derived from Monetarism and the ideology of market forces as: economy, efficiency and effectiveness. The main premise of the model is that a money-led curriculum serves and is subservient to, the requirements of the labour market and economic individualism. This justifies the value placed on vocationalism, control of the curriculum by employers, and changes to the organisation of the education and training system to
reflect the competitive and commercial aspects of the labour market. This gives rise to restructuring to create an internal market and the substitution of price-mechanisms, consumerism and centralism for educational issues in planning the curriculum. The key issues are the tensions between public and private cost; scarcity and choice expressed by consumer preferences; price-mechanisms operating to determine the funding of educational institutions and the cost of VET courses; and the utility value of education and training. The research concludes with a redefined economic curriculum model based on: economy, efficiency, effectiveness and equity, reciprocal transfer of values between the education and training system and the post-industrial labour market within a framework of economic ecological balance. It proposes a VET curriculum differentiated by buoyancy and contraction in the economy, restructuring of the labour market to include unpaid employment and an expansion of the workforce in employment through a concept of omni-proficeres.
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You must break through old thought
    As a seed through its rind
You must be bound by naught
    Beyond your own young mind;

You must pierce old language
    As a fresh shoot pierces
Fallen leaves of an age
    That was, to one that is;

You must know your own need,
    You must nakedly dare,
To form a perfect deed,
    To fruit a spirit fair.

ELIZABETH DARYUSH
"Applying economic theory to the elucidation of a practical problem is an art, not a science; judgement may be more important than technique." (David Simpson, Professor of Economics: University of Strathclyde at a seminar in 1989).

In this Preface I attempt to acquaint the reader with my personal framework and context for undertaking this project. The underlying philosophy derives from my experiences, skills and training as a student, employee, employer, adult educator and civil servant. This is the basis for the research model, design, data sources and construction of the report. This framework dictates the aims and outcomes of the research, frames the central questions and determines the style in which the results are presented. The next pages expand this explanation.

Approaches to the Study

This research is deliberately eclectic; it is also the means by which I seek mastery of the field of study and to make a worthwhile contribution to it. I am not attempting to regurgitate everything written about vocational education and training (VET) in the context...
of the last ten years, still less to provide a comprehensive labour market analysis or a treatise on macro-economics. Rather this is detection: it starts with a mystery, explores clues, sifts evidence and draws conclusions. The mystery concerns the inter-relationships between the post-compulsory VET curriculum, the labour market, the economy and the role of Government. Some aspects are obscured at the start of the enquiry: I attempt to clear the ground and reveal salient features. Clues are identified from many sources - Government policy statements, official analyses of training and labour markets, views of interested parties such as educationalists, employers' organisations and academics, press and public debate. I have cast the net wide since something seemingly unrelated might ultimately have crucial significance. Evidence for the enquiry comes from rigorous investigation of claims and counter-claims, detection of inconsistencies in policy and practice and the testing of hypothetical models of resolution.

At the level of my personal experience the study is education and training, personal and professional development, past reflections and predictions for the future, an instrument of career advancement and a
holistic manifestation of self. The basic explanatory model is that

"of intelligent self-direction ... combined with relative determinism" Heron (1981:21)

This means that as well as making a virtue of the necessity of independent study combined with family responsibilities, work commitments and leisure pursuits, I place a positive value on directing myself without reliance on the thinking patterns and research interests of others. This approach means that I must also be aware of the disadvantages and pitfalls of working in isolation - time wasted in futile activities or, at worst, the study taking entirely unjustified directions. I shall return to these themes in reflecting on my enterprise at the end of the writing.

Design Parameters

The study focuses on the decade between publication of the White Papers A New Training Initiative: An Agenda for Action (1981 Cmd.8455) and Education and Training for the 21st Century (1991a Cmd.1536). This period has been chosen because of the major role taken by the Government (in office continuously from 1979) in post-
16 VET which was driven, at least until Margaret Thatcher resigned as Prime Minister in 1990, by strong ideological, political and economic features. The decade was a post-war watershed in economic and social restructuring which reached into every aspect of education and training for children and adults, employed and unemployed. Against a background of major structural changes in the labour market, rising unemployment and post-industrial influences on the economy, public awareness of, and debate about, VET has risen to unprecedented levels. At the same time demographic changes brought about the first substantial decline in new entrants to the labour market allied to a rise in the proportion of older people. These demographic changes have led not only to social changes but to a fundamental reconsideration of the welfare state and the economic means for supporting the non-economically active population by a diminishing pool of the economically active.

All political parties, Government departments, trade unions and employers' organisations have declared support for increases in the quantity and quality of VET. All see VET as the reconciliation between supply of workers and the demands of the economy. All espouse
the private and public good of an economic model of post-16 education and training. This consensus, and lack of progress in advancing the coherence of the training and labour markets, is a signal feature of the decade.

The thesis concentrates on VET and its interface with the labour market through initial training, intermediate systems (including unemployment measures) and employee-related training. It refers to policies affecting schools and higher education insofar as they illumine processes underway in further education and training. The VET elements in higher and professional education are largely disregarded in this study on the basis that trends are more evident in the primary market of initial recruitment and updating than in graduate employment markets. The main focus is the preparation of 16-19 year olds for the labour market, training and retraining of adults wishing to enter employment and the updating and retraining of those in employment. The context for exploration of the major themes is Government policies and interventions in VET between 1981 and 1991. An interventionist Government has the pivotal role at the...
interface between VET and the labour market, and through its policies attempts to control the social aspects of the economy.

Methodology

The most appropriate model for this study is naturalistic enquiry. That is it starts from 'where people are' (Reason and Rowan, 1981) and seeks socio-economic explanations for political and social events. Broadly speaking the 'experiment' of Thatcherite education and training policy is observed and analysed. From this analysis a template based on economic concepts is applied to the effects of Government policies and interventions. Such analysis is inevitably partial because of my limitations and because of the evolving socio-political process. This research is not deductive, predictive or complete, rather it is a

"pattern model: explanation lies in demonstrating the connections of a puzzling item with other items and the whole pattern ...is rarely if ever finished, and ...is subject to change in the course of its development" (Reason and Rowan (Eds.) 1981:186).

It will already be apparent to the reader that this research is imbued with my character, qualities and
life circumstances. This I see as a strength — although there are pitfalls of self-indulgence and myopia to be avoided. An important element of this position is acknowledging the value of bias, or to be less contentious, the value of personal perspective as:

"... part of me as a researcher... it is my contribution, and it's coherent and it's felt and it has all these other qualities which make me value it more than a detached attempt to be objective. I work from a particular position; I appreciate other positions, and I feel that each has its own integrity and its own validity". (Marshall, 1981:399)

This is not to deny the value of argument but to place awareness of my view at the heart of the research and a central component of the process towards mastery of the material. In this respect this is an attempt to use objectively subjective methodology (Reason and Rowan, 1981). This means making use of

"strong determinants of rationality (testing, evidence etc.) plus strong emotional commitments" (Rowan, 1981:37)

Other characteristics of 'new paradigm' research such as contributions from people involved in the events being observed and ethno-centric materials are not used.
Research Models: Educative

Broadly, in developing the research I have followed a process of learning: exploration (what is the problem? how do I deal with it?), conceptualisation (what is the general framework?), experimentation (predictions tested for effective action), and consolidation (new understanding leading to fresh hypotheses) (Handy, 1981: 21). The learning-process model is deliberately chosen since I come to this thesis as adult educator, trainer, and Government administrator. It is also designed, as far as possible, to affect training, education and the labour market - at least within my sphere of influence. This extends the point that it is incumbent upon educational research to be educational (Torbert, 1981: 143): such research should also encourage change and risk uncertainty. Thus my aim is to demonstrate what Torbert calls "sensual or operational awareness and suppleness" (1981: 146). To have significance in my life the enterprise of producing the thesis must engage important aspects of my experience; utilise and extend my skills. The research should add to my understanding and evaluation of my experience as an adult student, teacher, trainer and policy-maker; it should contribute to my
productivity as employer and employee; it should suggest strategies for growth and change for organisations that employ me; it must challenge my world view. Therefore my involvement with this study is academic, scientific, emotional, political and social.

Since this study is about the education and training system a model of management education is also appropriate. Drawing on Open University material the features of this study are that it is:

1. Firmly rooted in the educational context;
2. Resourceful in its application of theory and analysis from outside education;
3. Comprehensive in its coverage of the post-compulsory sector;
4. Pluralist in conceptual models and theoretical approaches;

Some examples of this approach are found in the application of political and economic concepts to curriculum issues and the focus on client groups defined by the labour market.

Political - Economic Model

Kingdom (1991) claims that political science
"... combines both a positivist orientation with a rich source of ideas and intuition"
(Kingdom, 1991:19)

This research hopes to emulate those characteristics. In Kingdom's taxonomy of inter-related subdisciplines of political science, this research comes closest to political economy

"... a form of economics which challenges the market orientation of much economic theory..."

and to policy studies which

"... focus on the policy-making process of Government and [are] centrally concerned with the analysis of power..."
(Kingdom, 1991:19)

The fit is not exact but it does draw attention to

"the attempt to shine a searchlight [on political deception] as one of the principal duties of the political scientist"
(Kingdom, 1991:9)

I do not make claims for this thesis in terms of political writing, but rather I hope to show congruity between the dominant pattern-model and my approach to the political elements in the study. Similarly, the economic elements are wide-ranging and drawn from classical and Keynesian economics, Monetarism and the New Right. There is a concentration on Monetarism as evinced by the education and training policies of the Thatcher administration from 1981 to 1990, but the economic curriculum model attempts to go beyond this.
hegemony.

The process and product of this thesis is also rooted in the economic model that develops from the research. That is, it aspires to the characteristics of Economy, Efficiency and Effectiveness. Economy means that the project must be affordable within my resources; must have a cost-benefit; and must reflect my personal investment in its execution. The research must demonstrate Efficiency in the use of raw materials, academic technologies and the quality of the finished product. It must ultimately be Effective - that is, there must be value-added by the total enterprise. In other words, my aim for this project is that some aspect of knowledge will have been transformed in appropriate ways to yield increased understanding and to give a signpost for practical applications.

Data Sources

Core material is drawn from Government sources: White Papers, official reports, speeches by Ministers, departmental papers and statistics. As I am prevented by the Official Secrets Acts (1911 - 1989) from
quoting from unpublished documents I have attempted to confirm my understanding of policies set out in official papers by discussion with civil servants working in these areas. (I have also attempted to share ideas with civil servants working in developing policy areas (such as Training and Enterprise Councils) so that some of the outcomes of my enquiry are disseminated into policy-formulation). Official sources are supplemented with publications from non-departmental public bodies (NDPBs) such as the Further Education Unit (FEU), the National Council for Vocational Qualifications (NCVQ), the National Curriculum Council (NCC), Schools Examination Advisory Committee (SEAC), Training and Enterprise Councils (TECs) and topical comment from the media and conferences during the decade 1981 - 1991. This material is the texture of policy-making and draws threads from the interaction of influential groups - such as educationalists, employers and policy-makers - and the effects of interventions and their impact on social and political debate.

Technical analysis of labour market trends is drawn from Employment Department statistics published in the Census of Employment, Labour Force Survey, surveys of
employers and other sources used by Government departments and other agencies in determining economic forecasts. A brief explanation of the sources used to provide labour market intelligence (LMI) in this context is given in Appendix 1. Statistical analysis of VET is drawn from Further Education Student Records (FESR), Training Occupational Categories (TOC), programme statistics for Youth Training (YT), Employment Training (ET) and other Government schemes, Work Related Further Education (WRFE) data and the national training survey (HMSO 1989a).

Thesis Map

The basic framework for the writing derives from background theory, focal theory, data theory and contribution (Phillips and Pugh, 1987). In using each of these elements I have attempted to synthesise the material around the conundrums of the subject. The key areas of this enquiry are the curriculum implications deriving from the interface between the labour market and post-compulsory VET. Each chapter explores one or more facets by examining the literature and current ideas (background theory), hypotheses generated through my research (focal theory), scrutiny of the
economic curriculum model I am constructing against the evidence of source material (data theory) and its evaluation (contribution). In the linking sections I attempt to present the thesis, antithesis and synthesis of the research thus far. The chapters fall into three major sections: economic perspectives, curriculum frameworks and VET and the workforce. A Glossary of Terms and Government Schemes mentioned in the text is given at the end of the thesis; a List of Abbreviations appears next to the back cover. The final section of the thesis draws out the results and conclusions of the research and reflects on the process of its execution. A Case Study describing the interface between the training and labour markets in London (1989-90) is included to illustrate the concepts and claims derived from the economic curriculum model. The Case Study also illustrates the only Government programme - Work-related Further Education (WRFE) - designed to co-ordinate planning of VET with LMI. The Case Study was originally designed to provide empirical data to test some of the ideas developed in the early stages of the research. As the work progressed, it has became clear that the Case Study sits uneasily with the rest of the thesis and
yet is a fundamental part of it. This is because it exemplifies the dichotomy between research which attempts to find new insights and policy-making which is about the practical resolution of issues and discordancies in social and economic structures. It is a dichotomy of theory and practice, of ideology and pragmatism. These are the very issues which make Thatcherite VET policies so interesting. It is therefore apt that these discordancies arise within the production and presentation of the research. I shall return to these issues in the final part of the thesis.

Research Competencies
As part of the examination of VET curriculum frameworks, I explore concepts of core skills (Chapter 5) and occupational competence (Chapter 6) so it is particularly appropriate to delineate the competencies and standards this research seeks to demonstrate. Firstly, the research encompasses planning skills combined with persistent investigation and analysis. Effective planning entails matching the design of the research to the resources available for
its execution and which are appropriate to the topic being studied (Johnson, 1984:6). As such, the research has tried to move with events in training and education politics and, in the totality of the thesis, to move from fluid to consolidated thought (Carter et al, 1984:26). As interest in the questions posed by the study (and commitment to a search for enlightenment) increases, meticulous organisation, applied intuition and lateral thinking come into play. At the same time, the researcher has to deal with the unexpected and anticipate the future within action-timescales - these are skills that Schon (1983) describes as attributes of the 'reflective practitioner'. This involves application of creative imagination and inspired management of socio-political networks. These competencies - planning, investigation, organisation, networking, analysis, time-relevant action and creative thinking - may be present at the outset, but are also developed through the process of learning to do research and learning about the research. These competencies may be relevant to any adult learning project which aims to deepen knowledge and understanding of sociological events. It is through the devices, curiosities and
competencies I describe that I hope to arrive at mastery of the subject.

Standards of Competence

My standard of functional competence in the execution of the research reflects the cultural assumptions associated with the thesis. This is expected to be the standard of competence necessary for the award of the target qualification. Mastery in terms of a research thesis can be broken down into six areas: the basic level of having something to say that my academic peers want to listen to; second, being able to evaluate the contribution of others working in this field; third, astuteness to discover where I can make a contribution; fourth, knowledge of the strengths and weakness of appropriate techniques for the investigation; fifth, effective communication of the results; sixth, awareness of the international context in this field (Phillips and Pugh, 1987:18). Ultimately it will be you, the reader, who defines the standard of competence.

Outcomes

The thesis represents an attempt to construct and test
an economic model of VET and the labour market against economic and political certainties, ambiguities and unknowns. It contends that new paradigms can only build on rigorous examination of previous and current beliefs and sharp observation of trends allied to imaginative thinking. Above all, my fundamental contention is that if the thesis is to succeed in its own terms, its process and content must embody risk and change. Risk that the enterprise is insubstantial, or incomplete, or that its integrity cannot be proved; change because new perceptions lead to changed structures, behaviours and values. The following chapters attempt to exemplify these aims.
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET

AN ECONOMIC CURRICULUM MODEL

PART ONE

OVERVIEW
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

CHAPTER ONE: OVERVIEW

Introduction
I am fascinated by the interface between education and training and the labour market - How do they interact? Are both historical accretions adventitiously trimmed by movements of economic and social activity? In what ways can the supply of new entrants to the labour market adjust to demand for qualifications (used here in the broadest sense to encompass job-specific knowledge, skills and training) or does supply impact upon demand in largely self-regulating ways? Can the effects of unemployment and skill shortages be controlled through education and training or simply socially ameliorated, or could it be that the state of the economy masks imperfections at the interface of training and labour market which only necessitate political action when social or economic crisis is apparent or feared?

My quest for answers starts with teasing out the elements linking vocational curricula and labour markets within the crucible of Government policy of the last decade. Various templates derived from an
analysis of Government policies for vocational education and training (VET) will be compared with curriculum theory and economic concepts. Finally, I hope to construct and test an economic model applicable to the VET aspects of the post-school curriculum and the labour market. This first chapter sets out an overview of the themes and ideas which drive my curiosity. References derived from background reading and the detailed plotting of developments in the arguments are not spelt out: these will be expanded in the chapters which follow the introduction.

APPROACHES TO THE RESEARCH
Context
The study takes as its starting point the publication of the White Paper: New Training Initiative (MSC, 1981 Cmd. 8455) and examines Government policies in the ten years up to the White Paper: Education and Training for the 21st Century (HMSO, 1991a Cmd. 1536). These White Papers are important markers in Government policy issued at significant points in the economic cycle. Formulation of policy in this period has been continuously subject to fierce public and political
debate and scrutiny and has spawned two intermediate White Papers, the Education Acts of 1986 and 1988 and a myriad of schemes and programmes. Dirigisme has been fuelled by the social, economic and political pressures of unemployment in 1981 and falling commercial competitiveness and recessionary effects in 1991. This period also had features of rapid technological change in the structure of employment and marked demographic shifts. The number of school leavers changed from a peak of over 900,000 in 1982-83 to a trough that by 1995 will reduce the number of 16-19 year olds by almost a million. In the same period the workforce is forecast to rise by around one million jobs (assuming stable unemployment figures).

Many influential employers and academics have criticised the outputs of the education and training industry for a lack of basic and intermediate skills in workers, a lack of management skills in managers, a shortage of engineers and scientists and insufficient advanced design and technology skills in graduates. The Government has increasingly been criticised for not improving the proportion and number of young people taking further and higher qualifications, for the rigidity and lack of breadth in the academic
curriculum, for not raising the low status and esteem of vocational qualifications and for poor quality youth and employment training.

The investigation will focus on the impact of policies designed to subject training and vocational education for those over 16 years of age to the dynamics of supply and demand in an un-regulated labour market. Policies affecting schools and higher education are of interest insofar as they illumine the processes under way in VET. For this analysis, the VET elements of the higher education curriculum are disregarded because the emphasis is on examining the relationships between the primary labour market and VET. The main focus for the research is preparation of 16-19 year olds for the labour market, training and retraining of adults wishing to enter employment and the updating and retraining of those in employment.

In the chapters which follow three main arenas of activity in relation to the post-16 curriculum in the 1980s are explored: Government policies and interventions; VET responses to changes in the labour market and client groups; and changes in the role and influence of employers and structure of employment. In
analysing the activities of the main players the study will sift trends in the labour market and the education and training "offer" for post-16 year olds against an analysis of specific Government interventions aimed at bringing post-16 training and education into coherence with social and economic needs.

Economic Curriculum Issues

Major theoretical strands in this discussion derive from applying economic perspectives to education and training. VET is both a commodity subject to supply (learners) and demand (labour market) regulated by the relations of production on the curriculum; and is used by the state to regulate fluctuations in supply (qualifications) and demand (skills). Thus the curriculum is required to achieve a perfect state of effective demand in synchronising the size of the market and the level of output. This forces education organisations to consider the cost-benefits of curriculum policies and to experiment with pricing mechanisms and deployment of resources, particularly labour as the largest overhead. External pressures exerted by the Government through changes to VET
funding and structures highlight tensions in neo-liberal policies centred on 'feel-good' experiences for learners at the expense of profit to the organisation. Neo-corporatism on the other hand has to reconcile tensions between a curriculum driven by consumer sovereignty (which asks who is the customer in this relationship) and economic individualism. All this chimes with larger issues of public and private investment and consumption and the role of monopoly and competition in education and training. The Government in seeking to reverse the pluralistic incrementalism of the 1970s and to move public sector VET towards the norms and mechanisms of the market takes the debate beyond models of market forces into questions about the centrality of vocational education and training to economic competitiveness and wealth creation.

Curriculum issues centre on the nature of preparation for work, the interplay of theory and practice, the nature of skills and competence, the boundaries of vocational and academic curricula, the relevance of certification and prior learning and the definition of qualification. Curriculum management from an economic
perspective must encompass tenets of marketing, price-mechanisms and funding, scheduling and the mechanisms of delivery. More significantly, curriculum management must define the customer. The customer may be one or more of the following: the Government; Government agencies such as Youth Training managing agents; Funding Councils, or Training and Enterprise Councils; employers in general or particular employers; parents; schools; or individuals. Curriculum planning for the labour market includes structuring the curriculum to cover work-place and work-based learning within a balance of specific and general skills and knowledge. New topics such as social and life skills, applied information technology, world of work, and enterprise skills have been introduced through Government schemes. Evaluation and assessment of learning have been radically altered by profiling, records of achievement, assessment of prior learning, credit transfer and customer surveys.

Labour Market Issues
The past decade has seen rapid changes in the content of jobs and the structure of the labour market brought about by technological innovations, a changing age
profile of workers, increased employment of women and macro-economic movements of capital and trade. The role of employers in VET as consumers of the product, as commissioning agents, as competitors in provision, as funders and sponsors and, through Training and Enterprise Councils as policy-makers, is germane to the curriculum in a way that has not previously been known.

Case Study
The research includes a detailed study of the effects of centralised planning on the labour and training markets in Greater London. This was designed to test the arguments against a representative tranche of the labour and training market in a case study. London's labour market is particularly relevant as, in aggregate, it both sets and reflects trends for the rest of the country. London's labour market comprises three separate labour markets. The central business area accounts for nearly a quarter of UK graduate employment and is dominated by financial, professional and administrative jobs; the inner London labour market is dominated by creative, media and public service employers; and the outer London labour market
is more typical of non-metropolitan areas. Outer London has numerous local labour markets some of which have a mixed-economy of retail, office and administration, some like the 'Heathrow corridor' are largely mono-technic; and other areas have light manufacturing, retail and service sectors. Similarly, the training and education facilities located in Greater London encompass international, national, metropolitan and local requirements (Blamire 1990).

The Case Study examines the Work-related Further Education (WRFE) planning mechanisms operated between Local Education Authorities (LEAs), colleges and the Employment Department. The WRFE programme was designed to tailor the VET curriculum according to labour market intelligence (LMI), setting 3 year plans which are updated annually. WRFE is therefore uniquely placed to demonstrate the inter-relationships and influences on VET and the labour market. The inclusion of action-research in this project threw up a number of epistemological issues related to the role of research in policy-making and the pragmatic manifestations of policies applied from an ideological perspective. These issues contribute to the development of the economic curriculum model and
demonstrate that VET and the labour market exert significant influences on the other and cannot be examined in isolation.

This thesis is not seeking to provide definitive descriptions of London's labour market and VET provision, nor to give a comprehensive analysis of the economy in this period. Rather it is looking at theoretical issues in the application of economic models to the post-16 VET curriculum in the light of the information available to policy-makers at the time. Among the outcomes of the study it is hoped that the effects of applying economic concepts to the post-16 curriculum will be identified and that this will lead to a greater understanding of the inter-relationships between the supply of VET and the demands of the labour market in economic terms and the educational, regulatory and institutional forces impacting on curriculum policy and management.

GOVERNMENT POLICY

For Government the challenge of being active in the face of public dismay over high youth unemployment, social disorder, criticism from employers about poorly educated school leavers and graduates with over-
specialised and theoretical academic education has been met with an unrelenting spate of initiatives. Government policy from the New Training Initiative: An Agenda for Action (MSC, 1981 Cmd. 8455) through to Education and Training for the 21st Century (HMSO, 1991 Cmd. 1536) has consistently embraced short-term, piecemeal solutions within a rhetoric of grand design. Many of these responses have resulted in failure either to meet expectations or to make the problem go away. Above all little headway has been made with the central problem of how to use public investment in education and training to meet current and future demands of the labour market and the economy.

Training in Crisis
As I shall show, definitions of the problem have changed to fit the proposed solutions. Rising youth unemployment in the early 1980s was managed by containment on schemes for those unable to get work and an assault by the 'New Right' on the perceived inadequacies of the education system which was held largely responsible for poor economic performance. The main youth unemployment initiatives included: Youth Opportunities Programme, vocational preparation,
Community Programme and Youth Training. As Gleeson (1989) and others point out, one of the major paradoxes of training policy has been that rising unemployment has led to an increase in training without jobs. Similarly, adult unemployment resulting from restructuring in manufacturing industries from 1981 to 1985 prompted the introduction of measures entitled: Training Opportunities Programme, Wider Opportunities Programme, Job Club, Restart, Replan and Employment Training. As well as measures designed to take up over-supply of workers the Government also responded with programmes designed to make schooling more vocational.

Interventions
The Government's diagnosis of inadequacies in the education system led to initiatives targeted at 14 - 19 year olds. These initiatives included the Certificate of Pre-Vocational Education (CPVE), the Technical Vocational Education Initiative (TVEI) and a variety of education / business partnership arrangements such as Compacts, Youth Access Projects and Training Credits. Originally these programmes were intended to complement direct control of 25 per cent
of non-advanced further education by the Manpower Services Commission (MSC) proposed in the 1986 White Paper: *Working Together - Education and Training* (HMSO, 1986 Cmd. 9823). Despite the tripartite composition of MSC (Government, employers and unions) the announcement of the switch in control of a quarter of non-advanced further education (NAFE) invoked such hostility from local education authorities and colleges that it was never fully implemented. The curious effect of this is that systematic attempts by the Government to correlate directly training provision and the labour market have been confined to a small programme of direct training for technology (HNT) and the NAFE planning exercise between the MSC and local authorities (subsequently renamed Work-Related Further Education (WRFE) and managed by the Training and Enterprise Councils (TECs).

Many of these initiatives are now subsumed into the TEC programme announced in the 1988 White Paper: *Employment for the 1990s* (HMSO, 1988b Cmd. 540). TECs are a radical break with previous initiatives in terms of policy, strategy, funding and management. From initiatives designed to increase the influence of employers on school and college curricula such as the
dominance of industrial governors on school and college governing bodies, the influence of employers has extended to control large parts of the VET structure.

Later chapters show that the methods of implementing Government policy have been as important to the outcomes as the underlying ideology and political imperatives. Since the inception of the MSC in 1974 the Department for Education (DfE - formerly the Department of Education and Science), the Department of Trade and Industry (DTI) and the Employment Department (ED) have increasingly used new schemes to change existing systems of provision by hypothecated and categorical funding and competitive tendering. Downward pressure on funding has been maintained by encouraging private and voluntary organisations to compete with state colleges for scheme contracts. The near monopoly of state VET providers has been weakened firstly by the failure to secure new work and secondly by the rise of Government sponsorship of direct service organisations and "contracted-out" training run by semi-autonomous agencies staffed by civil servants. Under the Next Steps programme for devolving
50 per cent of the management structure and functions of the Civil Service in ten years, the entire Employment Service became an agency in 1990. Some of the effects of diversifying the structure of VET providers in this way include deteriorating pay and conditions for trainers, financially unstable organisations, lack of curriculum supervision and development and poor quality control. Central funding and control of youth and employment training has also severely weakened the role of local education authorities (LEAs) and removed local accountability in many areas. The break with previous regimes which TECs represent lies in the delegation by the Government of policy-making and executive powers to TEC boards consisting of unpaid, largely self-selected industrialists and a sprinkling of local authority and other public sector representatives. As well as responsibility and budgets for youth and employment training, education/business partnerships and WRFE, TECs are developing new programmes such as Training Credits and Business Growth and Enterprise (BGE). Many Government initiatives since 1981 have been generously funded through diverting mainstream funding away from unhypothecated grants to hypothecated schemes.
system of provision itself is being weaned off unhypothecated grants to payment by results through funding tied to student enrolment and to examination passes. These policies are intended to establish a market economy based on "demands" rather than "needs" in which consumer choice and relations of production determine the provision of education and training.

In a search for value-for-money and value-added indicators of performance it is not without irony that the culmination of a decade of policies is that for the first time Further and Adult Education will be subject to Value Added Tax (HMSO, 1991a, Cmd. 1536:29). The effect of imposing the tax on courses taken up by individuals could be catastrophic for continuing education and further education programmes which are not corporately sponsored.

Policy Models

Three major features have driven VET policy since 1981: monetarist, centralist and consumerist. Monetarist themes of resources dominating the curriculum have underpinned policies for local financial management of costs and fees; open enrolment; opting-out of LEA control; resources
allocated by competition rather than by historical grants; allocations targeted against performance measures; and loans and credits in place of grants and benefits. Centralist policies have concentrated on externally-imposed curricula through the national curriculum, employment and youth training schemes, TVEI, CPVE, National Vocational Qualifications (NVQ); national assessment schemes of profiling and records of achievement; central financial control through schools and colleges opting-out of LEA control; funding from private industry for city technology colleges; and reduction of local democratic control. Consumerist policies have been pursued through an emphasis on new client groups; curriculum determined by market analysis, market share and cost-benefit analysis; and employer involvement as governors and as controllers of funding and standards in Compacts, TECs, WRFE, NVQs. Some of these initiatives have contradicted policy goals in other areas, and some are both strongly centralist and highly innovative and experimental at classroom level. Although it can be argued that

"the idea that the current range of reforms on offer constitute a coherent package of agreed measures is illusory" (Gleeson 1989:10)
undoubtedly the major thrust of Government policy stems from a doctrine of market forces and a desire to reverse the liberal-pluralism of the 1960s and 1970s. A profile of an Education Secretary (Kenneth Clarke) described the privatisation of Her Majesty's Inspectors (HMI) as

"almost universally regarded as a triumph of Thatcherite ideology over logic, common sense and some of his own advisers" (Andrew Rawnsley in The Guardian 13 January 1992)

The apparent contradictions within policies are explored in detail in later chapters and examined for congruence with market forces policy aims of efficiency, economy and effectiveness operating in an internal market. State directives, funding and legislation between 1981 and 1991 have sought to apply these tenets to the structure, organisation and curricula of most of the state sector education and training system.

THE MONEY-LED CURRICULUM

The dynamics of supply (of students) and demand (for labour) and attempts to apply the relations of production to educational institutions through principles of consumer sovereignty, add up to what I shall call the Money-Led Curriculum. It is
questionable whether curriculum models based on learning theories, welfare capitalism or professional structures can adequately deal with resource-led policies. Government insistence on the operation of market forces has abrasively shaken and stirred traditional assumptions about curriculum development and the purposes of education and training. During the 1980s and 1990s wealth-creation has supplanted personal development as the dominant rationale for public investment in education and "qualifying for careers with good prospects and job satisfaction" (HMSO, 1991a Cmd. 1536, Vol I:64) has become the Government's declared purpose for state-funded VET provision. Value-for-money criteria and performance indicators are the means of evaluating the "opportunity cost" of public investment. Student autonomy and motivation theories have been overtaken by tenets of market research and customer care. Recruitment to educational programmes becomes selling the product by basing its price on attractiveness, scarcity and repeat sales. In short, Government policy now espouses consumer sovereignty and the doctrine of market forces has been applied to the theory and practice of education with what some see as metamorphic results.
Curriculum of natural selection or central planning?

What is educational entitlement in this context? Has neo-liberalism become neo-corporatism by giving the learner an importance in organisational and financial terms that is far more significant to the curriculum than responsibility for the learning process? If there are to be centrally determined common elements to the curriculum - and an increasing number of commentators argue for this- is this to be designed around customer preferences (which may displace educational "needs" and marketing "wants") or around labour market requirements however these are defined? This assumes that VET can discriminate between its publics and provide a matrix of programmes designed around individuals, corporate clients, and Government agencies. It can be argued that this is what happens now through an institution-led curriculum with additions often provided under the term "short courses". But this is historic and opportunist curricula rather than consumer-led.

Core skills

Many educationalists and advisory bodies are
consistent in their definitions of the core vocational skills required by entrants to the labour market and these largely chime with TVEI and Youth Training Scheme (YTS) promulgations of entitlement curriculum and basic skills. However, when we try to move beyond mere lists of topics for inclusion in programmes we immediately face questions of implementation and relevance. Should publicly-funded post-16 education and training be remedial, general, job-specific, skill-based, competency-tested, academic or vocational? How are the tensions between transferable skills and occupational competencies to be resolved? In considering answers to these questions, we must also consider the learning elements of work and the skills addressed by work-based and work-place education and training. Resolution of these issues is certainly not "value-free" and brings into focus prevailing attitudes among employers, issues of equality and the legitimacy of low-paid, low-skill jobs. One of the ways in which resolution might be approached is by defining qualification to encompass the knowledge, skills, attitudes and capacity to respond appropriately in a range of occupational contexts. If this definition was broad enough to include
situations of risk, uncertainty and change then a meaningful marriage between academic and vocational education could emerge. However defining expertise in this way would fragment the consensus around a core curriculum and raise questions about the capacity of present VET structures to deliver such an integrated curriculum.

Curriculum management

Curriculum management features such as scheduling, balance and level (Jarvis 1983) come sharply into focus in the consumer-led curriculum since clients must not only be influenced to buy the product but its location, timing, duration and level must be convenient. In the absence of regulation, the general interests of consumers may clash with organisational self-interest or may present conflicting demands that cannot be met. According to Galbraith (1972) "the market" does not rule producers; they rule the market by creating "wants" in consumers(mainly through advertising) for their products. Education marketing that really does offer information, choice, access and redress to every learner would no doubt have to be costed at considerably higher levels than current
"self-financing" courses. An effective and comprehensive system of concessions and rebates for those who could not afford the charges could enable the universality of the offer to be maintained. However, a curriculum driven by individual preferences would quickly come into conflict with other aspects of curriculum management such as quality assurance and breadth. In these circumstances, a social policy curriculum might be unsustainable.

Private and social costs
At a local level, the problem of a consumerist curriculum - however defined - must focus on price-mechanisms and the divergence of private costs and social costs. Consumers will judge the attractiveness of the curriculum in terms of its comparative cost and its perceived value for money. Price competition could in the short term benefit students by keeping fees competitive or by relating fees to the quality of the teaching or facilities, but in the longer term price competition has two self-defeating effects which make consumer sovereignty in this context a myth. Firstly the market would respond to demand and take no account of constituencies unable to articulate a demand, or of new or minority interests. For example, if the
authorities were to recognise economic advantages in creating the conditions for the workforce to become fluent in European languages, comprehensive subsidised tuition would be provided (as is the case in Wales in promoting the Welsh language). This could bring long-term benefits that would not otherwise arise from provision based solely on consumer demand. Secondly, a curriculum determined by consumer demand may fail to sustain provision through fluctuations in demand. The lead-in times for preparation of VET courses, the maintenance of plant and expertise and the time required for acquisition of skills and knowledge could be unsustainable in a demand-led curriculum.

Role of professionals

One of the many puzzling aspects of the crisis in post-16 VET provision is the weight of debate given to describing the problem while at the same time FE and particularly Adult Continuing Education (ACE) remain marginalised. FE principals were told by the Secretary of State for Education, Kenneth Baker, in 1989 that they were the "Cinderella" service. The policy that emerged (after a delay of two years) of central
control and funding by student numbers seems more like hard labour than being taken to the ball! For ACE professionals nothing short of desperation born of small hopes and large set-backs to the cause of universal educational rights and opportunities has resulted in adult educators accommodating every fashionable whim which appears to be a vehicle for achieving these aims - unemployment training, youth training, local financial management, marketing doctrines, demographic changes, skill shortages, social equity, personal development, basic education, education for citizenship, for self-employment, for vocational skills, for new technologies, for leisure, for retirement, for voluntary work, for co-operatives, for cultural harmony, for combating social disadvantage, re-training for women to re-enter the labour market, for parenthood and childcare, for access to higher education, and so on ... And to little avail since the latest White Papers are directed at education and training for young people and specifically withdraw central Government funding for non-vocational courses (HMSO 1991a, Cmd.1536). These are defined, by default, as courses which are not remedial or normally part of the curriculum of
school education. The Government's position effectively ignores any contribution to the labour market from the ACE provision which has been developed over the last ten to fifteen years. It may be that adult educationalists have been too wedded to a welfare capitalist model to fully engage in a debate about a proper role for state funding (Griffin 1987). In the climate of the economic individualism of the 1990s, the opportunities for formal recognition and expansion of Adult and Continuing Education's contribution to the labour market may have been irretrievably lost.

TRAINING CRISIS OR METAMORPHOSIS?

Post-Industrialisation

Strong links can be demonstrated between industrialisation and changes in education and training.

"The notion that education should have economic relevance and vocational purpose, as well as a concern for the personal development of the individual, has been present throughout the history of state education in the UK... industrialisation necessitates the formal and institutionalised education of young people in 'relevant' skills and competencies, prior to entering the labour market." Esland (1986:7)

Radical shifts in the preparation of young people for
work in recent years have seen the collapse of time-serving apprenticeships, new intermediate training schemes, work-experience for school children and blurring of the boundaries of work and training through "on the job training". Youth training (YT) programmes have developed from the containment of unemployed school leavers to schemes offering integrated occupational competence and qualification with job guarantees. YT also encompasses personal development, personal and occupational counselling, access to FE, and has become the preferred route for recruitment to the general labour market for many employers. These trends raise interesting questions about the nature of the action of the labour market on VET and the influence of VET on employment practices.

Perceived Problems

There is no dispute about the parlous state of post-16 education and training in Great Britain in the final decades of the twentieth century - pundits (and even civil servants!) are agreed that its curriculum and achievements are inadequate to maintain our economic competitiveness as a trading nation(Cassels 1990), too narrowly focused on academic education to meet the
aspirations of potential participants (Ball 1990), wasteful of human and financial resources and in quantity and quality is poorer than most of the rest of the industrialised world (Taylor 1991; Gleeson 1989 and others). The catalogue of inadequacies includes: that young adults leave school without sufficient and relevant qualifications to satisfy the requirements of labour markets; that those who do have qualifications have specialised too early with a resulting lack of general education and even less understanding of training and vocational skills. This group have a one in three chance of further and higher education - if they do extend their initial education, their post-16 curriculum is likely to repeat at least the last year of their school curriculum - or worse to assume a grounding that they have not had in either the subject or 'core skills'. Although a considerable consensus exists about the nature of the affliction, and educationalists, industrialists, Government departments, all political parties and the Trades Union Congress (TUC) have all proposed remedies, there is as yet little academic, theoretical or populist debate about the nature of the interface between VET and the labour market.
Skills in the Workforce

The shortcomings of VET systems are not confined to young entrants to the labour market. Employment training schemes have failed to provide a comprehensive system of training for older entrants to the labour market and there is no national system for training, retraining or updating the workforce. The national training study (HMSO, 1989a) found that two thirds of the workforce had not received any job-specific training and most did not expect to be offered training during their working life. The roles and responsibilities of the Government, employers and individuals and a detailed breakdown of occupational training patterns will be examined in later chapters.

A Well-Trained Workforce

It may be that a healthy economy depends in part on the availability of skills in the workforce able to counter or exploit change brought about by external influences and that this is what is meant by a well-trained workforce. At the level of the single enterprise its viability and growth will depend on the quality of its workers to adjust to changes in the trading environment. These may be economic,
technological and social. When aggregated to the overall economy, successful labour force movements require that skilled workers must be replaced by equally skilled workers in order to sustain growth. In periods of rapid and excessive change individual companies do not have the capacity to "grow their own skills" and the traditional response of employers has been to poach skilled workers from other employers. This has finite limits and results in a wage-increase spiral as employers seek to retain (or attract) the workers they need to prevent their activities becoming unprofitable. The alternative of ensuring a skilled supply of labour through training can only be cost-effective when the training has preceded the demand. At the point of recruitment the cost-benefit-ratio of training a new entrant who is needed to show immediately a return through use of skills will depress profits. The circle is particularly vicious where the workforce is generally under-educated and poorly trained and only on-the-job training is available to upgrade workforce skills. So it may be that vociferous complaints throughout the 1980s from industrialists about the low-skilled workforce are a reflection not of lowering education and skill
thresholds in entrants to the labour market - since school and FE qualifications have clearly risen in quantity and quality- but about the gap between the extant level of skill and that required to keep the enterprise profitable (that is flexible, adaptable, creative and innovative) in a period of complex and rapid change. Of course the Government (and increasingly the Council of Europe) also contributes to the volume of change through changes in fiscal policy, trade regulation and deregulation and legislation which transfers duties between private and public services. So the lacuna in perceived satisfaction between the supply of appropriately trained workers and the demands of the labour market may originate in the very changes designed to create synchrony.

WHERE DO WE GO FROM HERE?

This opening chapter has attempted to sketch the issues surrounding the interface between training, particularly vocational education and training for initial entrants to the labour market and those in employment, and the labour market. These issues cannot be divorced from the economic, social and political
context in which educationalists, employers and Government interact. In the context of the decade 1981 to 1991 the prevailing culture has been dominated by political demands for public services to be driven by external and internal market forces. At the same time the economy has moved into recession then inflation and recession again. The labour market has reacted to both pressures in the national and international economy and to continuing adjustments to technological change. Demographic shifts and changes in social expectations have changed the structure of the labour force with a fall in the number of employed 16-25 year olds and an increase in the proportion of women workers. Linked with these factors there has been a rise in the number of part-time jobs and in the number of self-employed workers. Overlying all these changes has been an unprecedented increase in unemployment, particularly long-term unemployment. Faced with insistent calls from employers' organisations for increased skills and qualifications in the workforce and public demands for solutions to the social fallout of high unemployment, the Government has initiated a range of training and job-preparation programmes, restructured the school
curriculum and radically changed the funding and control systems of schools, FE and HE. Some commentators have described the effects of these policies as a painful transition from expansive welfare-liberalism to free-market economic individualism. Many educationalists have struggled to protect and develop equality of access to educational opportunity while acknowledging the influence of the labour market on the curriculum. Many employers have become responsible for public sector policy and funding for VET and consensus policies have emerged from the political left and right, unions and employers' organisations.

So where do we go from here? The next chapters will closely examine concepts and outcomes for the VET curriculum seen from an economic perspective and derive a structure of thesis and antithesis around economic curriculum models. The main part of the thesis will focus on interactions between post-16 VET and the labour market and draw examples from a study of training and labour markets in London. The impact of Government policies, intentions and outcomes, particularly its monetarist and consumerist interventions, will be compared in the light of 1:33
Government objectives to instil a new vocationalism into education and training. Concluding chapters will attempt to synthesise the theoretical and practical threads woven through arguments exposed in the thesis leading to a new framework. Perhaps the new framework will itself synthesise elements of welfare-liberalism and economic individualism in a transitional model of VET in the 1980s. Or perhaps a new framework will emerge that encapsulates social democracy, egalitarian economics and an educational ecology of responsiveness - or at least captures some prevailing sensibilities of the 1990s.
CHAPTER TWO: ECONOMIC PERSPECTIVES

Introduction

The first chapter outlined the main elements of the market forces model which has driven Conservative Government policies for education and training since 1981. These elements are: monetarism, centralism and consumerism. These combine to provide the main features of the Government's declared market-forces policy aims of efficiency, economy and effectiveness. These features have had different characteristics in different Government policies, but the main thrust underlying VET policies has been the drive to cut costs, to tie the input of public resources to measurable outputs, and to gear education and training to be effective in terms of the labour market. This chapter explores economic concepts from the perspective of curriculum policy and starts by identifying the salient aspects of what I have called in Chapter 1 - the Money-Led Curriculum. A discussion then follows on the nature of market-forces policies in the context of Monetarism and the ideas promulgated by the New Right (Friedman and Friedman 1980), and
their impact on VET systems. The chapter concludes with a tentative summary of the main features of an economic curriculum model based on concepts of Economy, Efficiency and Effectiveness. This completes Part 1 of the thesis setting out an overview of the Economic Curriculum Model and its educational and political context. Part 2 is a report of my empirical examination of planning training for the London labour market in 1990. Part 3 examines the curriculum initiatives developed to support changes in the structure of VET brought about by the application of market-forces policies - notably vocationalism, a core skills curriculum and competence-based qualifications. Part 4 contains an assessment of the relationships and interactions between VET and the labour market. Part 5 concludes the thesis with an exemplification of the economic curriculum model drawing on the London Case Study and the arguments expounded in earlier chapters.

MONEY-LED CURRICULUM

From an economic perspective, the post-16 curriculum can be seen as the regulator of production between raw recruits and the products used by the labour market. The money-led curriculum is the means by which capital
(the education system) is converted into assets (workers). It is the fulcrum where the state supports economic and social requirements through the levers of vocational education and training (VET). The economic features of a money-led curriculum model for VET are fundamentally concerned with using the products of the VET system, and its production methods, in the service of the macro and micro economy. By this I mean that VET is seen as serving and subservient to the requirements of the labour market. These requirements span the macro-economy by providing workers (including managers) to run the economy and to maintain a balance between the supply of labour and the demand for labour in the economy. From an economic perspective, the "basic concepts that underlie economic thinking: scarcity and choice; opportunity cost; interdependence, and efficiency" (Dixon and West, 1988,1.2)

become central to the curriculum model. The model also attempts to provide for equilibrium between the supply of qualifications and the demand for skilled and adaptable workers to ensure competitive productivity levels, innovation and growth in each part of industry, commerce and the professions. At the micro-economic level, the model attempts to provide
individuals with economic independence. Individual economic independence may be derived from direct activity in the labour market or from social security payments funded by a strong Gross National Product (GNP).

Monetarism

Many changes in VET curricula and structure since the 1981 White Paper: A New Training Initiative (MSC, 1981, Cmd. 8455) have had their roots in Monetarism (see Bosanquet 1983:1-25, for a brief history of Monetarism). The notion that liberal policies permitting a free exchange of goods and labour, when allied to a natural drive for self-betterment and profit in the individual, would fuel economic combustion and maintain industrial equilibrium is not new (Hutton, 1986:2-3). What is of interest in this discussion is the application of monetarist policies introduced by the Conservative Government from 1979 to 1986-87 to the education and training system. It is therefore useful to describe the main aspects of Monetarism before considering the effects of recent Government policies. I will focus on broad principles of monetarist theory relevant to this discussion and
leave out major parts of monetarist theory relating to the money supply and fiscal policy.

Monetarists argue that market forces should operate as freely as possible. Any failures of policy would be due to some unremoved fetter on the market rather than a failure of market forces. Other economists (see O'Donnell (1989) for example) have doubted that the market can be "free" in the monetarist sense - even discounting minimal control of demeritorious goods (such as pollution) and provision of essential services (such as defence). Fundamental to the monetarist position is that the market is the most efficient regulator of wealth creation and distribution. To bring this about requires a minimum of regulation of the market, together with policies that encourage entrepreneurship and enterprise, the dominance of the consumer and a minimalist stance on welfare provision.

A Free Market?

Historically, a freely operating market was seen as providing the conditions for the most efficient use of resources. The laissez-faire model holds that price-mechanisms, operating within a legal system which
enforces contracts and prevents fraud, create a self-regulating system. Classical economists from Adam Smith (1723-1790) onwards, had argued that as long as people were free to buy at the cheapest rate and sell at the dearest price, the 'invisible hand of the market' would produce the greatest wealth (Hutton, 1986:6). Freely operating price-mechanisms coupled with people's "natural desire for 'self-betterment'" were thought to be the key to a flourishing economy. We could perhaps now interpret 'the invisible hand' as the forces of advertising and mass-media promotion which make the maintenance of market-share an essential part of product viability. Thus each person satisfies personal wants by demanding goods and services through money-exchange which enables suppliers to meet their own demands. Circulatory prosperity and efficient use of resources should ensue. The problem that other economists (notably Keynes (1883-1946) see with this model is that social policy for services such as health and education cannot be compatible with access to services determined by price-mechanisms. The freedom of the market is further eroded by the control of unwanted goods and the mandatory provision of
essential goods. There is a further inconsistency to deal with in New Right thinking about services that are free at the point of access, for example the National Health Service (Bosanquet, 1983: 160). The problem is the meeting of supply and demand in the political context. The argument states that the demand for free basic services will always exceed supply. If the Government fails to invest sufficiently in the service to meet individual voter's demands, voters will collectively become a pressure group lobbying for more resources. They will be supported by the vested interest of bureaucrats running the service and the political effect is either massive investment that inevitably fails to satisfy demand, or built-in conditions for inefficiency in service delivery, or social costs from insufficient investment. From this stems the monetarist's dislike of vested interest groups in the public domain, the emphasis on efficiency, and diversification into private services.

In monetarist theory the Government's role is to create a framework in which the capacity of the market to operate freely is extended into every area of
social and economic life and thereafter to intervene as little as possible. The natural state of a market economy will ensure an equilibrium between prices and quantities in a voluntary exchange of goods and services. Intervention by Government can only disturb the processes in this natural equilibrium and is undesirable. However, in practice, as later economists have shown, the Government cannot (and does not wish to) remain completely aloof from intervention. In education and training policies in the 1980s Government intervention - aside from centralisation policies - has largely taken the form of stimulating competition by creating an 'internal market' throughout the education and training system. There have also been examples of intervention designed to rig the market in favour of New Right consumerism. For example, the City Technology Colleges scheme deliberately created additional school places with the aim of giving employers direct control of schools and parents schools outside LEA control, at a time of falling numbers of students.

The benefits of a freely operating market in all goods and services are said to be natural stability of supply and demand and optimum efficiency in use of
resources - particularly public resources. Stability is maintained through the direct relationship between the consumer and the supplier. Consumers use their money-vote to indicate preferences for goods to which suppliers respond. In a freely operating market an equilibrium price (the amount supplied by the producer at a price equal to that consumers are willing to pay) will be reached thereby balancing supply and demand. For monetarists, the market is inherently efficient because price-mechanisms stimulate risk taking and competition leading to the efficient allocation of resources (Dixon and West, 1988: 78). This theory applied to the education system requires the system to operate as an internal market thereby ensuring that supply and demand are balanced by price-mechanism and optimum efficiency obtains.

Monetarists argue that inherent tendencies in public organisations to increase costs irrespective of demand must be restricted by competition between producers and by transferring resources to consumers. The transfer of buying power from producers to consumers (from institutions to students) should not be confused

2.9
with equality of wealth distribution. On the contrary monetarists claim that unequal distribution of income encourages initiative and enterprise and ultimately the effects of the buoyancy created in the economy benefits everyone. Further, the market forces of supply and demand change levels of output and relative prices within the overall buoyancy of money supply. Fine tuning of demand in the economy is redundant because a freely operating market is inherently stable and efficient. In terms of the labour market, the economy will work to establish the 'natural rate of unemployment'. That is, every worker who wants a job will take one offered and every employer who wants labour will have to make an acceptable offer. Government intervention will only be required if the 'natural rate of unemployment' is too high. It is possible that monetarist politicians in the early 1980s deemed the threefold increase in unemployment as the 'natural rate', in any case, the measures that were introduced (youth, employment training and self-employment schemes) clearly fit in with monetarist aims of economic individualism rather than Keynesian welfare capitalism. (See Chapter 9 for a discussion of the more complex interactions between
supply and demand in the labour market than monetarist theory suggests.)

Public and private cost

A further important aspect of Monetarism deserves close attention: that of cutting public expenditure. Traditionally the Government responds to political social pressure by allocating resources to alleviate social policy stresses caused by inadequate wealth creation or wealth distribution mechanisms. Thus politicisation of issues has the obvious fiscal consequence of raising public expenditure. For the New Right this

"is disastrous and self-reinforcing. Faced by falling output and employment as the rising share of public expenditure crowds out private wealth creation, governments are tempted to intensify their expansionary policies." (Bosanquet, 1983: 20).

The monetarist remedy is to cut public expenditure and encourage private entrepreneurship by reducing taxes and economic de-regulation. The switch from public to private investment in VET is demonstrated neatly in the substitution of HE student grants by loans. In 1990 the Government began to switch from student maintenance grants to loans which are to be repaid, with interest, once the student is in full-time
employment. Individuals are made responsible for the cost of maintaining themselves while in full-time education. The important economic effect - leaving aside finding the necessary private resources - of the substitution of private cost for public cost is that potential students are forced to calculate the economic value of participation in education and training. For Conservatives, the switch from the public to the private domain also has the welcome effect of introducing consumer choice into educational institutions' curriculum planning. For individuals, the opportunity cost of participation - that is income foregone while in education and training - becomes a direct factor in the assessment of value from the activity. Opportunity costs were present when students were maintained by grants, but the impact was indirect and masked by social expectations that academic ability merited support from the state. Removal of the subsidy has an impact on motivation, affordability and utility. In this theory, a virtuous circle is created whereby education has a higher utility value (since its price is increased) and because of its higher perceived value, individuals will be stimulated to pursue actively wealth creation.
and to increase their demands for education. It is interesting to reflect that all the major banks found the student loan scheme financially imprudent and declined to operate it despite (or because of) their obvious commercial interest in attracting student customers. Other examples of initiatives designed to promote individual capitalism include general measures to vocationalise education, the switch from resourcing teaching to funding outputs (qualifications) and numbers of students, and programmes to instil enterprise and entrepreneurship in the curriculum from primary schools to HE. I have briefly sketched in the framework of Monetarism as policies to promote a freely operating market with minimum regulation allied to economic individualism with a concomitant switch from public to private cost. The vein of these ideas has run through Government VET policies in the 1980s as a market-forces model of education and training.

MARKET FORCES POLICIES
Political rhetoric of the past decade has centred on using 'the market' to regulate supply and demand for education and training. It is helpful therefore to look in detail at what is meant by market forces and
in what ways such forces affect educational structures, provision and outputs. The market is fundamentally concerned with relations between buyers and sellers of commodities and the conditions of trading. A seller has access to a product which is required or desired by others. The buyer must have the resources to obtain the product - (and for VET resources may include available time, physical and intellectual capacity for learning, prior educational attainment and money or sponsorship). Conditions in the market must include available labour; raw materials; product stability; financial resources; medium for exchange of products; mechanisms for advertising the product; and customers. VET providers self-evidently have a product - vocational education and training courses and programmes. These sub-divide into a taxonomy of subjects, qualifications, practical skills and applications, preparation for Further and Higher Education and access to the labour market. Users of these products have traditionally been young people continuing their initial education in full-time HFE courses or part-time participation in sandwich, day-release or apprenticeship training. Some provision has also catered for adults - particularly women -
wishing to acquire skills while out of the work-force, and workers studying for qualifications predominantly by evening courses. Employers also offer training as part of personnel policies (to develop workers) and organisational policies (to develop skills, attitudes and knowledge or to change work-behaviour). Training by employers is part of wage-labour exchange and will be considered in the section on employment and training (Chapters 8 and 9). Demographic changes resulting in a 25 per cent fall between 1982 and 1990 in the number of 16-19 year olds who were traditionally the largest VET group, combined with Government policies for funding educational institutions on the basis of student numbers, has encouraged HFE providers to attract new customers. This in turn has led to changes in the type, content, delivery and assessment of courses. Flexible delivery methods such as correspondence materials, use of audio-visual media (open learning), intermittent attendance at the institution, and local venues for tuition through out-reach projects, have featured strongly in educational organisations' attempts to update their products. Some of these changes have come through an emphasis on promotion methods derived
from marketing professionals and both institutions and their programmes are increasingly advertised in the competition with other providers. Government initiatives have aimed at stimulating change in programme design, broadening the student profile, measuring outputs and competitive relations between suppliers (see Chapter 7).

It is something of a paradox that, in seeking to establish an internal VET market, the Government has directly applied interventionist policies. Although aiming to orientate the education and training system to the stresses and fluctuations of a freely operating market with minimal regulation, the implementation of Government policy has been prescriptive and centralist. In this the Government has eschewed a "major precondition" of market models for

"the least possible interference on the part of the government in the voluntary exchange and spontaneous cooperation of the market in goods and services" (Griffin, 1987:45)

It would seem that if the education system will not voluntarily abandon social-liberalism, protected status and historical precedent then it must be made to embrace monetarist principles by prescriptive determinism.

2.16
Competition and Monopoly

In perfect competition, the producer is 'price-taker' rather than 'price-maker' accepting supply and demand determinants because the product, or production, is universal and no one producer can arbitrarily influence price. Such conditions may be said to exist when all VET is free or very low cost, or fees are externally controlled at a uniform level. In a monopoly, production is restricted to a single seller, either through legislation, mergers or because there is no alternative product substitute. Monopoly, or near monopoly, is maintained by producers of free and subsidised goods because it is uneconomic for other producers to enter the market. By extending subsidies and grants to alternative suppliers of education and training in the schemes which followed the 1981 White Paper: New Training Initiative (MSC, 1981) - for example YT Managing Agents - the Government started the process of introducing competitive conditions into the public system of VET. Thus some public sector producers were no longer monopolist and 'price-makers' since other producers by undercutting costs or offering more desirable services, could obtain state subsidies for training schemes. The challenge to
public sector provision brought about by the changed conditions of production is still reverberating as producers struggle to adjust to new conditions forced on them from changes in their relations with the market (consumers and sponsors) and competition with other providers.

Economists point out that even a competitive market may not prevent a monopoly emerging. The market essentially operates on the relationship between supply and demand mediated by price. Producers compete with each other either through the scarcity value of goods that are in demand, in which case a higher price will obtain, or through depressing prices in order to sell surplus stocks. In economic theory the law of diminishing returns holds that the more there is of a commodity the more costly each marginal increment becomes (and therefore is less desirable). This is echoed in areas of policy where once an activity has been promoted with Government support, it is then subject to finding its own resources and customers. For example, investment in new curriculum areas such as the Open College and the Open Tech has been withdrawn or substantially reduced after the startup funding expired. The clear message is that
the Government either has enough of that particular commodity in the curriculum basket, or simply floated the product to stimulate competition, and the only rationale for its continuance is commercial viability. In the case of the Open Tech, requiring it to have commercial viability was against the competition of heavily subsidised traditional colleges and customer resistance to commercial fee levels, so the venture failed. In this example, the monopoly of FE provision was maintained and the Government's intervention was doomed to be an expensive business failure. This example is in contrast to the City Technology College initiative, which similarly failed to achieve its target level of commercial backing, and received additional Government aid to compensate. There are two lessons to draw from these examples: political investment in a scheme equates with financial support (even if this compromises the scheme's purpose); and the training and retraining for adults - particularly financially independent adults - is to be privately provided by employers or by individuals. Thus two policies springing from the same ideological base and designed to limit public expenditure, have opposite outcomes. The ambiguity and tensions in policies for
upskilling the workforce are examined in Chapter 9.

The main point about the competition of the internal market the Government has sought to achieve by a raft of policies giving educational institutions financial independence to generate income and control costs, has been to minimise direct state support and maximise the use of public resources. The resulting competition between institutions trying to increase their numbers of students and their share of grants and other resources is seen as the way to revitalise the educational economy. The Government argues that if producers become more competitive they will produce more attractive goods (or ultimately cease trading) and be more efficient. This in turn enables successful producers to amass capital (profits) and further dynamises the system with the ultimate aim of creating expansion without increasing costs. Encouraging competition means removing artificial support (such as historical grants), creating more producers (such as training agents) and directly rewarding the most competitive. The establishment of Funding Councils for FHE, employer-funded City Technology Colleges, and centrally funded Grant Maintained schools, has helped
to distance the Government from the administration of incentives and penalties in the new systems. These changes have complemented the initiatives founded on hypothecated funding, such as the Technical and Vocational Education Initiative (TVEI), designed to offer financial rewards to institutions willing to adopt Government curriculum policies (see Chapter 7).

CURRICULUM CONTROL BY PRICE-MECHANISMS

The most important feature of the market-forces model is the function of price-mechanisms. At institutional level the operation of price-mechanisms focus sharply on the inter-relationships between production costs, consumers' income, public subsidy and optimum price. The optimum price should be directly related to its value relative to other commodities as perceived by the consumer. The baseline for price derives from estimates by the producer of production costs including labour, materials, overheads and taxes. However, this estimate can only provide a cost threshold not an actual price for the product. The resolution of product price comes from a set of relations and movements within the price-mechanism.
The most simplistic view of price-mechanisms holds that the dominant motive behind economic activity is the desire for gain and that prices serve to reconcile this desire with the reality of production (Benham 1967). A more sophisticated view would hold that consumers can influence price - upwards and downwards - by their aggregate spending power and product choices. However, each product competes against an unquantifiable range of other goods and services that consumers may purchase. This has been poorly understood by education managers who have priced individual courses according to production costs. Most commonly production costs are equated with duration of the course, or higher labour costs arising from the seniority of the lecturer, or cost of plant or materials. Alternatively, price is equated with subsidy and the organisation attempts to achieve price-equilibrium between its own recurrent income and expenditure. These strategies - which may be historically determined - take no account of the changing demands of consumers or manipulation of the market through price-mechanisms.

Price-mechanism theories postulate a defined
relationship between the variables of supply, demand and price which can be shown diagramatically:

Supply of VET  +  Demand from consumers =  Price

<table>
<thead>
<tr>
<th>Increases</th>
<th>Constant</th>
<th>Falls</th>
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<tbody>
<tr>
<td>Constant</td>
<td>Increases</td>
<td>Rises</td>
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<td>Decreases</td>
<td>Decreases</td>
<td>Constant</td>
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The model shows that, in a commercial market, the supply of courses plus the demand from students, should equalise at a price level that maintains the supply and satisfies the demand. If the supply increases and demand is constant, the price should fall. If supply is constant and demand increases, the price will rise. If supply and demand fall, the price is unchanged. Conversely, the model holds that the higher the price of a commodity, relative to other commodities, the smaller will be consumer demand. As the price increases, more disposable income will be diverted into other goods which will result in a concomitant switch in production. The rise in demand for other goods will in turn raise prices and provide incentives to produce more. In this way price-mechanism prevents inconsistencies in the supply and demand of goods and services by operating towards

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optimum dynamic equilibrium in the market. In this model, 'equilibrium price' will obtain and stabilise when the quantity buyers want is exactly equal to the quantity sellers produce.

The second function of the price-system in a free market, is to provide mechanisms for communicating information for economic planning. Since information about consumer preference can be derived from price (the value to the consumer) it can be used to predict likely demand. The obtaining price at which consumers are prepared to buy influences the producer's estimate of future profits and has ripple and spiral effects in the economy as producers become consumers of materials labour and other services. In general, the higher the obtaining price in relation to costs, the more producers will desire to sell. In theory then, the curriculum will be organised around the courses which are completely subscribed at the lowest costs relative to price. Production will be geared to producing just the amount that can be sold. Courses that have the highest costs in relation to price must therefore be changed or discontinued.

There are two price-mechanisms operating on producers:
price-mechanisms related to inputs and production costs (wages, materials and overheads) and price-mechanisms related to selling the product. In an education and training system price-related production costs are largely subsumed into the macro-economics of the organisation since most infrastructure costs are met by sponsorship and subsidy. Price-mechanism in oligopoly is an interesting test of the concept. In theory, where the market is controlled by a few large producers, price setting is highly competitive and presumed to benefit consumers who can buy at the lowest price and dictate production. Some of these features can be seen in HE where, in changes introduced by the Conservative Government (1979 -), producers bid to deliver student places at a certain price to the state. Changes to the funding structure for HE institutions clearly reflect the premise that making producers compete on price increases efficiency provided that producers do not form cartels. Changes in Government policies may also operate to change the supplier's relationship with its financial backers. VET providers have moved from a near monopolistic position maintained by state subsidy to competing for funds with alternative suppliers which has forced an
assessment of consumer behaviour and organisational resources. With the transfer of substantial VET resources from Government departments to Training and Enterprise Councils (TECs), public sector providers are now seeing a restructuring of the market in which very unstable conditions prevail. This arises partly because TECs are inexperienced purchasers and partly because their corporate ideology and operational goals are embryonic, esoteric and inconsistent with what went before. A market-forces model would argue that such changes should encourage greater coherence with economic needs and greater efficiency in the system since weak producers will not survive (or be absorbed) and efficient producers will increase their market share. Paradoxically, such forces lead again to monopolistic conditions where one producer (or a cartel) dictate price, product and availability. What we see here is a complex interaction of price with other factors and although it can be argued that price competition benefits the consumer, in the longer term it may give rise to new restrictive practices which remove choice and competition.

HE as a whole is virtually monopolistic for home
students but operates in a market for foreign students and research contracts. However, the proposition that low price increases demand must be relative to social and cultural attitudes to participation in education and training and clearly does not hold good where student demand (in Great Britain) in a low price system is low, and high in a high price system (for example, Japan and United States). However, as student demand rises (as a result of either increased product utility or increased resources) there will be pressure of demand which should force prices to rise. This in turn has the effect of reducing the need for subsidies since supply and demand are self-regulating (and at no increase in public cost). Is this then the best system for mutual satisfaction of the tensions between the VET system and the labour market? If beneficial price-mechanisms are the sole determinant of consumption then all other factors such as availability, quality and consumer resources are redundant in determining the curriculum. As this is clearly not the case, the role of price is undermined. However it cannot be ignored once market conditions prevail.

Product Utility
The key to consumer choice lies in the value the
consumer places, or can be persuaded to place, on acquiring a particular product in preference to another. This is not just about the persuasion of advertising and the generating of desires, wants, needs for consumer goods. It is also about the take-up of educational opportunities and the influence of students on curriculum planning. At a basic level, VET institutions must find customers for their courses for the stability of their businesses. Demand for educational goods and services in this context is the relationship between consumers' choice and a prevailing price. The nature of this relationship is shaped by a number of factors, the key factor being the amount of pleasure or utility gained from consuming the product (Dixon and West, 1988:25). Utility can be defined in economic terms as the degree of satisfaction perceived by the consumer. I have been describing in theoretical terms the impact of market forces, and particularly consumerism, on educational opportunities. This may seem somewhat removed from the actuality of funding in FHE where few students pay for courses directly. However, I suggest that the underlying relationships are significant determinants of the curriculum. Whether price-mechanisms and customer
attraction is overt within an institution or not, the change from historical resource allocation to funding student numbers in predetermined subject areas, creates inherent instability for the institution which fails to attract its target clientele. Price-mechanism relationships also hold good for all fee-taking provision. At the least because the consumer has a bench-mark of previous levels of payment (or none) by which to assess the utility of the course. The concept of educational utility is important in the overall market-forces paradigm and I shall return to it in later sections.

Elasticity of Demand

Operators in a commercial market use a number of strategies to determine the price elasticity of demand. The first stage is to predict how varying levels of production affect costs and then to assess the spending range of targeted consumers. A product-based company is able to use price strategically in several ways: prices can be set as low as possible to capture market share or a range of prices can be set to extract from differing customers the highest price each is willing to pay. Service companies, such as
airlines, have exploited the latter strategy to the full by offering the same flight seat at up to 20 differing prices. Both strategies may be useful in determining a product price- and cost-cutting curve designed to gain the volumes and profits needed for technical innovation (The Economist, 24 August 1991: 57-58). It is also an increasing trend that VET students may pay a range of fees for the same course depending on their status (age, employed, benefit recipient, etc.) and their sponsor (employer, LEA, TEC, none). There will also be a range of fees (and costs) for the same course offered by institutions in different parts of the system (AE, FE, HE, schools, sixth-form colleges etc.). This has come about, not from consumer marketing but from either adventitious bureaucracy or from social policies designed to give access to VET for disadvantaged groups.

Traditionally in Adult and Further Education a threshold for demand was created by crudely relating class size to lecturer cost through the performance indicator of SSRs (staff: student ratios). The viability of the programme of courses, if it was assessed at all, largely turned on maintenance of average SSRs and little analysis of cost or price was
undertaken. The main task of financial controllers was to ensure collection of fees and accountability in the use of grants. All this was in any case secondary to the academic and vocational purposes of the institution. The effect of this management of educational institutions was that the curriculum was historically or professionally determined. The final programme of courses was determined by the actual number of students present at any one time. This turned on the viability of teaching rather than any cost implications. Until the late 1980s very little progress had been made in assessing cost overheads such as accommodation, publicity or management. The Government publication, Managing Colleges Efficiently (HMSO, 1987b), together with large injections of cash into computerised management systems (CMIS), are changing this situation. Colleges are now able to calculate their operating costs and relate these to performance targets for economy and efficiency. Some go further and relate costs to a ratio for effectiveness in terms of student achievements - such as examination results - or other measures deemed to be successful outcomes of the course of study. Performance indicators and their role in an economic
curriculum model are examined in the London Case Study (Chapter 3).

All sectors of post-16 VET have experienced a changing portfolio of "targets" designed by the Government to assess the economy and efficiency of institutional and sectoral performance. During the mid 1980s "targets" included average class size (sufficient number of students to constitute a class - however defined), buoyancy of recruitment (numbers of students enrolled), non-teacher costs per student and total costs per student. In this way large classes could be used to "subsidise" classes with low numbers of students and be justified in terms of curriculum balance (preserving minority interests) or of social engineering (use fees from leisure courses to balance costs of remedial education). None of these measures relate to price - only to cost - and in regimes of free, subsidised or grant-aided provision there is little incentive to consider the price elasticity of demand. However, in the economic model of demand, price elasticity must be calculated and manipulated to achieve the management goals for the enterprise. For example, innovation in the form of new ways of delivering learning (media packages, residential
courses etc), or technological innovation in plant and equipment, have to be financed through cost-price surpluses if grants are not available. Market share becomes important for training related to areas of the labour market which recruit low numbers each year. Viability of the course offer in a fixed-price system depends on attracting sufficient numbers to run the course. Market share may also be implicated in the numbers of participants that can be attracted (and retained) in a subject area in order to provide sufficient levels of teaching or sufficient throughput of students to provide a pool for more advanced study.

Actual Demand

In the debate about needs (what students ought to have) and wants (what customers may be persuaded to desire) it may be helpful to consider the role of price-mechanisms in determining actual demand. If the function of price is to regulate production and consumption, then it also has a "pivotal mode of allocating labour, resources, outputs and incomes" (Dalton, 1974: 56).

Thus the price-mechanism model claims a symbiotic, causal relationship between consumer demand determined
by price and total economic production and allocation. Through use of a monetary system of integrated values for all goods, services and currency units, consumer preferences dictate how productive capacity is deployed through rise and fall in price. It is claimed that in a system of competitive free markets, the pattern of output will depend on the way consumers decide to use their resources, so that - in the absence of monopoly - it is consumers who determine the behaviour of the economy. Price-mechanisms have two functions in controlling production and consumption: to provide incentives for producers and consumers to adjust their economic activities so that they are coherent; and to disseminate information relevant to economic planning. For these reasons, the application of price-mechanisms to VET is a fundamental mechanism for ensuring that the system meets its obligations to serve the labour market. The twin aims of vocationalism and economic individualism in a VET system designed to fuel the labour market and produce economic viability, meet in the circle of consumerism and price-mechanisms. The Government in applying price-mechanism levers to the control of public funding for institutions is making
consumer interests central to the curriculum and seeking to ensure that the system concentrates on economic individualism. This creates a pincer movement in which welfare-liberal curriculum policies are unlikely to survive. Even should consumers demand educational opportunities that are not fundamentally related to vocational ends, the funding system is unlikely to have allowed the provision to exist. It is only on the margins - and this means within Adult Education - that such provision could be offered. This then becomes the speculative curriculum - which Adult Education has traditionally espoused - but with the difference that now local authority funding is much less evident, consumers are expected to meet the full costs.

Consumer Income and Buying Power
So far I have concentrated on classical and monetarist economic theory. The alternative Keynesian proposition is that demand for consumption goods together with the producer's need for investment, is the determinant of production output in a free competitive market. The key variable is not price but level of consumer income (see Stewart, 1986) which determines demand. This is in contrast to the monetarist view that the
market will produce such attractive goods that people will want to buy and will seek the income necessary to secure them. It is possible to see both effects operating on recruitment for education and training. Absolute recruitment levels will drop (at least temporarily) when fees for courses rise in real terms indicating that consumers either negatively adjust the utility value of participation or that a different level of consumer income has to be attracted to the product. When the income level of regular consumers drops relative to the cost of expected transactions, recruitment will also drop because the consumer has less disposable income. When an increase in subsidy, or more efficient delivery, results in lower prices, demand can be expected to rise. In this way if subsidy is regarded as consumer income, demand can be guaranteed. An example of subsidy used in this way is the provision of literacy, numeracy and English as a second language tuition where no fee is charged. If Keynesian theory holds then consumers have sufficient income (since courses are free) to take up supply and demand is related to consumer interest. On the other hand since provision is 'free' to the consumer then demand is price-neutral. This assumes that demand is
value-free and unaffected by social, psychological or physical factors. However, the experience of full subsidy for Adult Basic Education courses has demonstrated that recruitment is not solely dependent on price-subsidy but on a wide range of individual and cultural pressures. Price-subsidy may well be important in retaining customers and any major shifts in price level may necessitate recruitment of new types of customers. Policies designed to increase participation may therefore require different pricing strategies from policies designed to retain and extend participation.

It is useful in this context to explore the distinction between capital and consumer goods. Economics defines capital goods as goods that are used to produce other goods and which generate an income in the future. Consumer goods are goods which are fully consumed immediately. In which category should we put education and training? It is clear that education and training is 'consumed' at once and not deferred in the sense that students do not 'buy and bank courses' although they might defer participation. At least to the producer, education and training is taken up at 2.37
the point of enrolment which for all practical purposes is in an immediate timespan. However, it is just as easy to describe education and training as an investment for the future or as a utility with future value. As such it can be categorised as capital goods which are expected to generate income in the future. And although the actual course may be taken, and completed, in present time, its effects may not be utilised until the student 'trades' the learning experience in the employment or qualification markets. This could even be true of leisure courses where the utility of the learning experience is used in social, domestic or recreational 'markets'. On these arguments it is more appropriate to categorise education and training as capital goods rather than consumer goods. Is this a clue to some of the problems in curriculum management driven by consumerism? It is clear that education and training providers have been encouraged to regard students as consumers and to develop attitudes and practices which assume that education and training is 'a consumable'. Institutions have been exhorted to be market-led and the Government has explicitly sought to create 'an internal market' in education and training provision. Could it be that it
is a mismatch of expectations to attempt to market education and training as consumer goods when potential consumers are actually seeking 'capital goods'? That is, that students regard education and training as something which is expected to build up 'capital' and to generate income in the future. Capital in this context may be qualifications, access to Further and Higher Education, increased education stock for the individual or the passport to employment or professional training. This may also point to a distinction between institutional and informal learning. Tough (1976) and others have documented the large number of learning projects undertaken by adults in the course of their lives which are outside educational institutions or structured learning environments (Tight, 1983:141-152). Such informal learning projects are self-directed or assisted by family or friends and relate to immediate learning needs. These informal projects are closer to 'consumer goods' than learning organised by educational institutions. Although such projects may last for many years they can still be seen as meeting immediate needs related to a hobby activity, family or work concern. It may be that formal education and training
is more properly regarded as an accumulation of capital and curriculum management should reflect this rather than attempting to gratify more immediate consumerism. The work of Tough and others has shown that consumers have already worked this out - they know that institutions (even market-led ones) are not organised to respond to individual requests for learning opportunities. Institutions in the public sector at least do not put on courses at the frequency, or at the locations, or at the price demanded by many consumers (Blamire, 1985). When institutions do attempt to offer learning opportunities on demand and at places chosen by the student, the price of the programme rises. This is even the case when learning is offered through correspondence courses or other non-contact media. When the price rises the curriculum manager is faced with decisions about cost and perceived value that have to be informed by a knowledge of consumer preferences.

ECONOMIC INDIVIDUALISM

A major imperative for Conservative policies in the 1980s was reduction of dependency on the welfare state and encouragement of individual enterprise unfettered
by Government controls. This was grounded in the belief that people have a natural desire for self-betterment and personal gain and will optimise their resources to achieve these ends. Many of the consumerist policies of the 1980s illustrate this position. For example, the Training Credits scheme which gives school-leavers vouchers to 'spend' on training is premised on the principle that if school-leavers have educational 'buying power' they will naturally use it to best advantage for themselves and the economy. Early indications (October 1991) from pilot training credits schemes were that 16 year olds were more likely to choose full-time education and training rather than part-time courses. This may be a reaction to contraction in the number of opportunities for young people in a recessionary labour market, driving young people to increase their number and level of qualifications instead of seeking employment with or without training. (An interesting use of terminology in the training credits scheme is to describe the monetary face value of the credit as the young person's "training account" with the Government. This implies calculation and fiscal transaction and a tone not previously associated with training schemes.)
Employers have also experienced difficulties in providing training places when falling demand has led to cutting jobs. The Government intends to extend the training credits scheme to all school leavers by 1994. Ministers are also considering applying the principles of purchasing power in the hands of all 16-18 year olds by introducing a similar scheme for funding school sixth forms. The replacement of grants with loans for higher education students also demonstrates the belief that natural desire for self-betterment is sufficient to increase participation in HE irrespective of actual resources. Perhaps the studied neglect of educational guidance services by the Government is also a perverse example of the axiom that rational choices will be made by individuals without recourse to professional guidance. The point made by Hayek (1948:Ch.1) underlines this: decision making is best left to individuals in a market because they are the best judge of "their circumstances, interests, and preferences" (Hutton,1986:9).

Monetary systems not only provide a currency of exchange but also a store and measure of value. Saving, the source of investment, is determined by
income and, if future predictions of production profits are pessimistic, savings will be stored rather than invested in future production. Scarcity of investment will raise interest rate return and lead to reduced investment in a self-fulfilling cycle. Thus Keynes discounts the second function of the price-mechanism as a predictor of future demand. In the alternative model of income level as the consumption determinant, unemployment results from decline in consumption or investment and further fuels decline in output by lowering income levels still further. Thus raising the price of VET at a time when relative incomes are falling fails to recognise the Keynesian interaction between income and demand. On the other hand, raising prices when customer demand is dormant results in failure to sell. Raising price thresholds may move the product away from one group of consumers (who previously bought the product) and a new customer base will have to be sought.

In a money exchange, buyers (as well as sellers) take time and money into account in making spending decisions. As well as cost-benefit and utility estimates, individuals also take into account estimates related to the purpose of economic movements.
and individuals assess their fiscal circumstances in the light of present and future spending needs. Keynes identified three motives for holding cash (or cash equivalents): transactions motive, precautionary motive and speculative motive (Hutton, 1986:126). Transactions motives relate to current personal and business activity, precautionary motives relate to the need to hold cash as a guarantee of obtaining resources in the future, speculative motives relate to making a profit in future transactions. Using this framework it is possible to hypothesise that, in a cash-holding or spending dichotomy, prospective students spend on education and training when they have surplus funds over and above transaction and precautionary needs, and perhaps speculative needs are taken into account as well. This suggests that actual consumers have a current cash surplus and do not need to spend to guarantee the future. This clearly makes education and training spending marginal spending and subject to direct fluctuations in the amount of money in consumers' pockets. It also explains inhibitions in spending related to fears of unemployment or increased cost-of-living expenses and belies the argument for education and training as 'investment' for the
individual. Again it may be useful to look for pointers in cash-flow theory. The transactions and precautionary motives are less volatile than speculative judgments. This is because activity levels are likely to be in a stable relationship with income levels. However, rates of return (interest) will largely determine speculative motives. In classical economics interest rates are the reward for deferring consumption. In Keynesian economics interest rates are compensation for not having liquidity (liquidity-preferences theory). If we substitute rewards from education and training for interest in these hypotheses we have replaced motivations with expectations. Thus in the classical scenario the student expects rewards from education and training for deferred consumption of other goods. In the Keynesian scenario the student has expectations that education and training will compensate for loss of opportunities while engaged in learning. Some of these ideas point to the complexities behind motivations to engage in education and training which have previously either been described in socio-psychological frameworks or have been seen as problems of advertising, marketing and promotion. What is also

2.45
interesting is that spending on education and training by individuals is unlikely to be reckoned as either investment or speculation. Is this because the cash benefits of education and training are uncertain? Or does it recognise the risk of failure to learn particularly over medium to long timescales? Or do consumers have doubts about the utility of the education and training on offer? None of these questions can be answered without detailed research into consumers' motives for spending on education and training.

A great deal has been written about the Government's motives for expanding or limiting spending on VET based on economic individualism and market forces. However if so much is to be claimed for a 'virtuous circle' of individuals spending on a private good which gives rise to a public good which, in turn, encourages more private and public goods to be consumed and produced, it would be helpful to understand more about economic individualism. Hutton sums it up thus:

"The dynamic of the market economy is thus immensely subtle. Each individual transactor faces a 'dual decision' in his actions; he juggles his money inflows with his money outflows and
confronts uncertainty in the very nature of things." Hutton (1986:136)

For these reasons, Hutton (1986) ascribes to Government a vital role of managing expectations in such a way as to support the market. It is vital to consumer confidence that education and training are believed to have continuity (for example, that accepted qualifications will not be replaced by unknown ones) and that their value will not diminish. Devaluation might come from general undermining of the desirability of qualifications (for example, influential statements that qualifications do not matter, or do not signify ability); or from a lack of monetary compensation for time spent achieving qualifications. At a local level continuity may be vulnerable to actual or feared class closures which deter potential students. A study in Kent of a pilot programme to provide adult classes in a rural area found that recruitment in the second year of the programme was much higher because all classes had been retained in the first year regardless of the number of enrolments, when compared to a similar area where classes had previously closed when numbers fell. The study found that potential students did not enrol

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where there was an expectation that classes may not run. This was because they would not commit their resources (time and money) to an uncertain activity (Blamire, 1987).

ECONOMIC CURRICULUM MODEL

Exponents of classical economic liberalism have tended to argue that any failure of applied economics is due to a lack of strong classical policies rather than failure of the theory on which the practice is based (Hutton, 1986). This defence has certainly been used by the Conservative Government in the latter part of the 1980s to justify policies of deregulation and competition in education and training. The main tenets of 'pure' classical economics revolve around ideas of rational individualism, voluntary exchange of money and services, market equilibrium, diminishing returns and competition. As we have seen the validity of these concepts has not been demonstrated in terms of an internal market for VET. Hutton (1986) argues that Keynesian economics has not failed to produce a viable explanation of how the economy works: but that Keynes' theories have been misunderstood and the true Keynesian revolution is yet to take place. He argues that the idea that the market could never produce a
natural state of equilibrium has been suppressed and misunderstood by the Right and Left:

"The Keynesian claim that the market economy is inherently unstable, and that there is no guarantee that it will either arrive at or even tend to a point of balance which ensures full employment or the 'best' use of resources, is a very shocking one." Hutton (1986:117)

The Right have interpreted this as a doctrine of paternalistic intervention and the Left have (wrongly) translated Keynesian economics into devotion to high public spending. Hutton argues that the market cannot be stable because decisions about production and spending are always subject to uncertainty about the future and change over time because in a money-exchange buying and selling can be deferred. This leads to political decision - making in which Keynesian strategies represent uncertainty and change and classical economics represents natural order and equilibrium. Thus the adoption of each policy becomes closely aligned with the politics of certainty and control or of doubt and unpredictable movement.

Basic Elements of the Model

In this scenario of opposing economic propositions and uncertain evidence drawn from examination of a period

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of economic volatility (see Chapter 9 for discussion of the labour market in the 1980s and early 1990s), I shall propose some basic constructs for an economic curriculum model. The main premise of the model is that a money-led curriculum serves and is subservient to, the requirements of the labour market. This justifies the value placed on vocationalism throughout the curriculum from infant schooling to FHE. It also demands that the organisation of the education and training system more closely reflects the competitive and commercial aspects of the labour market. This gives rise to restructuring to create an internal market and substitution of prices and costs for educational issues in planning the curriculum. In the parts of the system catering for adults, the structure is diversified into private organisations pump-primed by public funds. Mechanisms for the control of costs and the targeting of subsidy on a centrally controlled curriculum - or at least the overall programme dictated by Government - are essential to measure and achieve an efficient system. Even in a market that is not entirely unfettered, price-mechanisms dominate consumer choices and curriculum planning.
In the economic curriculum model the key issue in determining demand for VET is the tension between public and private cost. This operates on the macro-economic level with concerns about the overall competitiveness brought about, or hindered by, the level of skills in the workforce. It operates at the level of individual enterprises within the labour market and their ability to achieve growth through research, entrepreneurship and optimum productivity. It operates for individuals seeking economic independence dependent on the utility value of qualifications (defined as certified courses, skills and experience) compared to an indeterminant range of other consumer choices. Scarcity and choice affect both consumers and VET providers' curriculum policies. Into this equation comes considerations of the elasticity of demand and the monetary transactions potential students can be expected to make. It may be useful to see the VET curriculum as providing educational capital with high utility value when it is directed at exchange in training or labour markets, or used in social, domestic or civic contexts. However, motives to spend on VET in a monetary framework may involve deferred rewards, or compensation for other
opportunities foregone, or be marginal spending when transactional and precautionary requirements have been satisfied. There may be a place for a truly demand-led curriculum (that is provision demanded not offered) provided that the internal market controlled by Government funding policies allows space for a speculative curriculum.

The basic elements that derive from this analysis, and that become the hall-marks of the economic curriculum model, are Economy, Efficiency and Effectiveness. Economy is defined as the absolute cost of inputs to the system and the value-for-money represented by this expenditure. Economy issues include the affordable cost of private and public investment in post-16 provision; the opportunity-cost of participation; actual levels of cost; rate of return on investment; economics of research and development; and profits. Efficiency in this model represents the maximum output from minimum input. Efficiency issues centre on pricing-mechanisms; resource management; disaggregation of curriculum into cost-centres; and competition for resources. Effectiveness is the assessment of the value that has been added by the transaction; cost-
benefits of the learning exchange; the value attributed to the outcomes of the learning; its utility as an investment or marketable commodity; and the contribution to the economy of the individual, the employer and the state.

Hierarchy of Demand
In creating the conditions to operate an economic curriculum, account has to be taken of client preferences; relations of production; operating conditions in training and labour markets; occupational structure and choice. Client preferences in this model move beyond curriculum management issues of convenience and accessibility to considerations of consumer power in determining the curriculum offer. Demand is related to perceived utility or cost-benefit in participation. This draws in considerations of opportunity-cost (income foregone by attending the course, costs directly attributable to participation and the exchange value of the transaction). In the hierarchy of demand consideration must also be given to the consumer's estimate of the utility derived from taking the course.
ECONOMY

I have presented the case for level of income as a determinant of demand and demonstrated the more complex relationships between supply and demand that obtain in education transactions. Nevertheless, level of income does have some impact on demand where students bear the costs of participation. The concept of affordability must focus on the actual price and actual level of income when participation is bounded by monetary exchange. Affordability also extends to opportunity-cost and the cost of non-participation. In this model affordability is the simplest level in the hierarchy of demand. The consumer calculates the actual cost (fees, expenses, income foregone) against disposable income and compares costs for alternative forms of participation. This could be courses at a different price, different level of expenses or different considerations for income-foregone. This comparison brings elements of curriculum planning into the frame: location, frequency, duration, timing and media. Differential costs will occur with face-to-face teaching compared to open learning, or residential/part-time/full-time courses. Estimates of Economy also involve calculation of social costs. For example,
taking an evening course rather than a day course may change the amount of income foregone or costs of childcare or transport. All of these factors form the first group of assumptions related to estimates of Economy in which price is a significant factor. Price is important both in estimates of affordability and in estimates of the Economy of the product.

Incentives

Incentives are an important element in a market forces strategy which seeks to encourage consumption (incentives to consumers) and reduce costs (incentives to efficient producers). The New Right sees incentives stimulating competition and emphasises the the outcome-risk:

"Friedman stresses the importance of risk and uncertainty about outcome in giving incentive. There is no conflict between freedom and equality of opportunity, but much between freedom and the search for equality of outcome."

(Bosanquet, 1983:11)

In Government policies for VET between 1981-1991 incentives for producers have predominated; incentives for consumers have hardly featured. Indeed, some policy changes such as replacing HE student grants with loans can be regarded as disincentives to
consumers. Producer incentives have been used to undermine historical patterns of funding and to reward quality of outcomes rather than inputs. These initiatives have frequently involved risk for the organisations aspiring for funds and may result in fatal risk to some parts of the curriculum.

EFFICIENCY

I have discussed how Economy in the economic model hierarchy can be transposed to 'Affordability' as a determinant of demand. The second group of assumptions in the economic model relate to Efficiency, that is, value for money. For the consumer Efficiency is expressed through resource management and may involve competition for resources. Again elements of curriculum management are affected: what is the risk of the course closing from lack of (or collapse of) demand? Is the course over-subscribed and participation must be postponed? Does price reflect quality of environment, teacher qualification, size of group? Answers to these questions may figure in the consumer calculation of Efficiency. It is in this level of consumer assumptions that curriculum issues which have been generally grouped together as 'marketing' feature most strongly. Quality control and
quality assurance also impact on consumer estimates of value for money. Some providers of VET have placed marketing and quality systems in a pivotal role believing that consumer sovereignty predominates in this area of curriculum management.

EFFECTIVENESS

The third group of assumptions in this hierarchy of demand centre on Effectiveness. Effectiveness is the value-added by the transaction and relates to the cost-benefits of the exchange and evaluation of its utility. Economic utility can be defined as "the power or degree to which human wants are satisfied" (Dixon and West, 1988:25).

At the level of individual enterprises within the labour market, Effectiveness relates to adequate levels of skills, qualifications and experience compensurate with ensuring the vitality and flexibility of companies, in competition with others. At the level of individual students, Effectiveness covers a range of judgments about the utility of participation in VET and the added value of learning transactions. Utility and Value-added are likely to be subjective judgments encompassing a range of
motives, aspirations and outcomes which change with the individual's social and economic circumstances.

Evaluation of Effectiveness in the Economic Curriculum Model spans assessment of satisfactory relationships between the VET system and the economy as a whole and the degree of equilibrium which is maintained between the supply of workers and the demand for labour.

This chapter has examined economic concepts applied to Government policies affecting VET in the 1980s and early 1990s, and reached a tentative model for describing an economic curriculum based on Economy, Efficiency and Effectiveness. These qualities continue to underpin Government aims for public services. The Chairman of the powerful Public Accounts Committee recently told the House of Commons:

"With the advent of the National Audit Act 1983 we have had to consider questions of economy, efficiency and effectiveness. On economy, we must ensure that whatever the Government buy is bought with due attention to getting the best possible price and deal for the taxpayer. The Committee also considers efficiency - to ensure that the best methods are used - and effectiveness, which covers wider activities."

(Hansard 25 October 1993, Col: 592)

The next section (Part 2) gives an account of an empirical study conducted in 1990-91 into aspects of 2.58
the interface between VET provision and the labour market in London. The study was designed to test some of the concepts of the Economic Curriculum Model in action. The remaining chapters move from concrete analysis of training-in-action to evaluate the theories which have been used during the period to drive the debate about vocational education and training and the labour market. One of the elements of these policies - summed up as 'Thatcherism' is

"that it combined features of neo-liberal libertarianism as well as neo-conservative 'cultural rightism' which are by no means completely compatible, and are seen by some to be contradictory."

(Lawton, 1992: 2)

The contradictory elements of 'market forces' policies will be examined through their implementation in VET schemes.

Part 3 - Curriculum Frameworks - examines Vocationalism (Chapter 4); the search for a core curriculum (Chapter 5); and the evolution of a competence-based curriculum embodying economic features of occupational competence and observable performance (Chapter 6) which was expected to be a framework of educational entitlement for VET students irrespective of the institutional setting and

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structured on reform of vocational qualifications. These developments are analysed on their performance against the Economic Curriculum Model.

Part 4 considers the economic aspects of education and training systems and the workforce. Part 5 draws together the findings of the empirical study and the theoretical exploration and redefines the Economic Curriculum Model.
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET

AN ECONOMIC CURRICULUM MODEL

PART TWO

LONDON CASE STUDY
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

PART TWO: LONDON CASE STUDY

CHAPTER THREE: PLANNING WORK-RELATED FURTHER EDUCATION IN TERMS OF LABOUR MARKET INTELLIGENCE

THE CASE STUDY

Part 2 presents a report on an empirical enquiry, undertaken in 1990-91, which examined the dynamic relationships between VET and a segment of the labour market. The enquiry, in the form of a Case Study, was based on the Employment Department's Work-Related Further Education (WRFE) programme covering VET and the labour market in Greater London. My intention in carrying out the Case Study was to discover if evidence of training-in-action would support the theory of the Economic Curriculum Model. The enquiry was designed to test elements of the model and to yield new insights into the interface and interactions between VET and the labour market.

The WRFE programme was selected for the study because WRFE was the only Government initiative since 1981 to attempt directly to influence the provision of training in accordance with labour market intelligence (LMI). The Training Agency arm of the Department of
Employment had responsibility for ensuring coherence between the programme of publicly-funded work-related FE courses and the requirements of the London labour market. The WRFE programme operated by requiring the local education authorities (LEAs) responsible for colleges to agree planned course provision each year with the Department. Agreement was dependent on the LEAs' appropriate use and interpretation of labour market intelligence. Once agreed, the Training Agency released grants to each LEA against satisfactory quarterly monitoring reports.

The data collection was undertaken while I was employed as an FE Adviser at the London Office of the Department of Employment: Training Agency between January 1989 and October 1990. The study was an extension of an analysis collated in summary form for use by the Department (Blamire, 1990). Extracts from this summary, together with additional material collected for the Case Study is reproduced at Appendix 2.
THE REPORT

Introduction

1.0 The methods, results and conclusions of the Case Study are presented in report form; appendices referred to in the text, together with the sources used for the Study, can be found at the end of the thesis.

1.1 The Study analysed the WRFE 1990-93 Plans from 20 outer London LEAs and the Inner London Education Authority (ILEA) Planning Supplement for 1989/90. The WRFE Plans summarised local authority policies for FE, the consultation undertaken as part of the planning process, and their arrangements for monitoring and evaluation. The analysis examined the planned provision of work-related FE in the light of features of the London labour market. Changes in client groups, trends in the responsiveness of FE and efficiency as a whole, were indentified.

1.2 A document, Standards for Quality in Planning WRFE, describing the planning framework developed by the Department of Employment: Training Agency London WRFE team and agreed with LEA officers prior to the submission of the 1990-93 Plans is reproduced at Appendix 12 to illustrate the intended comprehensiveness and range of the WRFE planning process.

METHODS

2.0 The dominant method chosen was Case Study, it:

"aims to give a portrayal of a specific situation in such a way as to illuminate some more general principle" (Nisbet and Watt 1984:74)

The advantage of this method was that by focusing on a time-limited specific labour market and training area, insights could be gained about the general processes and interactions of training interventions. It was hoped that the Case Study would provide information not generally available and would make that information more accessible to other enquirers than
would otherwise have been the case.

2.1 The Case Study was not conducted as action-research because although I worked within the broad field of study in the data collection period, the research was not directed towards greater understanding and improvement of practice over time (Cohen and Manion 1984:41). My role in the study during the data collection period was akin to that of a participant observer (Hargreaves 1967) that is, I had

"access to information which would probably be denied to an outsider" (Nisbet and Watt 1984:75)

2.2 The constraints of the case study approach of specificity and lack of generalisation of results (Nisbet and Watt 1984:76) were minimised by use of survey techniques. The WRFE Plans were surveyed on common criteria and compared to national and local guidance for the content of WRFE Plans - see examples in Appendices 7 and 8. Surveys of national FE provision were used to complement the London data (see Appendix 3).

2.3 The use of criteria to assess the plans from 20 outer London LEAs and the ILEA plan was designed to overcome the difficulties reported in the evaluation of WRNAFE plans (the forerunner to WRFE) by the National Foundation for Educational Research (1990):

"Examining and comparing the plans and programmes proved to be a complex and time consuming exercise and some of the difficulties experienced in conducting the research were themselves illuminating. The following problems are therefore worth highlighting:

* Variations in format...
* Quality of data...
* Rhetoric and reality

Although the evaluation was concerned with assessing progress in respect of planning rather than in terms of provision, in practice a neat distinction could not easily be made."

(NFER 1990:2)

2.4 The NFER study, sponsored by the Training Agency,
focused on an evaluation of the planning process in 15 LEAs between the first plans (1987-88) and the plans for 1989-90. NFER used questionnaires plus textual analysis, to evaluate the plans against MSC/Training Agency criteria. The study limited its conclusions to recommending adherence to a common format and observations about the weakness of data, inadequate presentation and poor planning mechanisms (NFER, 1990). To a large extent the London plans for 1990-93 had overcome these weaknesses. However the information in the 1990-93 plans was complex and unstandardised, so the construction of criteria provided some measures of comparison.

2.5 The Case Study although mainly based on analysis of WRFE Plans, also included analysis of the impact of other initiatives, such as YT and ET on London's VET and labour market.

2.6 Case Study techniques included: analysis of documentation relating to WRFE Plans for Greater London in the period from the start of the NAFE agreement (1984) to production of the 1990-93 Plans; detailed analysis of the 1990-93 plans; analysis of London labour market intelligence; and surveys of background material drawn from Government statistics to verify the accuracy of WRFE Plan totals and to provide a comparative base for interpretation. Data were clarified and extended in discussion with members of the Training Agency WRFE team and officers of London LEAs.

HYPOTHESES

3.0 The Economic Curriculum Model proposes that:

an economic curriculum model for post-16 VET based on concepts of Economy, Efficiency and Effectiveness would improve coherence and Value-transference between VET and the labour market.

This provided the over-arching framework for the Case Study. The Case Study acted as an in-depth microcosm of the broader thesis and tested selected propositions.
3.1 The specific hypotheses for the Case Study were -

a) that planning WRFE provision taking account of LMI would increase the correspondence between training and the labour market; and

b) that the WRFE planning process would provide evidence to support a curriculum model based on Economy, Efficiency and Effectiveness.

WORK-RELATED FURTHER EDUCATION

Background

4.0 WRFE - (formerly WRNAFE) has had a low political profile apart from its notorious introduction in the 1984 White Paper: Training for Jobs (HMSO, 1984, Cmd. 9135). The White Paper called for increased responsiveness by VET to the needs of the economy and announced the Government's intention to transfer 25% of FE funding from the Department of Education (DES) to the Manpower Services Commission (MSC) and release it back to LEAs against approved plans covering all non-advanced college courses. The MSC already controlled some £90 million non-advanced FE provision through youth and employment training schemes. WRFE grants totalling £65 million in 1985/86 and £110 million in 1986/87 were transferred to MSC from the local authority rate support grant. By 1987 MSC controlled at least 25% of the funding for work-related FE in England and Wales (Neil and Miller 1989). The announcement took LEAs and colleges by surprise - and few in the MSC were prepared for the scale and speed of transfer. Later commentators were able to trace no less than 35

"references to key [Government] literature leading up to MSC involvement and ultimate execution of the scheme" from 1978 onwards (Lewin/APC 1987:23)

4.1 The announcement sparked off a furious, but futile, rearguard action by local authorities and educationalists to prevent what was seen as further aggrandisement by MSC who by this time were expanding Youth Training schemes largely outside mainstream provision (see Chapter 7).
"Criticism centred on the lack of prior consultation ..., the implied assertion that LEAs were unresponsive in their provision of work-related non-advanced further education, the transfer of resources from LEAs to the account of MSC and the intervention by Government in the powers and responsibilities of LEAs." (MSC/LAA 1985:3-4)

WRFE was seen as a

"break with established social democratic thinking" [which up to that time had] "characterised policy and decision-making processes in education" (Gleeson 1985:61)

The Association of College Principals described the hostile reaction as inevitable:

"No such radical revision of the local authority financial structure had been experienced since the beginning of the growth of what finally became the most important of local authority services - that of education" (APC/ACRA 1987:1)

4.2 The programme transferred to the Training Agency when the MSC was disbanded (because of trade union opposition to the Employment Training programme) and was transferred to Training and Enterprise Councils (TECs) in 1991.

4.3 After its stormy birth, civil servants launched a charm offensive - allied to tempting project funding - to persuade LEAs and colleges that the links between course planning and labour market intelligence (LMI) could be used to improve provision. A tripartite policy group, headed by Bryan Nicholson, chairman of MSC, comprising representatives of English and Welsh LEAs, the Commissioners for the Confederation of British Industry (CBI), Trades Union Congress (TUC), observers from the Department of Education (DES), Department of Employment and the Welsh Office, was charged with recommending detailed arrangements and funding structures for the initiative. The Policy Group's report in May 1985 fully embraced a co-operative model with power and prestige shared between the MSC and LEAs:
"...The Group [officer level working group] was unanimously convinced of the merits of the concept of the collaborative development plan. It would benefit employers and individuals through the opportunities for LEAs to provide, and for MSC to bring its labour market intelligence to bear upon, NAFE relevant to rapidly changing employment needs. It would also allow the two principle [sic] agents LEA and MSC, jointly to evaluate the outcomes and ensure their cost effectiveness" (MSC/LAA 1985:2)

4.4 The report recommended 3 year rolling plans, subject to annual updating and review, locally agreed between LEAs, colleges and MSC Area Manpower Boards. Funding would be at MSC's discretion and awarded in the light of satisfactory progress towards jointly agreed objectives (MSC/LAA 1985:16-23). In practice, funds were allocated to each LEA on the basis of the Government's Standard Spending Assessments (SSAs) with only very vague threats of withdrawal of resources even when LEAs failed to produce the desired plan. Sir Roy Harding, Chairman of the MSC/LAA Officers Working Group, writing in 1985 illustrated the frustration and potential felt by many educationalists:

"Instead of being continually involved in implementing cuts, you will be doing fundamental planning....

"David Bradshaw, secretary of ACFHE (the Association of Colleges of Further and Higher Education) recently wrote that this idea of programmes and plans is a significant development, not only in the short-term political sense - in that it resolves 18 months of paralysing deadlock - but because it provides a positive and potentially invaluable way of guiding work-related NAFE over the next decade." (FESC 1985:180)

4.5 When the first plans were produced in 1986 the Government put on a brave face about the poor quality of the plans and intensified the collaboration and partnership aspects of the initiative. Money top-sliced to pump-prime projects - the Central Reserve Fund - was renamed the Mutual Development Fund. The Government still faced considerable opposition to the
arrangements particularly from Labour-controlled LEAs.

4.6 The MSC recruited educational advisers - mainly ex-HMIs - to liaise between the LEAs, colleges and civil servants in an effort both to understand the FE field the Government was seeking greater control over and to convince educationalists that the scheme had merit. This tactic was only partially successful - many 'gamekeeper' advisers refused to turn poacher even when in the pay of the MSC - and much of the early planning process was taken up with distracting arguments about which courses should be classified as WRNAFE and therefore come within the remit of the new initiative.

4.7 However, as the programme settled down and lost some of its attendant hostility, the Government increasingly used WRFE to promote initiatives designed to modernise FE practices (such as student counselling and guidance) which, in themselves, were generally welcomed by educationalists. Such ideas were contrasted with DES activities which came to be characterised as centralist and hierarchical compared to the Employment Department's stance of co-operative flexibility (Finegold and Soskice, 1988) and was linked to the loss of influence and political clout of the DES (which had started with criticism of arcane practices and remoteness in the late 1970s - see discussion in Dale, 1986).

4.8 The Education Reform Act (1988) strengthened the WRFE process by prescribing 3 year rolling plans as part of the preparation for FE colleges to move to local financial management. By 1989-90 the WRFE plan had largely become a respected part of LEA / college management. Moreover, WRFE offered potential links with the new funding force: Training and Enterprise Councils which were then being established by the Training Agency. This period marked a partnership mode in which the Government sought to capitalise on centralisation and vocationalism in a more constructive relationship with local government. (Unfortunately, this attitude was patchy across Government as a whole and came to be overwhelmed by the introduction of the universally unpopular Community Charge "Poll Tax" in 1990.)
Training Agency Role

5.0 The MSC (and later the Department of Employment: Training Agency) fostered the new planning arrangements with a range of parallel initiatives designed to assist LEAs and colleges to translate LMI into meaningful messages about the type and structure of FE courses. The Government instigated a classification system for courses, the Training Occupational Classification (TOC), which coded courses into occupational groups (see Appendix 4). The TOC system was based on the classifications in the Standard Industrial Classification (SIC); this was later superseded by the Standard Occupational Classification (SOC). These codes were the basis of most labour market and occupational statistics used by the Government.

5.1 The problems of relating training to occupational skills were legion and the classification systems were revised continually between 1986 and 1989. Beyond the macro-occupational training levels used in TOC the problems of delineating skills within sectors of the labour market and within job-content remained. Essentially, there was little connection between the industries in which people were employed and the nature of their occupations - clerks and electricians worked in finance and banking industries, schools, health services, heavy industries etc.

5.2 Another major area of difficulty was defining and quantifying training needs as perceived by employers. The MSC developed CALLMI (Computer Assisted Local Labour Market Information System) based largely on sectorial surveys, to increase the accessibility of information about training needs as perceived by selected employers. Much of this work focused on surveys designed to identify skill shortages and recruitment problems in the boom labour market between 1987 and 1990.

5.3 By 1990 the Training Agency had assembled specialist teams in its regional offices to negotiate and agree WRFE plans with LEAs. The regional teams were supported by advisers and policymakers in the MSC headquarters at Sheffield.
5.4 The Training Agency grant was administered on a financial year basis and calculated on the number of FE students resident in each LEA. Details of the grants to London LEAs for 1990/91 are given in Appendix 4.

5.5 The Training Agency, as part of the Employment Department, provided LEAs and colleges with useful messages about the labour market which reached an increasingly receptive audience among FE staff. Lecturers and college heads of department had close links with local industry and LMI started to be used for marketing courses and developing the curriculum.

5.6 By the late 1980s the Government was concerned that the 1990s, which they liked to term the 'skills decade', would be constrained by the decline in the cohort of 16-19 year olds and skill shortages. The WRFE programme was seen as a useful mechanism for improving efficiency in LEA-managed FE and increasing the effectiveness of FE in meeting new demands in the labour market. During this period, the Training Agency had gained the initiative from the Department of Education and Science for innovation in vocational education and training. New initiatives such as TVEI and Education Business Partnerships were the responsibility of an expansionist Employment Department under Lord Young. This increasing influence was fuelled by the political correctness of 'new vocationalism' and the Government's strategies for diminishing the power of educationalists (teachers and their unions) and local government. Such policies derived directly from the Thatcher administration's espousal of Monetarism and free markets in public services. In a foreword to a Training Agency report on WRFE in London, the Training Agency Regional Director linked WRFE and TEC planning to the economy thus:

"The 1990s have been called the 'skills decade' as demographic and other labour market developments increasingly underline the importance of training in meeting the international competitive challenge. Further education colleges represent a major concentration of capital and human resources: they offer a wide range of training and retraining opportunities for people at all levels and all ages. In London, colleges now provide more than a quarter of a million work-related training
places each year meeting local, regional and national needs.

"There is a consensus on all sides about the importance of an efficient training system in tune with the needs of both employers and the individual.... I hope [the report] will be helpful to the Training and Enterprise Councils whose own strategic aims and priorities will depend so much on the existence of a responsive and effective education sector.... The potential of these new partnership arrangements is great indeed, and all of us have a responsibility to help ensure it is realised." (Blamire 1990:1)

Local Education Authority Role

6.0 The Education Reform Act (1988) placed a duty on LEAs to secure the provision for their area of adequate facilities for further education - (Further and Higher Education as defined by the Act included the education of adults, part-time and leisure studies). The Act required local authorities to plan education for those over the age of 16 living in the area, laid down a strategic role for the LEA and gave operational control to the Governors of schools and colleges. The transfer of powers was laid down in the Scheme of Delegation submitted by each LEA to the Secretary of State for Education (September 1989). Boroughs taking over from the Inner London Education Authority had up to September 1991 to submit schemes. The Scheme described how the planning would be organised and the method for calculating college budgets. The WRFE Plans analysed in this study were the first to be written to the Schemes of Delegation submitted to the Secretary of State for Education.

WRFE Planning

7.0 WRFE Guidance developed by the Training Agency and representatives of the local authority associations described two ways in which the LEA could identify the WRFE element in their wider post 16 plans:

a) Post-16 plan with identified provision linked to the needs of the local labour market; or
b) WRFE plan covering specific provision and showing how the plan complemented other post-16 provision.

7.1 Most outer London LEA plans described all work-related FE in any type of institution funded by the LEA. Five LEAs concentrated on provision in FE colleges for 1990-93 and intended to move to plans covering all post-16 provision in subsequent years.

7.2 The Training Agency Guidance (1989) required WRFE plans to cover three major areas: strategic overview, annual action plan and arrangements for monitoring and evaluation. The main headings to be addressed in each section were:

Part 1:
- Mission / vision statement
- Consultation
- Sources of Intelligence
- Strategy for Clients, Courses and Character of Provision
- Management Information and Performance Measures

Part 2: Action Plan for Forthcoming Year

Part 3: Monitoring and Evaluation

7.3 WRFE London Plans did not all conform to this pattern and some, often as the result of the process of validation of policy statements within the local authority, presented additional material and supporting documentation not required by the Training Agency.

WRFE Definitions

7.4 By 1990, WRFE described courses and activities in FE colleges up to GCE 'A' levels and Higher National Diplomas (HND) funded by local authorities (before incorporation of FE colleges under the 1992 Education Act) and non-advanced courses in Polytechnics and colleges of Higher Education. In many LEAs, WRFE included some, and sometimes all, the courses in Adult Education Colleges and Institutes. The planning process could also encompass Careers and Youth Services. WRFE provision included basic
education, examination and vocational courses, access to Further and Higher Education studies, and pre-vocational training. WRFE provision was available to those aged over 16 years not receiving full-time education in school.

7.5 WRFE courses could be fully subsidised, part-subsidised, at full local authority rates, or at full market cost. The fee policies of the ILEA and most of the outer London boroughs resulted in most WRFE provision in 1989-90 being either free (usually for basic and remedial education) or subsidised. Some colleges included fully self-financing courses in WRFE planning totals but these were not a significant number.

SUMMARY OF ANALYSIS OF WRFE PLANS

8.0 Extracts from my summary of the WRFE Plans (Blamire, 1990), together with additional commentary on the analysis and illustrative quotations from the Plans, are reproduced at Appendix 2. The results are itemised below.

Summary of the features of WRFE provision (1990):

* London provided 14% of the total FE, managed by nearly a third of the LEAs in England and Wales, with the London polytechnics teaching a high proportion of non-advanced courses.

* WRFE was offered by over 70 colleges and adult education institutes including a large number of specialist and monotechnic colleges.

* Participation rates were above the national average for 16 year olds in education and training. Participation by 16 and 17 year olds had improved by 3% since 1983/84. London had the lowest proportion of 17 year olds in part-time training.

* FE students were likely to be over 19 years of age, female, and studying business and general education courses. More men than women were released for training by their employers.

* Significant numbers of students studied outside
their home area and many were attracted to inner London colleges from other parts of the UK and abroad.

* Provision closely reflected the London labour market and was planned to increase by 3.3% by 1993, mainly in skill shortage areas.

* The Department of Employment: Training Agency London Office agreed around 250,000 training places annually with LEAs, of which over 50% were administrative, clerical, management support and general education.

* Provision was roughly split equally between full-time, part-time and evening courses.

* London's FE was more cost-effective than the national average both in the ratio of students to staff and the costs per full time student.

Summary of LEA Plans (1990-93)

* A consensus on the aims for FE was evident despite the variety of political, social and economic conditions in London.

* Consultation with a wide range of individuals and organisations was an integral part of policy formulation.

* LEAs recognised that the assimilation of intelligence sufficiently robust to support clear WRFE objectives and measurable targets required sustained market research.

* Increased participation and an expansion of the client group were major targets throughout London. Guidance, counselling and learner support systems such as grants, childcare and open access were important strategies to widen access to FE.

* Implementation of competency-based learning, including the modularisation of courses and assessment of previous experience was gaining momentum in most colleges.

* Education/business partnerships to improve the relevance of FE to the labour market and the needs of employers, and to increase the number of employees in

3.15
training were being formalised and extended.

* Close working relationships with TECs and employer groups were a priority for the majority of LEAs in London.

* Clearly defined systems and roles for monitoring and evaluation were in place in every LEA and each part of FE was developing quality assurance systems.

* Performance indicators were being widely introduced and used to support more subjective information in evaluating programmes.

(Blamire, 1990:6-16)

OTHER VOCATIONAL SCHEMES

9.0 Before reaching conclusions on the data provided by analysis of WRFE Plans (1990-93), I investigated other provision including YT and ET, some business support programmes and Compacts. Updated FE statistics obtained from other sources were also added. This material was included so that conclusions about the relationships between training and the labour market were better informed. Non-public sector provision was excluded — estimated to be about 4% of total provision.

Youth Training

9.1 In 1990-91 London had around 13,500 youth training trainees; about 4% of the national total at a cost of around £31 million. Figures given in 1993 show the total to have risen to about 18,000 (Hansard 18 May 1993 cols:130 - 132). This was lower than might be expected for the London labour market. Training Agency staff often explained the low take-up rates in London as due to the higher than average number of trainees with employee status, and the dominance of small firms (which were often reluctant to take trainees) in the occupational sectors that normally participated in YT in other parts of the country.

9.2 Qualification rates for YT trainees in London are generally lower than the national average (see Table 1 below). In comparison to the numbers in WRFE, the YT total is insignificant and has little impact on
training for the labour market as a whole.

Table 1

Youth Training % of Qualifications of Leavers who Complete YT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>49</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>Great Britain</td>
<td>56</td>
<td>67</td>
<td>68</td>
</tr>
</tbody>
</table>


Employment Training

9.3 London had around 23,000 trainees on ET in 1989/90. In the London TEC areas for the period between July 1989 and June 1990, between 43 and 53% of ET leavers completed the agreed training. The proportion gaining a qualification or a credit towards one, ranged from 12% (Islington and Hackney) to 24% (West London), the average was 18.7%.

9.4 The destinations of ET leavers 3 months after leaving the scheme in the period between December 1989 to November 1990 showed fewer London ET trainees in full-time employment (20%) than the national average (23%), fewer in part-time jobs (6% compared to 7%), and 51% unemployed compared to 50% nationally (Hansard 23 May 1991 cols: 631-632).

Compacts

9.5 The London Compact was the first to be launched under the auspices of ILEA in six East London schools in 1987. The idea was taken up by the Government and extended to 20 areas of England and all the inner London boroughs in 1990. A key element of the scheme was the guarantee of a job to all school leavers who reach pre-set attainment goals. Compact goals included attendance rates of at least 85%, punctuality and achievements in English and mathematics. Evaluation of the first year by the London Education Business Partnership and the ILEA indicated that the scheme had increased staying-on rates and instilled self-
discipline in students. Employers in the scheme acknowledged that jobs should be more closely aligned to the career aspirations of pupils staying on beyond the minimum age (reported in The Times Educational Supplement 19 May 1989: A14). The impact on employment rates in the first year was difficult to estimate because of the increase in the proportion of pupils staying on at school. Anecdotal information indicated that the recessionary labour market in 1990 discouraged employers from offering job guarantees and that this element was being replaced with a guaranteed interview for a job. On this limited evidence, Compact schemes were more effective in promoting positive relations between employers and schools than in preparing school leavers for the labour market.

Training Credits

9.6 The South London TEC area was one of 10 national pilot schemes for Training Credits in 1990-91. The scheme gave all school leavers access to vocational counselling and a 'credit' with a nominal value of 1500 to 'spend' on part-time training courses. The training had to be approved by the TEC and the trainee's employer. Discussions with TEC staff running the scheme indicated that take-up in the first year was adversely affected by the general increase in staying-on rates. In 1991 one in four school leavers in London left school without going into a job or training compared to the national average of nearly one in seven (Careers Service Annual Report 1991).

9.7 The scheme has potential both to steer young people into jobs with guaranteed training and to assist employers to tailor subsidised training to their requirements. London, with its range and quantity of training including centres of excellence in many occupational sectors, should be well placed to use training credits to overcome the traditional hostility to training in many non-professional occupations in the exceptional mobility of the London labour market.

Job Guarantee Scheme

9.8 The inappropriately named scheme offered unemployed adults a guaranteed job interview and was part of a range of Employment Service programmes which included Job Clubs and Restart. Its success rate in
placing people in jobs of 20% (Hansard 12 November 1992 col:901) placed it on a par with other ES schemes reported fully in Chapter 7.

Further Education

9.9 In November 1990 the aggregate number of full-time equivalent students studying in London's 46 FE colleges was over 91,500. The Government calculated the cost at a notional transfer of £366 million to the new FE Funding Council (Hansard 8 December 1992 col:564). This figure excluded the Training Agency subsidy for WRFE and expenditure by TECs on post-16 VET. I estimate that around £400 million was spent on FE in London at 1990 prices which seems good value for a key national labour market.

Adult Education

9.10 The abolition of ILEA in March 1990, led many commentators to predict the demise of adult education in the capital - ILEA's 'jewel in the crown'. Provisional figures for November 1991 (20 months after the inner London boroughs took over) indicated a loss of 20,000 places out of 220,000 (Hansard 12 January 1993 col:697). My own experience of ILEA figures was that they were not robust so these estimates should be treated with caution. In this context, curtailment of the influence and role of the LEAs may prove more important to levels of provision than the unified structure of the ILEA.

LONDON LABOUR MARKET

10.0 In 1990, the London labour market comprised three distinct labour markets: the central business area covering the cities of London and Westminster and associated business areas; general local labour markets in outer London and the county fringes; and specific local labour markets. Each had distinctive characteristics of occupational range, qualification level and catchment area for workers. The central area contained up to 70% of the total professional white collar support jobs in financial institutions, head offices and in the premier media, entertainment and tourism industries. London absorbed a quarter of all graduates to these occupations and the major public services of Government, local
government and health services.

10.1 In 1990 London had 12% of the UK population and 16% share of jobs. London's resident population was around 6.8 million of whom around 1.1 million had a head of household born in the New Commonwealth and Pakistan. The economically active population (employed, unemployed and estimated number of self-employed) was 4.3 million of whom around 200,000 were unemployed in April 1990. At this time there were over 340,000 vacancies notified to Job Centres and unfilled.

10.2 Over half of the jobs were in service occupations with nearly a third of total employment in Banking, Insurance, Financial and Leasing Services, 15% in Distribution and Repairs, 9% in Transport and Communications, Metal Goods/Vehicle Industries, and around 5% each in other Manufacturing, Hotel and Catering, and Construction (based on Standard Industrial Classifications).

10.3 26% of London workers worked in the four Boroughs of Camden, Hammersmith, Kensington and Westminster, and a further 9% worked in the City's 'square mile'. The other Boroughs had between 1.5% and 4% of the total workforce each.

10.4 Unsurprisingly 58% of the largest companies were in the 13 Inner London Boroughs, and the smallest firms were concentrated in outer and in East London.

Table 2

<table>
<thead>
<tr>
<th>Percentage of Employees by Size of Company</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies with 10 or fewer employees</td>
<td>14</td>
</tr>
<tr>
<td>Companies with 11 to 24 employees</td>
<td>12</td>
</tr>
<tr>
<td>Companies with 25 to 199 employees</td>
<td>35</td>
</tr>
<tr>
<td>Companies with 200 to 499 employees</td>
<td>15</td>
</tr>
<tr>
<td>Companies with over 500 employees</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Training Agency 1990:Key Statistics
10.5 The Central London Business Area (the City of London, most of the City of Westminster and adjacent business areas including Holborn, Bloomsbury and the South Bank) had a specialised metropolitan labour market of national, international or regional importance. Over 40% of these jobs approached, or exceeded, a quarter share of the national total of jobs in that industry. A breakdown of employment sectors of national importance is at Appendix 10.

10.6 Outer London labour markets were closer to the national profile of construction, production and service industries employment closely related to the structure and strength of local consumer demand. The separate and distinct labour markets around Heathrow airport and the Croydon commercial centre supported a more complex range of skilled jobs in aeronautical and financial sectors. Specific local labour markets, such as the significant rag trade in East London, mainly catered for less mobile, less well trained sectors of the workforce. Groups such as the unskilled, disabled and women seeking part-time employment predominated in local-level labour markets. Occupational support services such as transport links and child care were shown to be major determinants of participation in VET and the labour market. A comparison of central and outer London labour markets is at Appendix 11.

TRAINING FOR THE LABOUR MARKET

11.0 In 1990, FE courses in London covered all but two (Fishing; Mining, Oil Extraction and Quarrying) of the 17 categories of the FE Training and Occupational Classification. A list of TOC(FE) categories and the distribution of places is given in Appendix 4.

11.1 More than half of the planned courses were in administrative, clerical, management support and general education. A comparison of planned WRFE places and skill shortages reported by the CALLMI survey are shown in Table 3 below.
Table 3  
(Source: Blamire, 1990:12-13)

WRFE PLACES BY TRAINING OCCUPATIONAL GROUP 1990/93 000s

<table>
<thead>
<tr>
<th>TRAINING OCCUPATIONAL GROUPS</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration, Clerical and Management Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,290</td>
</tr>
<tr>
<td>Creative, Educational, Recreational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29,500</td>
<td></td>
</tr>
<tr>
<td>Health, Community, Personal Services</td>
<td></td>
<td>15,700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling and Storage</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific</td>
<td>6,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel &amp; Catering, Food Preparation</td>
<td>6,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural and Related</td>
<td>1,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport Operating *</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction &amp; Civil Engineering</td>
<td></td>
<td>17,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicles, Repair &amp; Maintenance</td>
<td>4,800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing</td>
<td>3,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Education</td>
<td></td>
<td></td>
<td>63,100</td>
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<tr>
<td>Processing</td>
<td>2,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td>26,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 40% IL  
54% OL  
6% London Institute & Polys

**KEY**  
31% Inner LEAs  
61% Outer LEAs  
7% London Institute & Polytechnics

Source: WRFE Plans 1990-93  
Total Places = 246,000

CALLMI SKILL SHORTAGES

- A: Administrative & Clerical 34%
- B: Creative, Educational, Recreational 3%
- C: Health, Community, Personnel Service 5%
- D: Selling & Storage 11%
- E: Scientists/Technologists, Lab. Workers 0.4%
- F: Hotel and Catering 2%
- J: Transport Operating 1.5%
- K: Construction 14%
- P: Motor Vehicle Repair and Maintenance 2%
- R: Printing 1.9%
- T: Security 0.02%
- W: Processing 9%
- X: Electrical, Electronic, Mechanical Engineering 16%

PERCENT

3.22
11.2 Although Skill Shortages reported by employer surveys are only an approximation of training requirements, the Table shows that WRFE places show a fairly strong correlation with Skill Shortages in most categories. A shortfall in Selling and Storage (TOC D) training places may be attributable to the lack of YT trainees in London to take up these places.

11.3 Skill shortages are difficult to quantify. The Department of Employment: Training Agency LMI Unit estimated that of skill shortages leading to difficulties in recruitment or loss of productivity, around 34% were in administrative and clerical occupations, around 16% in electrical, electronic and mechanical engineering, 14% in construction industries, 11% in selling and storage occupations and the remaining 25% across most occupational sectors.

11.4 It should be pointed out that labour shortages may be due to low wages and unattractive conditions. The number of unrecruited jobs due to lack of suitable applicants may also be underestimated because firms reduce production standards or promote workers internally who do not have the desired qualifications and skills.

11.5 The most significant determinant of declared skill shortages is economic activity. In periods of rising economic activity - such as the period covered by the Case Study - skill shortages were perceived as a major constraint. When economic activity declines - as it has done markedly since 1990 - skill shortages tend to disappear.

11.6 In 1989-90 when the WRFE plans for 1990-93 were being prepared, a shortage of administrative/clerical support workers was general throughout London. Buoyancy in office development, compounded by a tight housing market attracted a high proportion of workers from outside London into administrative and clerical jobs. Many London LEAs planned to increase training provision in these occupational areas to benefit the local population. In this way the local economy would be boosted and the general upward wage trend necessary to attract commuters could be slowed.

11.7 The proportion of training between inner and
outer London boroughs (65:35) roughly equated with the distribution of the population. The unusual position of the City with a large day-time commuter population and almost no residents, was reflected in the provision of one primary school and no FE facilities.

11.8 Creative, education and recreational training accounted for 12% of total provision, reflecting the labour market in visual arts, education and leisure occupations. Similarly, training for the health, community and personal services sector was quite strongly represented at 6% of total provision. Some of this provision was occupational-specific courses in colleges with reputations as national centres of excellence.

11.9 Outer London's economy was strongly orientated towards consumer demand. Retail/wholesale distribution, catering and personal services were examples of buoyant local industries with recruitment difficulties in the late 1980s. These frequently reflected full employment conditions and low pay rather than any marked need for complex skills. Here additional provision tended to be concentrated in YT/ET but there was some scope for WRFE interventions, particularly for returners to the labour market.

11.10 The analysis shows scope for provision designed to support enterprise and self-employment but most LEAs found this difficult to provide. Financial support and advice was available to participants on the Enterprise Allowance Scheme which supported new businesses for 12 months. Single-person enterprises and companies employing a handful of workers were difficult to provide training for because of difficulties in releasing personnel. A few colleges, notably Ealing, had experimented with courses for Asian business men where some cover for training could be provided by family members.

11.11 The public sector, in local government administration and the health and education services, also had a very substantial share of labour. These sectors were under pressure to cut costs and make optimum use of existing workers. However, in London the level of staff shortages across this whole spectrum of occupations was frequently very high.
because wages were not generally high enough to support travel costs. These sectors had well-developed training provision largely organised within the occupational sectors and, apart from local training of ancillary workers, there was not a role for FE colleges.

11.12 The restructuring of manufacturing industry was associated with a substantial loss of unskilled jobs. During the 1980s redundant skilled workers also moved out of manufacturing either through retirement or because they lacked transferable skills. The net result at the end of the 1980s was a shortage of skilled workers in both engineering and processing. A shortage of maintenance and service engineers in the tertiary sector was also emerging. These problems were frequently marked in outer London because of its larger share of manufacturing industry.

Unemployment

12.0 The greatest change in the supply and demand features of the London labour market since 1990 has been the rise in unemployment. By March 1992 Greater London had an unemployment rate of over 9%. By the end of 1992 the annual economic review published by the London Chamber of Commerce was forecasting a loss of a further 100,000 jobs by 1994. Job losses in London between 1990 and 1993 were considerably above the national average. Unemployment in London increased by 140% compared with 88% nationally.

12.1 Rises in unemployment in the 1981-83 recession were accompanied by an increase in the workforce (through additional workers and part-time jobs). The 1989-93 recession combined increased unemployment and employment loss of around 8% in south east England.

Limitations of the Case Study

13.0 In adopting a Case Study approach, I acknowledged its limitations of specificity and selectivity. On the first weakness, the specific character of London's labour markets, LEAs and colleges means that conclusions cannot be automatically extrapolated to other areas. However, the diversity of the London labour market and the richness of VET

3.25
provision, provides a broad canvass that includes most of the features to be found in other areas.

13.1 On the second point of inappropriate selectivity, it is evident that the WRFE planning process was undertaken with incomplete data on courses and students, inconsistent definitions of WRFE between LEAs, and shortcomings in local labour market intelligence. All of these factors contributed to an inbuilt selectivity in the data analysis. I attempted to mitigate this by widening the Case Study to include surveys of national statistics and corroborative data from national sources and extending the data to provision outside WRFE.

13.2 The study excluded any aspects of enterprise training or initiatives - itself a fascinating area of Government policy. The Government spends around £250 million a year on enterprise programmes (Hansard 1 May 1991 col:231).

13.3 Over and above these weaknesses in the WRFE planning process there are unsubstantiated areas in the economic model. I have claimed on the value for money data that economy and efficiency are expected to be achieved. There is insufficient data as yet to show this to be the case over longer timescales or as a direct result of the planning process. For example, a recent audit of Further Education colleges in England and Wales found much needs to be done to establish quantitative measures of performance in terms of examination results, course completion rates and employment destinations of FE students (Audit Commission HMSO 1993).
CONCLUSIONS

The Case Study evidence showed that the WRFE planning process undertaken by London LEAs and colleges and supported by the Department of Employment: Training Agency was thorough, progressive and co-operative. The process involved a wide range of contributors in Government, local government, education institutions, unions and advisory / research organisations. The process also involved employers and employers organisations to some degree. The establishment of TECs in London should significantly enhance the contribution of employers to WRFE planning.

London LEAs, irrespective of socio-political make-up, strongly embraced themes of equity, entitlement and co-operation in their aims and plans for post-16 VET. LEAs showed a commitment to the goals of increasing participation in VET and access to lifelong learning for all who wished to benefit. LEAs were cost-conscious and committed to increased economy in the delivery of VET. Most LEAs accepted that funding and support should be based on measured results across a range of quantitative and qualitative indicators. The adoption of performance indicators and targets, and achievement of competitive unit-costs, indicated the considerable
effort being applied to achieving economy, efficiency and effectiveness.

The study showed a correlation between planned training and labour market intelligence. VET provision related to a varied range of data on the labour market, employers' requirements and student preferences. There was evidence of collaboration in areas of London sharing the same broad economic and labour market profiles. Labour market intelligence was used at appropriate levels of decision making and broadly corresponded with planned provision for the metropolitan, suburban and community labour market areas. The process of strategic planning was robust enough to provide a confident basis for planning and funding work-related FE and showed promise of improved accuracy in the medium term.

The Case Study showed the diversity of the labour markets in London and the marked effects of the economic cycle on skill shortages, unemployment and training. In periods of economic buoyancy, the demand for training is fuelled by optimism that deferred wages will be compensated for by long-term economic benefits. This may lead to a qualifications spiral.
In a recession, the demand for training is fuelled by unemployment. Training, including work experience, may be restricted in a recession by the reduced availability of work placements for trainees. The proposition of D'Iribane and Silvestre (1986) that the labour market is shaped by training seems borne out by the Study.

The overall pattern of training provision was geared to the occupational profile for workers with non-advanced qualifications in London's labour markets. There were gaps in provision, particularly in electrical and electronic engineering and some construction trades. The difficulties for individual LEAs of providing resource-intensive provision highlights a need to co-ordinate financial planning across the region as a whole. The present system of funding on the basis of student numbers in each LEA could be supplemented by Government assistance for regional or national training. The TECs as a regional group could co-ordinate this with the assistance of sectorial groups such as the Engineering Council.

The co-existence of vacancies and unemployment cannot be explained only in terms of a mismatch between the
skills and experience of unemployed people and the type of vacancies. At least a third of vacancies in the period of expansion in the labour market in the mid 1980s required no previous knowledge or experience. Failure to recruit for these jobs was due to the unattractiveness of their terms and conditions not to a lack of suitable recruits.

Unemployed people in London were frequently well qualified with academic qualifications and experience of skilled employment above the national average. On the other hand, up to half of the longer-term unemployed people were unqualified and up to 10 per cent acknowledged literacy and numeracy problems.

Provision for adult education in the first year of management by the successor LEAs to ILEA did not have a marked effect on work-related training (although in discussions some LEAs indicated that rationalisation and cutbacks were being considered for future years). However, the provision overall largely benefitted Londoners who took up 85 per cent of provision and over 90 per cent of part-time day courses. Very little provision was taken up by non-residents even though the workforce was recruited from a 100 mile
radius around London. There is scope also for provision targeted at employees, particularly women who receive less employer-sponsored training than men, and for scheduling courses in workers' free periods (including late afternoons) to increase training in the workforce. Such innovations would require new marketing strategies in order to reach a new clientele. In addition, provision for occupational updating could be developed more strongly in outer London close to where commuters live. Some colleges such as Newham and Croydon who recruit large numbers of adults across all courses have shown this to be successful but it needs to be more widely developed, particularly in west and north London.

Despite the limitations in the research, the investigation has exposed some of the interlocking relationships between training, the economy and sectors of the labour market. I conclude that there is sufficient evidence in the analysis of WRFE Plans, VET statistics and labour market intelligence to support both hypotheses:

a) that planning WRFE provision taking account of labour market intelligence increases the correspondence between training and the labour market; and

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b) that the WRFE planning process provides evidence to support a curriculum model based on economy, efficiency and effectiveness.

The first hypothesis is weakly supported because the wide range of other variables and the incomplete nature of the data are an unsound basis for strong claims. The second hypothesis is more strongly supported. I conclude that further attention to planning systems, particularly computerised management information systems, improved communication and understanding of labour market intelligence and continued support by Government agencies for the principle of aligning post-16 VET planning to LMI, would more strongly support the hypothesis in the future.

The conclusions could be strengthened by further work. For example, the study of occupational and spatial labour markets in relation to the profile of training and trainees could identify the interactions of actual movements of supply and demand. It could be significantly productive to examine the real-time influences on occupational profiles, the economy and worker qualifications. This work might usefully link with other research such as that by Green and Owen.
ways this Case Study could serve as a pilot for more comprehensive work.

As a final comment - and with some irony - I report that at the end of this Case Study which has shown the value of the WRFE process, the Government's commitment to programmes that directly link VET with LMI has all but withered on the vine. As part of the Government's wider objectives to increase the responsiveness of FE colleges to market forces through less control and intervention by local government, the Education Act (1992) removed 6th Form and FE colleges from LEA control from 1 April 1993. So the WRFE planning process which was already weakened by fragmentation to smaller units when the programme passed from the Training Agency to TECs in 1991, has lost the pivotal focus of local authority-wide planning for the whole population with the removal of LEA influence. It remains to be seen if Ranson's (1992) view that the contribution of LEAs is indispensable:

"A local structure, therefore, is needed to help secure a national education system of the highest quality, accessible to all and meeting their educational needs. It should enable the statutory tasks and provide the necessary support services so as to allow for the benefits of economies of scale."

(Ranson 1992:88)

is yet to be discovered by the Government.

3.33
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET

AN ECONOMIC CURRICULUM MODEL

PART THREE

CURRICULUM FRAMEWORKS
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

PART THREE CURRICULUM FRAMEWORKS

CHAPTER FOUR VOCATIONALISM

The three chapters comprising Part 3 examine curriculum frameworks from an economic perspective and develop the concepts and terminology of the economic curriculum model.

The first chapter starts by reviewing definitions of curriculum in the literature including social policy frameworks and Monetarism. This sets the context for examining curriculum developments since 1981 in terms of the impetus for vocationalism in the curriculum and organisation of the education/training system. The effect of market forces policies leading to consumerism and the 'demand-led' curriculum are discussed. The second half of this chapter examines the primary focus for vocationalism since 1981: the increasing influence of employers allied to the transfer of training policy and control of resources to employer interests. The chapter ends with an extension of these developments into consideration of the structure of the VET curriculum and the labour market.

4.1
Chapter 5 describes the efforts to define and establish a common core post-16 curriculum linked to the search for a national structure for intermediate training that could be readily replicated locally. The development of core skills in the National Curriculum for schools is examined in the light of developments in YTS, TVEI and other intermediate training programmes. Comparisons are drawn between vocationalism and the post-16 academic curriculum and links made to an andragogical - pedagogical theoretical framework. The exploration of developments in the core skills curriculum leads on in Chapter 6 to examination of the theory and practice of the competence-based curriculum seen by the Government as an essential mechanism in the delivery of a vocational curriculum designed to meet the requirements of the labour market.

Policy Directions

The Government's 1981 White Paper: The New Training Initiative - An Agenda for Action (Cmd.8455) set an urgent and radical agenda for vocational and educational training (VET) encompassing skill training, preparation for and entry to working life
and wider opportunities for adults (MSC, 1981: 4). The Government proposed that the VET curriculum should offer transferable skills, norm-referenced through agreed occupational standards, progression and economic relevance. This curriculum should be available at all stages of working life, accessible by those with a range of educational attainment and delivered through classroom, work and home-based activities. The Agenda rejects the human resource planning approach and former proactive policies of providing for future needs in the economy (Kenney and Reid, 1990: 297). The New Training Initiative (NTI) gave rise to the Youth Training Scheme (YTS) which Gleeson observed was the

"most notable difference in curriculum terms...away from the development of analytical skills to a preference for 'doing' and activity-based learning...the replacement of general and liberal education by basic skills and personal effectiveness training" (Gleeson, 1989: 31).

The impact of NTI initiatives, and those that followed during the 1980s, will be examined in Part 4 in terms of the role of Government interventions in the post-16 curriculum. By contrast, the 1991 White Paper: Education and Training for the 21st Century (Cmd. 1536) postulates a systems approach and largely ignores
curriculum issues. During the 1980s the Government in pursuing vocationalism, introduced an extended unified structure for vocational qualifications (NVQ), increased employer influence on the education/training system, strengthened careers and training advice for school leavers, and set goals for increased participation in further and higher education. In the 1990s, the Government intends to extend institutional independence to all schools and colleges to further an internal market (HMSO, 1991a Cmd.1536:5). Between 1981 and 1991 Government policies have steered changes in the curriculum by ascribing a central role to vocationalism and the instrumental purposes served by the VET curriculum. How far and how deep these policies have penetrated will be considered next in the light of post-16 curriculum models that had currency in the late 1970s and early 1980s.

Curriculum Definitions
Much has been written about the dimensions and perspectives of curriculum including its scope, purposes, content, influences and ideologies. Definitions range from the "manifest or public curriculum" (Becher 1985) to the "hidden curriculum" (Jarvis 1983:246-7). The first definition covers the
public courses or educational programmes of an institution, the second deals with the mores, attitudes and underlying assumptions from which the curriculum derives. Between these two poles, the term 'curriculum' is commonly used to describe all the activities of the (educational) organisation, and more narrowly to define specific courses or subject areas. Other terms include the official (laid down in syllabi) and actual (what is taught) curricula, and the formal (mandatory subjects) and informal (voluntary activities) curricula (Kelly, 1982: 8-11). For the purposes of this research, the curriculum is defined as: the activities, inputs and outputs offered to students. This definition is not restricted to educational institutions since VET activities may be offered in the workplace and in training venues outside educational institutions. The definition also covers the supporting elements linked to VET activities such as publicity and recruitment, the management of duration, timing, course structure and media, and learner support systems such as childcare. I see all of these activities as inextricably linked to the content and outcomes of the VET programme and the pattern of participation.
It is of particular interest to this discussion of the effects of market forces on curriculum policy and the model I am developing to focus on vocationalism. Education has always been predicated on its economic value (Kogan, 1985:21). Vocationalism has long been an overt feature of the FE curriculum (Esland, 1986). It has also featured, at least at a tacit level, among Adult Education professionals (Griffin, 1983:139) who acknowledge the vocational motives underlying the participation of adults in educational activities. The curriculum for most OECD countries in the post-war period has become increasingly vocational (Parkes, 1985:159) through external influences and processes of internal modification. The focus on vocationalism has operated against a background of other curriculum determinants such as institutional forces, professional interests and political ideologies (Jarvis 1983, 1985, 1987). The new feature of vocationalism in the 1980s in UK Government policies for schools and post-16 VET is the juxtaposition with 'market forces' ideologies for the structure and organisation of VET.

It is not part of this discussion to examine
curriculum theories which focus on learning styles or the power relations between teacher and taught. I am also not attempting to describe the content of the curriculum except insofar as new subjects such as enterprise and social life skills for example, throw light on the Government's intentions about the purposes of VET. Much of the curriculum theory debate in the literature focuses on schools, (see Kelly 1986, for example); this is of interest insofar as it relates to the case for a core curriculum for post-16 year olds and the arguments about progression between school, VET and employment. What is interesting is that very few commentators have considered the demands of the labour market in any way significant to curriculum theory.

Post-16 Curriculum Models
The process-based, Further Education Unit (FEU) curriculum model which focuses on the structure and planning of learning experiences has had a persuasive influence on post-16 VET (Parkes, 1985:165). Its emphasis on aims and objectives; design; implementation; and evaluation (FEU, 1981) has exerted an influence on VET - particularly in FE colleges - in
a number of ways. The model legitimises practical and active learning and encourages the recognition that the conditions of the learning process are as important to the outcomes as the content. It encourages integration for vocational studies linking preparation for work and life roles. FEU research has also been influential in the search for a core curriculum for post-16 VET and these developments have run parallel to Government initiatives such as TVEI (Technical Vocational Education Initiative) for 14 - 18 year olds in schools and colleges (Chapter 5 describes the development of core skills). TVEI has encouraged mainstream teachers to adopt active learning styles for the presentation of classroom topics and broadened students' experiences outside the classroom through vocational activities. Many initiatives by Government during the 1980s, such as Project Trident and SCIP (Schools Curriculum Industry Partnership), were also designed to give 14 - 19 year olds work experience and to involve employers in school education as a means of ensuring a technical and vocational curriculum. The FEU focus on curriculum design has given rise to diversification through modularisation, open and distance learning and project
work as integral parts of the delivery of the curriculum. The FEU model encourages the use of evaluation as consequence and antecedent in curriculum planning. A modified view centres on determining the motivating factors and intellectual requirements of students (FEU, 1984). Although Chadwick (1984) suggests that these factors should be assessed for

"not only individuals...[but also] any educational requirements that commerce and industry..may have for employees" (FEU, 1984:89),

the learner-foci dominate. The FEU model is limited by its concentration on learning process and fails to address the purpose of the activity other than within the confines of motivational theories. Kelly (1986), a self-confessed empiricist/pragmatist (page 237) argues against a content-based model which is heavily dependent on defining objectives (and the attendant problems of this approach), and for an epistemological approach to curriculum development in schools, but sees the FE curriculum as essentially empiricist and specialist (Kelly, 1986: 104,146). In FE the relationship between the economy and education has been seen as rather more straightforward than is the case in the school curriculum. Traditionally, FE courses are specific to the needs of local employers,
premised on full employment and limited to a narrow range of occupational strata (Esland 1986). However, even if the simple relationship of direct supply of young recruits to the demand of the labour market exists, it cannot be assumed that there can be a simple interpretation of the FE curriculum. There are moral questions to be addressed about exploitation of young workers in dead-end jobs, about role and gender stereotyping, about unhealthy consumption engineered through advertising and about work processes that are dangerous to individuals and the environment. There are also pragmatic questions about the breadth and depth of the curriculum and its links to school learning and higher education.

"Further education cannot paper over dichotomies between factory and community, or discrepancies between private gain and public good: high sounding phrases have a hollow ring for the young worker. Nor can further education be charged with the task of doing what primary and secondary schools fail to do." (Carter, 1963:129)

The 1980s have brought these issues even more sharply into focus.

A social policy approach has prevailed in adult education curriculum theory by explaining the curriculum as an instrument of welfare capitalism (Griffin 1987), social justice (Watts (1983), and
class stratification (Finn 1987a). For Jarvis, the curriculum for adults divides on classical and romantic distinctions. These derive from the orientation of the curriculum as 'education from above' or 'education for equals' (Jarvis, 1985: 45-55). None of these frameworks adequately encompass the 'politicization of educational policy' in the 1980s (Raggatt and Weiner, 1985: 5), or a resource-led structure.

To begin to unravel the vocationalism of the curriculum in the 1980s, it may be best to start with some basic propositions about post-16 VET. That is: participation is non-statutory; the curriculum is not centrally prescribed; its organisation spans educational and non-educational organisations; its delivery and assessment are not governed by statute. At the most basic level the adult curriculum can be seen as a causal effect of several people coming together to study a subject (Newman 1979). However seductively simple this may seem, I have shown in Chapter 2 that the economic pressures of price-cost made overt by consumerism and demand-led funding, mean that a non-statutory curriculum may be suppressed or
generated by economic conditions.

The absence of a nationally defined curriculum for adults has encouraged the development of strong liberal-welfare belief systems clearly articulated at local level. The failure to articulate a national debate about state funding for adult education can be seen as a major cause of the failure to establish the case for a statutory framework (Griffin, 1987) and in the context of vocationalism it is pertinent to consider possible reasons for this. The 'invisibility' of VET for other than school-leavers in apprenticeships encouraged benign tolerance, and even pride, at local government level which facilitated the growth of adult education throughout the 1970s and 1980s. However, the drive for vocationalism in the education/training system in the 1980s increasingly led the Government to regard work-related skills (however defined) as the responsibility of employers and provision for learning 'leisure interests' as the responsibility of the individual (HMSO, 1991a Cmd. 1536). With the exception of state support for literacy, numeracy and English as a second language, some pre-16 examinations and some higher education entry
courses, all other education for adults is perceived as outside the public domain (HMSO, 1991a, Cmd. 1536). A market mechanism whereby demand for learning will ensure supply of provision is held to be sufficient. Griffin (1983) examines this from perspectives called, by Titmuss (1974), 'residual welfare', 'industrial achievement-performance' and 'institutional-redistributive' models of social policy. Residual welfare models hold that individual needs are properly met through the private market and the family. The welfare state is essentially negative and does not encourage healthy individualism (Griffin, 1983: 107). Moreover, it is claimed that producers can have excessive influence in extracting subsidies, which in turn limits the scope of the Government to make "an effective response to the problems of poverty" (Bosanquet, 1983: vii). Put as baldly as this, the case against social welfare would seem perverse: it is prey to unseemly pressure for support thereby preventing the state's real supportive role. This was a dominant theme in the early years of the Thatcher Government (1979 - 1990) and extended to policies for industry, de-nationalisation of public utilities and restricted welfare support in health.
education, housing, public transport etc. In summary, the New Right opposes a 'nanny-state' on grounds that such dependency weakens the economy and usurps the right of individuals to determine their own lives.

The industrial achievement-performance model of social policy delineated by Titmuss encourages meritocracy as a basis for social policy:

"This incorporates a significant role for social welfare institutions as adjuncts of the economy. It holds that social needs should be met on the basis of merit, work performance and productivity. It is derived from various economic and psychological theories concerned with incentives, effort and reward, and the formation of class and group loyalties" (Titmuss, 1974:31 quoted in Griffin, 1983:108).

In this model, support should be available for those who merit it but the power of bureaucrats is increased. Griffin draws attention to the unintended as well as the intended effects of legislation in social policy:

"Modern versions of the market model project administrators, bureaucrats and professionals as likely to constitute sources of control. Professional 'needs-brokers'...are likely to be implicated in processes of control and intervention in the lives of individuals. The interests of the individual as consumer can only be met by professionals on the basis of market economics: the supply and demand principle." (Griffin, 1987:55).

Again the role of professionals and their influence
has been a recurrent theme in the Government's drive for market-forces conditions to prevail in public services. The third welfare model of providing:

"universalist services outside the market on the principle of need" (Titmuss, 1974: 31 in Griffin, 1983: 108)

has been in retreat since the 1970s and is unlikely ever to be fully embraced by Governments mindful of the rising costs of welfare. A weak version of the redistributive model may be achievable. Samuel Brittan argues that there is

"nothing incompatible in wanting to extend the use of competitive markets and at the same time to support a generous measure of redistribution and provision of 'public goods'. This is ... the social market economy" (Bosanquet, 1983:vii).

Some Government curriculum initiatives, for example those designed to change educational expectations and achievement for women returners to the labour market and the adult unemployed have shown elements of redistribution of educational chances and resources. The Replan and Restart programmes for unemployed adults were in part concerned with vocational curriculum development for adults within the context of a 'learning society' rather than an 'employment society'. However, most of the training schemes and organisational changes set in train by the
Government during the 1980s have come within a monetarist framework (see Chapter 2) rather than a 'social market' policy.

Monetarism and the Curriculum

Much of Government policy since the 1981 White Paper has aimed to change structures of provision to establish an internal market and economic individualism throughout the education and training system. Firstly, the Government has wished to remove regulatory restraints on the supply of students. Measures include open enrolment for schools and establishing alternative suppliers (City Technology Colleges and cross-boundary recruitment). Open enrolment removes restrictions on parents' choice of their children's school and is intended to have the effect, as market forces are applied, that good schools will be fully subscribed (and given the means to expand to meet demand) and less popular schools (now equated with poor schools) will atrophy. With every school teaching the National Curriculum with associated standardised tests and the requirement for schools to publish their aims and results, parents should be able to make an informed choice. Competition
is further encouraged by removing the powers of local authorities to select children on the basis of catchment area. The enterprise of individual institutions is given free rein with schools, colleges and polytechnics allowed to opt out of local government control. The Government intends that, by 1995, the only establishments still controlled by local government will be small Adult Education Institutes. In one of the most controversial of the Government's programmes, City Technology Colleges (CTCs) were established in 1986 in direct competition with existing state schools for students and resources. CTCs were set up to attract sponsorship from industrialists who were expected to influence the curriculum and ensure that vocational attitudes and learning prevailed. By this policy the Government deliberately encouraged an internal market in the state school sector with large employers sponsoring schools. This policy has prevailed even in a contracting 'market'. That is, CTCs and centrally controlled grant-aided schools have been encouraged even where the cohort of students is diminishing. In some areas, this has played havoc with local education authority plans for a phased run-down of surplus
school places. It must be questionable whether the creation of additional places where demand is reducing could ever be the result of the operation of the 'market'. In a commercial market - even that for private education - it is difficult to see how a business case could be made for additional places where the existing suppliers have a shortage of customers.

Other changes by the Government to the organisation and funding of schools, colleges and universities use fiscal policies to underpin competition and vocationalism through the introduction of local financial management, formula-funding and incentives for corporate wealth creation. At the same time monetarist policy dictates that public subsidies should be reduced and that 'funding should follow the customer'. This has been pursued by limiting the revenue-raising powers of local authorities through rate-capping and community charge capping and by changing the basis for allocating funds to institutions. Formula-funding based on the number and type of student places and type of provision is now the norm for Further, Adult and Higher Education.
institutions. Funding for VET is increasingly tied to achievement of performance targets based on examination results, employment rates or a mixture of performance targets. Targets may cover the number of students, type of courses, staff: student ratios and number of qualifications gained. These reforms are sweeping away funding based on historical grant allocations and driving the curriculum to serve consumer choice.

Demand-led Curriculum

The monetarist policies which have attracted most fire from curriculum theorists in the 1980s have concerned the relationship between market forces and demand. Monetarism holds that the market must be the most efficient determinant of provision. The opposing view argues that consumer demand is an imperfect measure by which to determine the supply of VET. This is in part an argument about the inability of the aggregation of individual choices to result in a coherent whole. Left to market demand, individuals may underprovide for themselves - in this model, overprovision fails to be sustained, or may only provide goods and services that are of immediate use. The point here is that
consumer demand is disparate and unco-ordinated and cannot provide any kind of curriculum balance other than that of supply and demand.

The problem facing curriculum managers is how far economic curriculum models can successfully replace social and educational models or a balance between market forces and minority interests (Jarvis, 1983). Jarvis uses Lawton's distinction between classical and romantic curriculum models of adult education as a way of considering polarities in aims, content and teaching method. He argues that questions about the control of learning activities and outcomes are crucial to maintaining the learner's critical awareness and respecting his humanity (Jarvis 1983: 228). Shackleton (1989) arrives at the conciliation of learning activities and outcomes through achievement-led curriculum policies and institutional organisation. In her model a new set of "learning (curriculum) principles" embody recurrence, advocacy, flexibility, empowerment, personal achievement, visibility and learning support (Shackleton, 1989: 103). These principles translate into an institutional
organisation which is driven by the right of learners to achieve at a time, place and manner of their choosing. A central delivery vehicle for the 'achievement-led college' is competency-based vocational education and training and the TVEI entitlement curriculum (Shackleton, 1989: 107). Chapters 5 and 6 look in detail at these models in terms of core skills and competency-based qualifications. But what is interesting about the achievement-led curriculum in this context is its attempt to define balance by the roundedness of the learner's 'demands and rights'. These are given as the right to learning irrespective of time, place and prescribed method; the right that assessment should be continuous, visible and on demand; the right to a range of support, development and certification services according to needs, aspirations and circumstances. Curriculum balance is to be achieved through meeting every need, demand and right of the learner (Shackleton, 1989). Jarvis postulates ten elements that influence the curriculum offered to adults: philosophical, sociological, social policy, perceived demands, psychological theories, resources, advertised programmes, actual demand, actual curriculum and

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evaluation. The outcome is a particular programme of courses which must attract students to be viable (Jarvis, 1983). These views are not mutually exclusive and in a curious way vocationalism has encouraged the consumerist elements in both models to be main determinants of the curriculum for children and adults.

Fluctuations in supply and demand for labour (and conditions of declining growth and loss of international competitiveness) have been perceived as opportunities to change the prevailing culture and distribution of power by changes to the organisation, structure, curriculum and outcomes of the education/training system. Many of the Government's interventions since 1980 have aimed to change a 'welfare culture' into a 'market forces' culture where education and training providers compete in an 'internal market' and students have 'consumer choice'. Political values concerned with promotion of a free market economy between individuals, education/training institutions and employers have driven a range of policies for funding, curriculum, training and organisation of VET with the dominant rationale.

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of unfettered supply and demand regulating the system. The dominant values promote economic individualism and the freedom of choice for individuals with 'buying' power. Earlier discussion has pointed to contradictions in policies encouraging economic individualism resorting to centralist features to enable the Government to implement deregulation. For example, the policy of local financial management of schools and colleges aimed at giving institutions free choice over provision of education services (maintenance, inspection, curriculum support and teaching), control of resources and management at the level of the smallest viable unit, had to be managed through central control of these elements. The Government's 'opting-out' policy does not permit schools to form cluster groups to protect the range of enrolment currently possible in an area under LEA control. On a general level of education / training structures and organisation, the FHE Funding Councils control institutional funding and provision, replacing the dual system of local and central Government control of funds (although of course the Treasury continues to control the quantum of public money spent on the education and training system) and control of
provision by education professionals. This does not replace professional control with consumer choice (which might be a desirable aspect of the market model), but removes these decisions from democratic control by elected local or central politicians. Ultimately freedom of choice is controlled and determined by the Government.

The positive face of consumerism is that a demand-led curriculum may emerge which combines customer satisfaction, quality assurance and organisational stability. Consumerism is leading to more attention being given to customer services, such as educational guidance and 'after-care' services. The concepts of marketing increasingly prevail in provision for adults in colleges and institutes. This involves market research to establish when, where and at what price, courses can be expected to recruit. Course evaluation is likely to include the views of course participants and to lead to changes in future design. Management initiatives such as total quality management (TQM) and quality assurance mechanisms such as the British Standard No. 5750 which are increasingly being adopted by colleges, arise from consumerist curriculum principles. Most of these initiatives can have a
beneficial effect on the quality and responsiveness of VET. But the overall direction of the curriculum by consumerist principles gives rise to management of fluctuating supply and demand conditions which are affected by the context in which VET courses are offered.

These variables include the characteristics of the 'consumer', and the economic, social, political and legislative conditions of the 'market'. Definition of the 'consumer' will change over time and in different educational settings. Consumers may be individuals, parents, communities, employers, sponsors or Government. Consumers may be defined in a variety of contexts: as learners engaged in acquiring qualifications or other learning experiences; as fee-payers in an exchange relationship where actual or supposed benefits are exchanged for services; as sponsors buying a product at an agreed price; and as investors in an opportunity-cost relationship where current investment is expected to realise future profit. The over-riding condition of the demand-led curriculum is the mechanisms of supply and demand and their state of balance. The effect on the curriculum
may be uncontrollable change. An example of this in the foreign languages curriculum occurs when levels of affluence rise and new holiday destinations become fashionable producing increased consumer demand for foreign language courses. Supply may be held down by lack of institutional resources. Conversely, demand may drop in a recession or with a change in popular second-home / holiday locations, leaving the institution with expertise and equipment unused. Changes in legislation also affects demand. To continue an example in the foreign languages curriculum, the 1992 Acts creating a single European market may stimulate workers (or employers) to demand courses in European languages. If only beginner courses in languages recruit large numbers of students and more advanced levels are withdrawn, students may not choose to participate in the limited range of courses on offer and may not enrol in the public sector at all. On the other hand, for provision for the workforce to become fluent in European languages to be available in advance of demand as a result of public policy (as is the case in Wales in promoting the Welsh language), requires intervention in the market. Without access to financial and other
resources to invest in future demand or to have a cushion against falling demand, it is difficult for organisations to manage a demand-led curriculum. A demand-led curriculum can only be sustained by a programme that is responsive to the market forces exerted by the consumer, achieves financial targets and furthers the objectives of the organisation. Failure to achieve any one of these could lead to a downward institutional spiral that will threaten to destroy policies, programmes and jobs. The twin risks of a demand-led policy are that populist provision may produce an imbalance which makes the curriculum unsustainable, and conversely, that fluctuations in the curriculum may make consumerist principles unsustainable.

The Employer-Led Curriculum

The first part of this chapter has examined the effects of vocationalism on the curriculum in the light of a range of curriculum models. The remaining sections look at the strongest influence upon the vocational curriculum in the 1980s and 1990s: the role of employers.
Strong links can be demonstrated between industrialisation and changes in education and training.

"The notion that education should have economic relevance and vocational purpose, as well as a concern for the personal development of the individual, has been present throughout the history of state education in the UK. Industrialisation necessitates the formal and institutionalised education of young people in 'relevant' skills and competencies, prior to entering the labour market." (Esland, 1986:7)

Esland goes on to say that the tension between vocational and personal education found some resolution in human capital theory (Schultz, 1970) which linked the development of the individual with the good of the economy. In a decade famous for alternative life-styles, flower-people and the general realisation of affluence in post-war western culture, Schultz's theories struck a chord, matching the rising aspirations of adults for prosperity and a consumer society while retaining enough of the puritan work-ethic to espouse improvement as a private and public good. Such sentiments brought into focus the role of employers which had been steadily developing since the first World War. Esland describes employer involvement in education and training from 1914 to 1939 as 'entrepreneurial' and exemplified by
educational progressives such as Cadbury who extended the employer's role into an all-embracing paternalism. The good employer provided health care, housing, social welfare and education for workers and their families. Moreover, such practices were seen to be profitable in fostering and maintaining worker-loyalty and in boosting output. This phase was followed by a 'collective' style with the emergence of interest groups formed by educationalists (for example, the British Association for Childhood Education) and by employers (Federation of British Industry - the forerunner of the CBI) that would become influential in the debate over the curriculum that was to follow almost unabated for fifty years. A third phase from 1945 onwards is characterised as incorporatism:

"involvement [of employers] has become so deep... a process of colonisation leading to the incorporation of education for industrial ends"

Esland (1986:11)

Esland sees incorporatism most markedly in higher education, but with the transfer of responsibilities for post-16 VET to Training and Enterprise Councils (TECs), control by employers over the VET curriculum will be far-reaching.

These phases have occurred against a background of
steady economic decline linked to failure of the education / training system to respond to technological and other post-war changes. An almost despairing sense of inadequacy pervades the commentary on education and training by the end of the 1970s. The 'Great Debate' inaugurated by the then Prime Minister, James Callaghan in a speech at Ruskin College, Oxford in 1976, articulated the unease felt by politicians. Two main themes sprung from the debate: one ascribed economic failures to the "British disease" with culturist/ normative causes (see for example, Wiener, (1981) and the other theme took a largely economic and political perspective. Esland dismisses the cultural argument as "oversimplified, reductionist, ethnocentric and teleological" Esland (1986:15). The more popularly persuasive economic perspective has been seen as conferring legitimacy on the right of industrialists to influence Government training strategy. The Labour Government's industrial strategy between 1976 and 1979

"had the effect of conferring an unprecedented degree of educational legitimacy on industrialists" Beck (1983:225)

Whatever their perspective, few commentators have disagreed with Esland's summary of the malaise
affecting the British educational system:

"the steady decline of UK economy...failures of education system...slow development of a technical education; the dominance of examinations, which reinforce the higher status of academic values over practical skills; the valuing of pure science over applied science and engineering; the lack of support for 'enterprise'; a lower level of recruitment of graduates into industrial management as compared with the UK's competitors; inadequate marketing skills, stemming from national insularity and negative attitudes towards foreign cultures and languages... the belief that the culture of the UK is biased against its manufacturing industry and attaches higher status to agriculture, finance and the professions."

Esland (1986:12)

Political / economist theorists did not lay the blame for decline at the door of the education system. Other factors commonly cited include: changes in the organisation of labour with the rise of multinational companies and their trading patterns; heterogeneous needs of industry (differing scale, importers/exporters, monopolies and duopolies, national versus multinational) and the influence of the money markets. However, the pattern of response commonly adopted by successive Governments has focussed on preparing children and young adults for working life through the involvement of employers in education / training systems. From the mid 1970s onwards economic uncertainties fuelled criticisms of
schooling as unrelated to economic life and increased the clamour for vocationalism. Numerous Government papers exhorted schools to contribute to creating wealth (Mueller Committee, 1977), to help children appreciate how the nation earns and maintains its standard of living (DES: Education in Schools, 1977a), to teach economic competence (HMSO, 1977b: Curriculum 11-16) and to inculcate an understanding of industry and technology (HMSO, 1979: Finniston Report). The Department of Trade and Industry responded to the Finniston Report by funding computers in schools and Local Collaborative Projects (LCP) involving FE colleges and local companies. These early initiatives set a pattern of projects funded by local /central Government and industry, providing teachers, organisers and budgets for equipment and training, with the aim of fostering positive attitudes towards industry and introducing industry-related materials into the classroom. For example, the Department of Trade and Industry did much - with meagre funding judiciously placed and matched by contributions from industry - to raise awareness of the practical assistance (such as computer equipment) that industry could give with its Schools Council Industry Project
(SCIP 1978). The early model was not radical in concept. It continued an approach based on reciprocity (if it's good for schools, it will be good for employers) and vocational pairing (if teachers and employers are asked to undertake tasks together teachers will begin to share employers' attitudes about the vocationalism of education). The methodology of early initiatives included pump-priming grants to create new posts of teacher/co-ordinators with the function of liaison between schools, local education authorities and local employers. These initiatives were used by schools to extend the curriculum by opening up workplace visits to children and bringing employers (and their gifts) into schools. As the economy expanded during the mid 1980s and the decline in the number of school leavers made employers aware of a tighter labour market, companies increasingly saw the commercial, social and educational benefits of educational patronage which they often equated with fostering good community relationships.

In FE links with employers had been in place for years with most courses, departments and curriculum assessment bodies including employer representatives on their supervisory committees. However, the 'new
vocationalism' sweeping through schools in the 1980s breathed new life into these relationships and encouraged the Government to give employers direct responsibilities for education / training policy, organisation and resources. At the level of Government and corporate industry, the abolition of Industrial Training Boards (ITBs) and employers' statutory training levies following the 1981 Act, typified a period of passive voluntarism in which the Government and employers' organisations exchanged advice about training policy but, with the notable exception of the Manpower Services Commission (MSC) and all its works, little structural policy change in the relationships between state control of education/training and industrial demands for the labour market occurred. By 1988, this was changing into a policy of active direction and control by agencies at arms-length from Government departments who had previously both set policy and managed funding and organisation of delivery. At first this was achieved by replacing public sector representatives with employers on college governing bodies in legislation in the Education Reform Act 1988. This was quickly followed by the 1988 White Papers (Cmd.316 and 4.34
which proposed the creation of employer-led companies (Training and Enterprise Councils) to take over previous Government functions for the provision of post 16 education and training. Perhaps this was because of a natural affinity between a Conservative Government and employers - particularly employers' organisations such as the Confederation of British Industry (CBI). Perhaps it was because the recession in manufacturing industry which had displaced a significant sector of the traditional labour market in the early 1980s had given way to inflation and a boom service economy in which unemployment was rapidly being displaced by skill shortages as a major political issue. It was certainly influenced by the Prime Minister (Margaret Thatcher) wishing to minimise union influence on sectors of public policy and when the unions gave notice of their withdrawal from the tripartite MSC, the Government seized the moment. Whether the movement towards employer control of policy, funding and delivery of post-16 training is described as incremental vocationalism or as a more radical switch to allow market forces to prevail, the Government set a challenging agenda. Kenney and Reid (1990) point out, employers
"tend to have an indifferent, or possibly paternalistic, approach to training ... they generally regard legislative attempts to reform industrial training as unwarranted interference in the operation of their businesses. Indeed, it was largely due to pressure from employers that the activities of the Industrial Training Boards were restricted (by the 1973 Act), and, following the 1981 Employment and Training Act, that most of the Training Boards were disbanded" (Kenny and Reid, 1990: 266)

Anecdotal evidence of the indifference and ignorance of employers to training initiatives is perhaps overplayed and out-moded. Many employer representatives have regrouped into Industry Training Organisations (ITOs). There are currently 126 ITOs

"representing the training interests of around 85 per cent of employees in the UK. Ranging from The Biscuit, Cake, Chocolate and Confectionery Alliance to the Security Industry Training Organisation Ltd to British Waterways, they cover most industrial, commercial and public sectors" (Employment Gazette, September 1993: 388)

The launch of TECs and LECs (Local Enterprise Councils in Scotland) showed no shortage of employers willing to volunteer to take over the Government's role for formulating training policy and delivery of schemes. The Secretary of State for Employment reported to Parliament in November 1992 that

"£2.6 billion is administered by 1,300 businessmen (sic) in charge of training and enterprise councils. They are used to working with the resources that they have" (Hansard, 3 November 1992, col: 138)
At the same time, these employers and organisations such as the CBI have publicly expressed dissatisfaction with what they see as the Government's withdrawal of both commitment and financial support for skills training. TEC directors' grievances have largely focussed on budget cuts (at a time when unemployment - and the training clientele - are increasing) and on the restrictions (in their view) of petty bureaucracy. The latter complaints stem in part from employers' unfamiliarity with the frameworks for accountability in the use of public funds, but also reflect irritation with civil servants who hoped to continue to control policy from behind the scenes. There is some evidence for employers' interest in training provision in a Joseph Rowntree Foundation report (1991) into the effect of the new unified business rate on relationships between local authorities and businesses. The research found that employers look to local authorities to provide strategic development and provision of training as key elements of support for business development. This finding again underlines the public perception that central and local Government should be responsible for the infrastructure of training as a public good that
should not be left to the altruism or accident of private benefactors.

By 1990, a Training Agency report catalogued the major 'education / business partnerships' as TVEI (1983), Industry Year and Industry Matters (1986), Enterprise and Education Initiative (1988), Foundation for Business Education Partnerships (1989), Compacts (1989), Enterprise in Higher Education (1989) and Training and Enterprise Councils (1990) (Nuttall, 1990: 7). There were other schemes aimed at interactive links between schools and employers not mentioned by the Training Agency document. These included Science and Technology Regional Organisations (SATRO) which, with backing from the Government and around a dozen of Britain's largest companies, provided visits to develop science and technology programmes and computer-based work simulations; and TRIDENT which funded co-ordinated work-experience exchanges for teachers and industrialists to design school exercises based on industrial materials. Employer involvement was extended still further as schools / industry advisers were appointed in schools and education departments
with TVEI (1983 - 1993) funding and a range of 'enterprise' and work-experience activities were promulgated even for primary school children. The Compacts initiative (1988-1992) attempted to use employer influence to enhance attendance rates, time-keeping and motivation in inner-city school children. Under the Compacts scheme local employers signed compacts with schools offering 'job guarantees' (in practice, this was usually a guaranteed interview for a job) to children who achieved target levels of attendance and qualification. All of these schemes were overtly attempting to vocationalise the curriculum through funding targeted on the manipulation of relationships between educationalists and employers. The schemes were designed to promote education with a work-ethic and interactive interfaces between schooling and working life. The dominant aim of the schemes was to create, foster and direct a new interface between schools and employers designed to translate experiences of the labour market into the curriculum.

The City Technology Colleges (CTC,1986-) initiative, was launched to broaden the influence of employers on
the curriculum through the organisation and sponsorship of schools. The Government legislated for employers to set up, fund and administer new schools which would be outside the jurisdiction of local education authorities. Individual firms were to be able to provide capital for new schools (and could adapt and take over the sites and facilities of existing schools) and determine a vocational and specific work-related curriculum in return for promotion of the company's brand name and image. As well as direct curriculum control by employers, the CTC initiative also embodied other important areas of Government policy including challenging local education authority monopoly of state-controlled education; widening parental options in choice of school; and introducing competition between schools for able children and resources. In the event, employers have not proved eager to fund capital projects and the CTCs that have been established have required up to 90 percent Government funding to attract 10 percent funding from industry. Fewer than 20 CTCs (the Government's original target) have been set up in 6 years. A relaunch of the scheme in 1993 watered down the original concept to 'employer-
participation' along with other local interests. In softening their approach the Government has been forced to acknowledge the public antagonism to CTCs by major employers such as Shell and BP who see the scheme as educationally divisive.

Vocationalism, Training and Enterprise
By 1990, schemes promoting links between employers and schools and colleges were burgeoning to the extent that the Government became concerned about duplication and overload on employers. An interdepartmental policy review in 1990 resulted in most of the schemes being brought together under the auspices of the Employment Department and a rationalisation of initiatives before responsibility for 'education / business partnerships' passed to Training and Enterprise Councils (TECs).

TECs (and LECs in Scotland) were introduced as the main delivery mechanism for the Government's Youth and Employment Training and business/education partnership schemes in the 1988 White Paper: Employment for the 1990s (Cmd 540). By April 1990 the first 10 TECs were under contract to deliver Youth Training, Employment Training and Business Growth
Training (BGT 1990) - a short-lived consultancy funding scheme to assist employers to write 'training plans' and the precursor to Investors in People (1990). By mid 1991, 82 TECs and LECs covering England, Wales and Scotland had responsibility for the intermediate training curriculum including Work-Related FE and Training Credits. Initially, TVEI was the only major programme controlled by the Employment Department to resist hand-over to TECs. This was in part due to the separate empire and lines of command with the Department that TVEI enjoyed, and in part due to the planned finish for the programme by 1993. The budgets controlled by TECs amounted to £2.1 billion in 1992-93 (Hansard 18 February 1993 col:342). This represents an unprecedented transfer of state responsibilities for education and training policy, functions and resources from Government to unelected, private individuals. The Times newspaper Leader article of 9 August 1990 pressed for complete autonomy for TECs to determine training in these terms:

"In a perfect market economy, all training would be provided and paid for by employers. Here, an imperfect market has failed to deliver... The economy would grow faster, and with lower inflation, were the square pegs to be sent to the
workshop so that they fitted round holes. It is this combination of market failure and public good that justifies the spending of public money on training...

The only measure of the success of a training scheme is that it equips as many trainees as possible with the skills needed to find a good job. Employers are uniquely qualified to determine what those skills should be. But if they are to run local training schemes, through the new TECs, they should be trusted to assess what skill shortages need to be addressed in their area, not forced to spend earmarked money on earmarked schemes."

The Times 9 August 1990

These views were echoed by the Secretary of State for Employment, Michael Howard, writing in the TEC Director in 1990:

"Local planning and delivery will mean more effective and efficient training, education and enterprise services tailored to meet the needs of particular localities. The skilling of Britain has to be a key priority. TECs have a crucial part to play in mobilising employers' support for and participation in training and enterprise which will benefit themselves and the country."

TEC Director, 1990, No. 4: 5

And yet the tensions between private freedom to organise and spend according to the TEC/LECs' wishes and public planning and accountability sit uneasily together in this regime. The attempt to minimise conflict by staffing TECs with the civil servants who formerly ran the Employment Department programmes appears to have been successful in educating TEC boards about probity and accountability. There is also

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some evidence of entrepreneurial activity and commercial attitudes in the procurement and organisation of training programmes. What is less evident is signs of transformation of the relationship between the education/training system and its institutions and labour market requirements. The questions to be asked are whether such a transformation is feasible with this structure for employer involvement and, more fundamentally, what is the nature of the desired transformation? These questions go to the heart of this study of the interaction between VET and the labour market; they surface in London case study (Chapter 3) and are further examined in Part 4.

This discussion has shown that while projects to increase vocationalism in schools through employer involvement concentrated on changing the curriculum, changes in vocational education / training throughout the 1980s were changing the organisational relationship between employers and the education / training system. The former models for employer involvement in the education system of 'entrepreneurial' (1900-1920s) with benefactors such as Cadbury and Rowntree, 'collective' (1930-1960s) through the
Federation of British Industry and other employers' groups, and 'corporate' (1970-1980s) sponsorship activities especially in HE (Esland, 1986) were giving way first to passive voluntarism and then to hegemony. Elements of former styles remain. For example, City Technology Colleges built with endowments from industrial benefactors continues the tradition of entrepreneurial benefactors; the continuing influential role of the CBI in setting targets for qualifications echoes an industrial collective phase; and sponsorship of education projects by large companies such as BP and Shell gives examples of corporate activity in education independent of local authorities. The new element is the dramatic change of direction and relationship between the post-16 education/training system, Government and employers through the switch of leadership and control of post-16 VET from Government to employers. The hegemony vested in TECs is complemented by dilution of the role and powers of LEAs - to the point where, under legislation planned for 1994-95, local authorities will no longer be required to have education committees. The rationale for abolition of local education authorities is the parallel policy intention

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that, by 1995, all schools will be independent of local authority control and directly administered and funded by the Government. The incorporation of schools would complete the process whereby all HE institutions became incorporated bodies in 1990 and all FE and 6th Form colleges become self-standing institutions in April 1993. The Education Act 1986 and the Education Reform Act 1988 paved the way for a separation of the funding and control functions of local authorities in respect of schools and colleges and replaced their representation on governing bodies with industrial/commercial employers. The switch of funding for part-time FE from local education authorities to TECs under work-related further education (WRFE) and the Training Credits scheme gives employers direct control over all intermediate training.

Education, Social Structure and Employment

Government reports from 1977 to 1981 sought to define the perceived dissonance between education, training and the labour market in terms of the social values and relationships of the education system and those of
work (see for example, a Department of Education (DES) report on educational policy and industry's needs in the 1980s (HMSO, 1981b). The debate hinged around the polarities of education as a civilising cultural influence and therefore a 'private good' and education serving the instrumental ends of the economy and the labour market and therefore a 'public good'. The liberal view held that education has value as much for its non-economic as for its economic contribution. Early vocational specialisation, it was argued, results in an under-educated work force unable to respond to demands for higher level skills or industrial restructuring (Dale, 1986). Financial rewards, job-satisfaction and success in the labour market may be outcomes of a successful education but should not determine the curriculum. The opposing view held that education should be preparation for working life across the whole spectrum of the labour market. The curriculum should provide general and vocational skills, work-experience and direct routes into employment. The monetarist view goes further and sees the educational establishment as organised producers exerting destructive power in protection of their own interests. Such power exerted by producers leads to
politicisation which is the antithesis of a naturally ordered free market and puts pressure on Government to intervene in the self-regulatory processes of the market. This view argues that consumer interests are best served by the operation of market forces which results in a responsive, self-regulating curriculum. The interests of organised producers are therefore always contrary to the interests of individuals (Bosanquet, 1983:12-17). The effect on the curriculum of employer-led curriculum policies has been increasing pressure for vocationalism (some marginal defence of the status of a non-vocational curriculum has formed a resistance to vocationalism in some quarters, notably among radical adult educationalists). Some pressure to resist vocationalism may also arise naturally from the professionalisation of education. The development of a professional class brings in train delineation of a professional body of knowledge and the definition of professional standards and practice. This encourages the separation of theory from practice and elevates theoretical learning at the expense of applied learning. While acknowledging the tension between a general education and vocational training in terms of
timing and content, Dale links these issues to political motives:

"[the] dangers of early specialisation in vocational training... makes the workforce less likely to have the flexibility needed in the future. Others give political reasons - they value a broad education for its own sake, or as much for its non-economic as for its economic contribution to pupils' lives" (Dale, 1986:52)

Dale starts to tease out some important strands of the dilemma when he suggests that

"The problem of how to bring education and the economy closer together cannot be separated from an analysis of both the education system and the economy (especially the occupational structure) as a whole." (Dale, 1986:53)

Analysis of the education system shows a pyramidal structure with the most highly qualified attaining the highest status, working conditions and rewards (Husén 1986). Social relations are often 'collegiate' rather than strictly stratified into occupational groups. Relationships are predominantly active within peer groups with few non-peer networks or functional tasks. The professionalisation of education both in the training and working conditions of teachers encourages a professional interest in maintaining the separation of theory from practice and bolsters the status of the academic curriculum at the expense of the vocational. Thus the general academic curriculum
matches the structure of the education system which promotes hierarchical values and prepares entrants for employment into professional occupations. Only Further Education is presently stratified in ways which reflect general labour market structures. FE colleges recognise craft, mechanical, technical, general and professional structures. The FE curriculum is delineated into agricultural and land services, production and construction, manufacturing and service industries. However, even in FE these demarcations are blurring with the common pressures of the demand-led curriculum. The academic structure is not mirrored in the labour market. Labour market structures only very loosely correlate with qualifications (see Chapter 9), are stratified by gender, class and occupational group, and frequently require non-peer functional relationships. The labour market has few unifying professional interest groups (except for associations representing the professions which are more likely to mirror the academic structure). Trades unions previously provided inter-company and sometimes intra-industry, representation of sectors of the labour market but this function has largely disappeared with the decline in union
membership and the demise of closed-shop agreements. Workers generally have more occupational mobility inside and outside the labour market than academics and teachers whose individual careers may not be incremental. The sociological inference from this is that structures in the education system should change to more closely reflect structures in the labour market. From a political viewpoint, it is necessary to consider several fundamental questions about this proposition. First, what is a replicable structure in the labour market; second, could change in the education system reflect such a structure; and third, would such change have beneficial outcomes. Tentative answers to these questions are explored in the analysis of the interfaces between the education/training system and the labour market in Part 4.

Summary
Government policies in the 1980s and 1990s have attempted to restructure the education/training curriculum using three major models: monetarist, centralist and consumerist. The monetarist model focusses on the freedom of the market to determine structures, outputs and costs. Examples of monetarist
policies changing the structure of education / training are local financial management for schools and colleges, open enrolment for schools, institutions opting-out of local government control, resources allocated against specified performance instead of grants, and measures for economic individualism such as student loans replacing grants. Centralist policies include: the National Curriculum in schools, externally-imposed curricula through employment and youth training schemes and the Technical Vocational Education Initiative, national profiling and records of achievement. Consumerist policies include access for new client groups; curriculum determined by market analysis, market share and cost-benefit analysis; employers as 'customers' directing and controlling FE colleges and TECs. In many ways these models can be summed up as vocationalism in a context of market-forces and economic principles applied to the structure, organisation and curricula of post-16 education and training.

Vocationalism has become dominant in curriculum initiatives for schools and post-16 through changes to the structures and funding of VET. The main force for vocationalism is the rising influence of employers.
Some elements of previous models of employer involvement including 'entrepreneurial', 'collective' and 'corporate' can be seen in some aspects of curriculum initiatives during the 1980s. However, these models have given way to a phase of passive voluntarism in the early 1980s followed by hegemony in the 1990s. A radical shift in the transfer from Government to TECs of policy, delivery and resources for all intermediate training and TVEI has swept away all vestiges of social policy models prevalent in the 1970s and 80s. The process of the transfer of power to employers has been complemented by policies designed to encourage an internal training market fuelled by consumerism. Curriculum management through consumerist principles may introduce a welcome recognition of customer preferences, but also carries complex risks. The fluctuating conditions of consumer preferences, economic choices and social, political and legislative change present uncontrollable variables. The demand-led curriculum may be unsustainable in these conditions.

Finally this chapter has considered some of the arguments for congruence between the social structures
of the education / training system and the labour market and concluded that the case is unproven. This area will be looked at again in the section on the interface between VET and the labour market in Part 4.

Having given an overview of vocationalism and curriculum frameworks, the next chapter in this section moves on to look in detail at core skills. Core skills are important to the debate about vocationalism because the Government and many educationalists in the 1980s expected that a core skills curriculum would form the conceptual and practical bridge between VET and the labour market. How far these aims were achieved and their intended and unintended outcomes are considered next.
This second chapter in the section on curriculum issues examines the concept and definitions of core skills in their various manifestations in VET initiatives since 1981. This follows on from the overview of vocationalism and the increasing role of employers in post-16 curriculum policy described in Chapter 4. The chapter starts with the search for a core skills curriculum linked to establishing a national intermediate training scheme. In the second half of the chapter, the relationship between core elements in the national curriculum for 5-16 year olds and post-16 academic and vocational curricula are considered and features of the economic curriculum model in relation to core skills are identified.

A General Training Programme

The advent of national youth and adult training schemes following the 1981 Employment and Training Act and the publication of *The New Training Initiative* (MSC, 1981 Cmd. 8455) immediately posed questions about the content of training programmes. On the one hand
the Government and many industrialists were critical of the standards of basic skills in school leavers. On the other hand, the introduction of a national intermediate training scheme (YTS) required a readily replicable curriculum for entrants to the labour market. YTS was designed to be delivered by structures - and trainers - that were set up alongside the education / training system. It was a nationally directed scheme, locally delivered. The wish to introduce a competitive alternative to traditional VET and the need for practical solutions to setting up a large youth training scheme rapidly, fitted into the Government's overall objectives for vocationalism and a VET curriculum and structure dictated by market forces. One of the perceived solutions was to base the curriculum of the new scheme on core skills. Such a core skills curriculum would be closely aligned to the requirements of the labour market for literate, numerate and socially skilled workers. The market-forces philosophy of the Thatcher Government (1979 - 1990) required a curriculum that served the requirements of employers, ensured that young workers possessed basic skills and introduced competition for trainees and resources into publicly-funded VET.
There was, in any case, something of a vacuum of curriculum ideology in post-16 VET. The idea that there should be a core of skills or common learning opportunities for the 16-19 age group had started to emerge with the prototype schemes of youth training at the end of the 1970s (FEU 1982). In the rapidly changing conditions of the labour market following the 1976 oil crisis (restructuring of manufacturing industries and rising unemployment), transferable core skills could be seen as a means of equipping individuals to meet the changing needs of the labour market efficiently and flexibly (Silver, 1990: 121).

Existing models such as apprenticeships or theoretical training based on job analysis were unsuitable for a large-scale, generalist youth training programme. Apprenticeships based on time-serving absorption of manual skills through observation and imitation of a master were too closely linked to restrictive labour practices. Job training analysis, which had been encouraged by Industrial Training Boards (ITBs) and led to company training in isolated, unrelated elements of a task, was seen as even less appropriate to a restructured labour market (Kenney and Reid, 1990: 153-5). It was, after all, the perceived
failure of such time-honoured methods that had led to the abandonment of apprenticeships and the current training crisis. The 1981 Employment and Training Act gave powers for the restructuring of ITBs and led to the concentration of Government policies for post-16 VET under the auspices of the Manpower Services Commission (MSC).

"MSC was set the task - never before attempted in peace time - of linking the problems of manpower planning and supply with an integrated national training provision." (Kenney and Reid, 1990:294)

In response, the MSC organised a range of special programmes, developed the provision of employment-related services and began a number of projects concerned with the interface between training and the labour market - for a description of MSC activities from 1974 to the late 1980s see Kenney and Reid (1990).

Vocational Preparation

At the same time that the Department of Employment through the MSC was developing a radical youth training curriculum, the Department of Education and Science (DES) brought out proposals for a broadly based certificate of pre-vocational education (CPVE)
The central thrust of curriculum development now radically changed from the human resource, liberal-egalitarian approach which had prevailed from 1945:

"Priorities and values have shifted: training is preferred to education, practical skills are elevated above understanding, detailed profiles replace impersonal exams, and external control of the curriculum by employers and administrators displaces the influence of the professional community of teachers" (Ranson, 1984:81)

The new CPVE course was

"intended to provide comprehensively and coherently for a substantial proportion of the 16-19 age group" (HMSO, 1982:para.7)

The course was to be an integral part of the curricula announced in the 1981 White Paper (MSC, 1981,Cmd 8455) which presaged YTS and CPVE. The curricula of both schemes were intended to be coterminous:

"the Youth Training Scheme will include a period of further education or off the job training designed to increase basic skills in literacy, numeracy and communication and will provide opportunities for personal development. Those responsible for the CPVE will need to collaborate with those concerned with further education and training for the Youth Training Scheme so that common objectives may be covered by the same syllabus" (HMSO, 1982:para.9)

CPVE, available to full-time students, would offer general vocational elements together with an introduction to a range of specific qualifications.
While the Government did not intend to specify the detailed curriculum, the common learning elements would be the 'occupational family skills' prescribed for YTS. In its response to the DES proposals for a certificate of vocational preparation, the Further Education Unit (FEU) welcomed the emphasis on an integrated course structure but was alarmed at the "vocabulary of single subject education" (FEU, 1982: 68). FEU also criticised the apparent lack of reference to recent work on occupational 'clusters' and the definition of basic skills being limited to literacy, numeracy and communication (FEU, 1982: 69). The growing ascendancy of MSC over the DES in the area of training for the growing numbers of unemployed youth (and adults) exacerbated a departmental power struggle which was exemplified in contradiction and duplication in Government programmes until the end of the decade.

Core Skills

Proponents of the 17+ qualification saw a resolution of the tensions between the needs of the labour market and the post-16 curriculum through a 'generous interpretation' of vocational preparation (Silver, 1990: 108). A curriculum covering "communication, numeracy, decision-making and
problem-solving, physical and manipulative skills, interpersonal relationships, moral values, social, political and economic awareness, learning skills, self-confidence and adaptability" (FEU, 1981:12) was seriously advocated. It began to appear that any subject could be covered by such a prescription. The following year the DES-sponsored Further Education Unit (FEU) published a revised version of *A Basis for Choice* (1982). The earlier edition of this publication had proposed a core skills curriculum in 1979. FEU now amplified the concept of core studies alongside a critique of CPVE. In these proposals FEU described the nature of the curriculum as encompassing core studies, including induction, vocational studies and job-specific studies. The curriculum checklist covered learning experiences and the nature and level of performance to be expected. In contrast with the work-based prescription for learning and assessment in YTS, FEU proposed that the curriculum should be provided in the context of the

"intention of young people to enter the world of work in the near future" (FEU, 1982:17)

The rather coy reference to the world of work rather than work itself is perhaps a reflection of the times. Public concern about rising youth unemployment was generating ambivalence among educationalists about

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transitional schemes such as YTS. Some educationalists favoured working with the Government's schemes, others eschewed involvement. The FEU (1982) proposals offered a bridge: that core studies and induction should be common to all post-16 VET and derive from

"a consensus about the general education to which all members of this age group have a right, or from analysis of why common demands are made of all young people in their role as adult citizens and workers" (FEU, 1982: para. 48)

This prescription for core elements was firmly within an educational entitlement framework to which VET practitioners could subscribe. FEU (1982) proposed that the core as a whole should comprise

- practical numeracy - ability to communicate
- ability to learn from study, experience and colleagues
- social skills and understanding in a variety of contexts
- self-confidence, self awareness and adaptability
- manipulative and physical skills
- technological, environmental, political, economic and aesthetic awareness
- ability to make informed and realistic career choices

(FEU, 1982: para. 57)

These skills should be a foundation for extension and application to specific vocational and job-specific studies. FEU was at pains to point out that this was a workable curriculum structure and not just a new
course "to add to the plethora of existing courses" (FEU, 1982: para. 87). The core curriculum could provide national criteria for all one year full-time prevocational programmes. In the event, the recommendations were never implemented and 'A Basis for Choice' became more influential with educationalists for its innovative approach to assessment through profiling and ways of involving students in the learning process than for its suggested core curriculum. However, the notion of a core skills curriculum continued to gain support.

A key part of MSC's programme which established the youth training scheme was the development of core skills. Early research projects included development of core analysis, transferable skills and the definition of occupational training families (Hayes et al 1983). Core analysis, initially developed for YTS, claimed applications in the recruitment and selection of workers, in performance appraisal, career counselling and in training needs analysis. Core analysis also had close links with profiling and participative, learner-centred training (Kenney and Reid, 1990:162). Training based on transferable skills was expected to provide a conceptual and practical
bridge between the labour market problems of supply of
recruits and demand for skills. It was hoped that if
trainees could acquire skills that enabled them to
adjust to job restructuring and employment changes,
the problems of matching qualifications and skill
shortages would be overcome. One of the ways of
investigating such skill-transference was by analysis
of the skill components of employment-related tasks.
This work was intended to relate 'occupational
training families'(OTF) with core components of the
youth training curriculum. Silver reports that the
OTF study was more broadly focused than its
description suggests with

"... talks of life skills, product skills, process
skills and other ranges of skills and competences
which go beyond job-specific ones" (Silver, 1990:122)

By 1984, MSC reported optimistically that

"Work currently going on to identify over 100
core skills, which form an essential element of
the Youth Training Scheme, could lead to the
setting up of a work-based alternative to 'O'-
levels and CSE as a route into further education
and employment. It could also provide a common
framework for accrediting performance in
vocational and pre-vocational education and
training, according to Dr.George Tolley [then head
of special programmes]:

Fundamental to the development of the core is
the concept of skill transfer. If two tasks
have elements in common, then learning how to

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perform one successfully should help the learning of the second. The process of transfer will be heightened if trainees gain some insight into the structure of the tasks and the nature of the skills they are acquiring in carrying them out competently." (Education + Training, 1984:175)

The MSC core programme consisted of 103 generic skills grouped into four hierarchies of number, communication, problem-solving and practical skills which underpin tasks at work. These skills should be imparted through experience of meaningful tasks in a work context. They should not be classroom-based or taught in isolation from work-experience. Since they derive from analysis of work tasks, the skills are to be relevant to all ages and abilities. The MSC planned that the next stage would be to identify national standards of competence against which proficiency in the skills could be tested. The essential element of skill transfer in core skills was linked to efficiency in learning specific skills. In this model, reinforcement occurs if the learning is contextual and empirical. Although there was some acknowledgement of the requirement for some theoretical understanding of tasks, it was not intended that learning or assessment should be knowledge-based.

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Educationalists were divided between those who welcomed MSC intervention in traditional curricula (and their generously funded programmes) and those who strongly resisted curriculum control passing to non-educationalists. The latter group was far larger and more vociferous than MSC supporters and included most careers officers through whom MSC gained access to school leavers (Gill, 1985). The debate was polarised around proponents of liberal education for the whole person and advocates of vocationalism and an instrumentalist curriculum serving the labour market. Opposition to the introduction of a core skills curriculum focused both on resisting MSC incursions into schools and colleges and on mitigating the mechanistic aspects of training programmes by including general education. As youth training expanded (in line with youth unemployment) the dichotomy between the supporters of 'education' and of 'training' widened into diverging structures of provision and curriculum. However the search for core skills did not abate. Both the MSC and the DES pursued the definition and assessment of a core skills curriculum as the means of ensuring compatibility between prevocational education and training and
labour market requirements. As such the concept of core skills made common ground between factions that supported and opposed policies of both departments. These policies eventually converged into the National Curriculum for schools and a national framework of vocational qualifications for post-16 VET. In this early phase, there is little evidence that the assumed link between core skills and transferable skills was tested, or that the concept of core skills as a means of individuals adjusting to changing labour market conditions was questioned.

Links to School Curricula
At the same time that post-16 policy-makers were closely examining the potential of a common core VET curriculum, political dissatisfaction with the power of teachers and local authorities to determine the content and methods of school curricula culminated in the introduction of a prescribed national curriculum and standardised assessment tests for all 5-16 year olds in state schools (1990). It is not my intention to examine closely the content of the National Curriculum but it is pertinent to the discussion of post-16 core skills to consider the effects of
standardisation of the pre-16 curriculum on education and training for post-16 year olds. The National Curriculum was premised on the same skills already put forward as candidates for core skills post-16: communication, observation, study, problem-solving, physical and practical, creative and imaginative, numerical, personal and social skills (HMSO,1989c). Its characteristics were to be: breadth, balance, relevance, differentiation, progression and continuity taught through 10 core subjects (plus religious education) - mathematics, science, English, technology, history, geography, art, music, physical education and modern languages (HMSO,1989c). Core studies were to be differentiated for the curriculum as a whole within a framework of unifying themes that underlay each prescribed subject. Each subject syllabus was scrutinised and approved by Ministers so that core skills, in the sense of a nationally applied body of knowledge, now formed the basis of the pre-16 curriculum. Thus core skills have been transposed to a centrally controlled, nationally assessed, core curriculum. The drive to vocationalise the school curriculum together with strategies to reduce professional power and increase consumer power (open
enrolment, direct funding and local budgets, published test scores) underline the market forces thrust of Government policies.

The introduction of the National Curriculum has transformed a loose collection of subjects linked (but not exclusively) to a national examination framework for 16 year olds (CSE and GCSE), to a unified structure applied to each subject and driven by age-related testing at each stage of development from 7 to 16 years of age. The process of standardisation, centralisation and marketing embodied in the National Curriculum has transformed the school curriculum into a consumer product. Standardised assessment testing with published results for each school has become the tool to facilitate discrimination by customers (parents and pupils) between producers (schools) and enforce competition. In this the Government's role is paradoxical: on the one hand the redirection of curriculum control from professionals to central Government is a necessary emancipation from elitist academic power, on the other, increased consumer sovereignty is to be achieved through central control. It is too soon to assess how effective such centralist, monetarist policies are in enhancing the
curriculum for its customers (and it is well to remember here that the 'customer' may encompass individuals, parents, sponsors, employers, Government - see Chapter 4 for discussion of who is the customer). What is clear is that standardisation satisfies the desire for control of the curriculum and offers a simple model of assessment.

Many educationalists castigated the general tenor of developments in the school curriculum as instrumentalist or utilitarian:

"...a major emphasis is on the vocational aspects of schooling; gone is the antipathy towards vocationalism and stress on education as liberal... Thus, at root, the justification for much of the curriculum is to be found in its intended products." (Kelly, 1986: 212,213)

This was seen as largely incompatible with the second characteristic which is the assumption of superior value for certain subjects or activities

"a reaffirmation of the rationalist perspective ... towards a view of education as the transmission of knowledge rather than as growth or development" (Kelly, 1986: 213)

So the dual effect of vocationalism on the school curriculum is seen as reification and reactionary. Kelly had not changed his mind writing four years later in his critical review of the National
Curriculum. He again argued that it was based on instrumental, commercial and elitist principles (Kelly, 1990). While other commentators may not fully endorse this analysis, they agree that the school curriculum (at least up to GCE 'A' levels) has ostensibly become more vocational. It is clearly the Government's intention that vocational should equate with 'more relevant to working life'. One study, admittedly small and specialist, throws an interesting light on this. A survey by the Council of University Classical Departments (1990) found that employers regard the study of Latin and Greek as a valuable asset in employees. The graduate recruitment officers and careers advisers surveyed reported that classicists were able to demonstrate intellectual rigour, showed development of logic and analytical skills, possessed clarity of expression and could present a balanced argument. Unfortunately - if employers generally share these views - under the National Curriculum children are not taught classics (nor, incidently, are business studies included). This is a small illustration of the difficulty of providing a curriculum posited on 'what the labour market needs'. The difficulties of pre-judging both
employers' perceptions of desirable qualities and skills in workers and the identification of work skills with sufficient complexity to be relevant to training plans are legion.

Core Skills and Entitlement Curriculum

The main Employment Department programme concerned with the school curriculum is the Technical Vocational Education Initiative (TVEI). TVEI strongly promotes the concept of 'educational entitlement' in the sense of a core curriculum. TVEI started as an initiative to introduce technical skills into the vocational curriculum with the aim that the majority of higher education students would have a grounding in new technology and work skills. After some pilot studies, TVEI was extended to all 14 - 18 year olds by the White Paper Working together - Education and Training (HMSO,1986, Cmd.9823) in a curriculum-led programme designed to cover all schools and colleges by 1995. TVEI claims substantial reform of teaching styles, improved vocational relevance in courses and qualifications and higher student retention. Although sponsored by the Employment Department, TVEI at least until 1990, enjoyed almost autonomous status within
the department. TVEI policy-makers distanced the programme from departmental training initiatives such as YTS and set out to win the hearts and minds of educationalists. Helped by generous funding and the use of advisers controlled by local education authorities (LEAs), TVEI refined a process of inviting progressive educationalists to implement innovative curricula within a carefully structured framework backed by hypothecated funding. This approach combined tendering against a demanding specification with exhaustive coaching by advisers to ensure that applicants were able to reach the standard required. In each LEA, TVEI was first piloted with small groups of children and then extended to all schools in the area. At every stage of implementation, detailed plans were worked up by education authority teams working alongside TVEI advisers and civil servants. The plans were extensively scrutinised and reworked until being formally approved (or referred for further work) by Employment Department senior managers. The interesting feature of the development of TVEI is the extensive use of peer pressure and financial support to 'get it right'. Such an intensive process gives rise to fervent debate about principles and practices promoted.
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by the programme and one of the central elements of TVEI to have emerged from this debate is the theory and practice of curriculum entitlement. This is defined as

"key experiences and opportunities to which all students are entitled, regardless of their programme of study" (Training Agency, 1990a: para.2.1)

In the TVEI model, curriculum entitlement includes common learning outcomes, qualifications, records of achievement, work-related activities, teaching and learning styles, guidance and counselling. Common learning outcomes specify that all students should be able to:

communicate effectively (where possible in more than one language)
compile and use numerical information
use science and technology appropriately
understand the world of work
develop effective personal and interpersonal skills
work independently and in teams
solve problems
cope positively with change

(Training Agency, 1990a:5)

The emphasis is on opportunities for the acquisition of skills and knowledge and certain attitudinal dispositions. TVEI does not attempt to test these attributes but relies heavily on personal profiling both to record certificated and uncertificated learning and as a basis for student negotiation of

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learning experiences. This is essentially an input curriculum model posited on affective learning experiences and accreditation of all achievements derived from the curriculum whether related to qualifications or not. The methods used to establish TVEI were based on skilful internal management of local authority officers, teachers and civil servants. Even more adroitly, TVEI fostered powerful political support from Her Majesty's Inspectors (HMI) and DES Ministers (helped in the latter by the transfer of 'convert' junior Ministers from the Employment Department to the DES in the 1990 reshuffle designed to give the DES a stronger commitment to market forces policies). Many aspects of TVEI run counter to the grain of increased competition between providers (it insists on consortia of schools and colleges) and output-related curriculum frameworks. It may be that the tactics of using local authority staff to promote Government policies for change have subverted the ideology underlying the initiative. In this sense TVEI is closer to previous frameworks of a comprehensive, egalitarian curriculum than to a market forces model evident in other initiatives. TVEI espouses resource-led curriculum development as a vehicle for classroom
innovation rather than radical change in ideology.

More radical models of curriculum entitlement have been described in the American and European systems. Advocates of 'Challenge Education' in the United States claim that it offers a creative curriculum that does not neglect basic skills:

"With a single, bold stroke, secondary administrators and their teachers can educate students in the basics, eliminate many discipline problems in schools, improve the individual effectiveness of their students as emerging adults, and help to reverse the social trend toward apathy and fatalism - all without increasing the cost of education" (Gibbons and Phillips, 1974, in Knowles, 1985: 366)

The system is quoted by Knowles (1985) as an example of andragogy in action. It seems to hold the promise of meeting the demand for a return to basics, the concerns of those anxious to stimulate and mature young people and monetarists bent on containing public expenditure. Challenge education has elements of adventure, creativity, service, practical skill and logical enquiry and is modelled on decision-making and action. The curriculum includes diagnostic skills and is based on a contract agreed between learners, their parents and teachers. Core categories of skills cover access skills, mastery skills, planning skills,
management skills and interpersonal skills. Achievements are publically presented to contract partners and peers for the final assessment (Knowles 1985:365-377). Thus 'challenge education' - at least in this account - contains the same range of core skills that have been described for British curricula. It is also akin to self-directed learning programmes with assessment by peers and significant others. It has roots in the humanist movement advocating control and direction of learning by the learner expressed in a 'contract'. The contract model is used in the Compact programme where the learner agrees educational and behavioural goals with an employer in return for an offer of employment (see Chapter 10). But this is more instrumental and coercive in nature than the challenge education model. A British approach which is closer in spirit to the American model is Education for Capability (RSA, 1989) where the educational process itself produces the curriculum and the implicit outcomes are capable learners.

A European entitlement model is of interest with the completion of the Single Market at the end of 1992 which gives open access to labour markets and
recognition of educational, vocational and professional qualifications across all EC member states. The impact of this is as yet in its infancy. Government programmes such as TVEI have started to emphasise the cultural and linguistic consequences of '1992' in the curricula of post-14 year olds and the Employment Department has sponsored a number of studies into the European curricula for FHE colleges and polytechnics. None of this work is concerned with establishing core skills in an international context. Most exhortation from Government departments concentrates on the lack of language skills of British entrants to the labour market and the resulting lack of competitiveness with European workers. Husén (1986) describes the international goals of schooling thus:

"1. Awareness of global interdependence and the building up of international understanding.

2. The building up of international solidarity as expressed in the efforts and resources devoted to financial and other assistance to developing countries.

3. Acceptance of the Western pluralistic value-orientation and tolerance towards ambiguity.

The more specific, and at the same time more pragmatic, goals should be:

1. Employability on the international labor market, including international, inter-
governmental organisations.

2. Orientation towards the future.

3. Specific skills and knowledge necessary in order to function in an international context, such as language skills, knowledge of other cultures, etc." (Husen, 1986:182)

A wider debate about the purposes of vocationalism in an international context has not been articulated in the UK.

Academic Versus Vocational Curricula

Attempts to vocationalise the British school curriculum have not, so far, been carried through into post-16 academic provision. The characteristics given by HMI as necessary to the development of the school curriculum - breadth, balance, relevance, differentiation, progression and continuity (HMSO, 1989c) are conspicuously absent from GCE 'A' level courses. The Government in 1988 rejected the reform of 'A' levels recommended by the Higginson Committee (HMSO, 1988c) but have put in hand measures, such as introducing 'AS' levels (a broader based examination between GCSE and 'A' level), intended to address some of these characteristics. The 1991 White Paper (HMSO, 1991a, Cmd.1536) promised parity of academic and vocational qualifications with...
interchangeability of generic core skills. So far this proposal has resulted in work on a general vocational qualification (GNVQ), but no significant change to the structure and content of GCE 'A' levels.

The pre-eminence and prestige of GCE 'A' levels as the apex of the school curriculum started to be seriously challenged during the 1980s. The Schools Education and Assessment Council (SEAC) proposals for reform of the post-16 school curriculum (1989) were the sixth attempt since 1969 to broaden 16+ academic studies while maintaining the specialism which is the hallmark of GCE 'A' level courses. Pragmatic and educational reasons have been put forward to justify the monopoly of GCE 'A' levels in post-16 academic examinations. Supporters of GCE 'A' levels cite their advantages as: promotion of intellectual rigour; development of specialist knowledge; cultivation of conceptualisation, abstract and analytical thought; and the ability to assimilate knowledge. However, as responses to Government consultation show, many supporters also acknowledge the need for breadth, practical skills and more appropriate forms of assessment (SEAC, 1989: paras. 34-36). Critics claim
that GCE 'A' levels produce narrowly educated students:

"scientists remain unread and arts students maths-blind" (The Economist, Leader, 27 April 1991: 15).

Others suspect a more cynical agenda for the retention of 'A' levels:

"The whole point about a specialism is that... it develops its own subject matter, concepts and skills; its own language; its own exclusive membership. To remove the barriers between the long-established specialisms that constitute the post-16 curriculum would threaten fiercely-guarded domains of knowledge, not to mention academic livelihoods" (MacFarlane, in The Times Educational Supplement 5 Sept. 1990, page 20)

Specialism is also crucial to an effective screening process for higher education. The structure and content of GCE 'A' levels prevent the majority of children from qualifying for HE - nearly 70% of children are screened out before 'A' level and over 20% of those who sit 'A' level papers fail to achieve a pass. This is cost-effective because it reduces the numbers of people qualifying for HE and reduces the length of university courses. GCE 'A' levels provide the equivalent of the first specialist teaching year in most European HE systems, at about one third of the cost of higher education. Such early specialism and cost-effectiveness has a price. SEAC spell out the

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weaknesses of 'A' levels in their report for the Government on the rationalisation of syllabuses: [A levels have]

(i) narrow academic orientation with an unwarrantedly restrained knowledge base that is also vulnerable to the rate of increment of new knowledge and ideas,

(ii) over-burdened content, sometimes unrelated to the real world, which restricts conceptual understanding and the capacity to apply what has been learned as well as placing too much emphasis on memory and recall,

(iii) an inadequate range of assessment methods having, possibly, adverse affects on the quality of teaching and inhibiting student progress,

(iv) inadequate attention given to the relationships between different areas of study, thus enforcing a narrow perspective,

(v) insufficient stimulus for students to contribute to their own learning, to explore particular issues and to undertake analytical problem-solving,

(vi) the overly narrow knowledge base renders A levels poor predictors of future performance and offers little by way of preparation for students who enter employment upon completion of their A level courses,

(vii) the principle of differentiation is not recognised; students' achievements are not formally acknowledged unless they successfully complete the whole course and examination; the lack of short term goals reduces the opportunities for crediting positive achievement.

(SEAC, 1989: para.37)

In addition to these severe criticisms can be added the absence of a defined relationship (or credit
transfer) between other post 16 courses. The multiplicity of courses sponsored by different examination boards means time lost in further and higher education searching for a common starting point. The result is that post-16 syllabi largely ignore any links to the pre-16 academic curriculum.

Corroboration of the criticism of poor problem-solving ability in students who learn to solve problems only in their field of study comes in the findings of a study by London University (Wolf, Kelson and Silver, 1990). Wolf et al. tested 650 YTS trainees before and after they had been given three months training in problem solving in contexts related or unrelated to their training. Trainees with broader problem-solving experience solved both training-related and unrelated problems better than those with narrow experience. These findings have implications for the pedagogy not only of GCE 'A' levels but also of core skills.

In accepting the SEAC reform proposals the Government put in hand work on a common core for GCE 'AS' and 'A' level courses. This has subsequently broadened into

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the search for common elements, transferable skills and credit transfer across 16-19 academic and vocational curricula. Perhaps the search for skills and competences is not so much the pressure of vocationalism but rather a way of education coming to terms with the demands of late twentieth century society (Silver, 1990:125). If so, the internalisation of economic pressures on the curriculum in academic post-16 education could give rise to a curriculum which is more holistic in terms of reality to adult life than liberal models. If competences and skills become neutral ground claimed by both academic and vocational curricula, the usual distinctions disappear. I shall return to this when looking at competency in the next chapter. However, whether influences on post-compulsory education can be described as progressive or reactionary, there is no sign yet that the Government will permit other than parallel development of academic and vocational curricula. When introducing the White Paper _Education and Training into the 21st Century_ (HMSO, 1991a, Cmd.1536) to the House of Commons, the Secretary of State for Education emphasised the Government's rejection of an integrated academic and
vocational curriculum:

"A levels are successful and well-respected examinations, which are being taken by steadily increasing numbers of pupils. I am determined to see them maintained and to control their development so that their high standard is preserved" (Hansard, May 1991: 640)

It is of interest to this discussion to consider reasons other than cost-effectiveness or traditionalism for the Government's insistence on retention of a post-16 curriculum so at odds with vocational integration (and so damningly exposed by its own SEAC committee (1989). Some commentators have argued that education systems have a social reality. A more powerful explanation for the esteem in which GCE 'A' levels are held might be that education structures reflect and reproduce existing culture and social structures (Jarvis, 1987: 161). GCE 'A' levels are exclusive and prestigious (axiomatic features) and a crucial support for university academic standards. These in turn control access to professional occupations and powerful social positions. A clear replication of social power and hierarchies can be seen in the way that GCE 'A' levels mirror the culture and social relations of higher education, the civil service and the professions and may explain the strength of support for their retention. There is a
lacuna between the aims of a social or an economic curriculum in resistance to the vocationalism of 'A' levels which goes beyond the dichotomy of education and training. If, as I have argued, the post-16 academic curriculum efficiently screens out most children from participation in higher education and thus maintains the social relations of the education system, it is not only at odds with the vocational curriculum which seeks to mirror the labour market but is also opposed to economic growth. In this analysis GCE 'A' levels are a barrier to raising levels of participation in higher education, irrelevant to the knowledge and skills needed in employment, detrimental to systematic development of problem-solving and managerial skills, underpin social class differentiation and perpetuate knowledge obsolescence. All of these characteristics are diametrically opposed to economic needs.

Pedagogy to Andragogy
One theoretical approach to a comparison between academic and vocational curricula is to consider the pedagogy - andragogy dimension. Pedagogy, in this model, is defined as a body of knowledge about the
education children and andragogy as a body of knowledge about the education of adults (Jarvis, 1983: 102). Although the major exponent of andragogy, Malcolm Knowles, places the theory squarely within a psychological perspective of adulthood in the romantic, humanist tradition (Jarvis, 1983), it has many overtones of adult/child differentiation that can also be considered from an economic perspective. The main basis for this is a cultural assumption that economic status is central to distinctions between adults and children. Economic models of the curriculum are concerned with preparation for and maintenance of economic independence which sees education as a contributor both to wealth creation and to an understanding of wealth distribution. Both of these elements are essential cultural features of adulthood. In contrast, post-16 academic education can be defined within a pedagogical framework as content based, subject-orientated, norm-referenced and externally controlled. It could not of course be claimed that no GCE 'A' level students control their own learning. Jarvis points out that children show readiness to learn when motivated by the desire to know something (Jarvis, 1983: 99). However, it should be recognised
that the British examinations hierarchy explicitly encourages internalisation of external goals by largely restricting access to higher education to the academic route. Although, as Griffin points out, Knowles in making the distinction between pedagogy and andragogy does not necessarily associate pedagogy with subject-structured knowledge (Griffin, 1983: 58), it is hard to resist comparisons drawn broadly on the two concepts. Theoretically at least it is possible to describe vocational education as competency-based, related to the application of knowledge and process, criterion-referenced and internally controlled. Some aspects of this dichotomy can be seen in GCE 'A' levels (pedagogical) and TVEI, BTEC and YTS (andragogical). Many of the criticisms of 'A' level courses stem from the passivity of the learner and the over-riding assumption that knowledge is complete and durable. Knowles (1985: 422) argues the opposite: accelerating obsolescence of knowledge demands that process learning has precedence over content-based learning. The most explicit attempts to emulate andragogy in a national education programme in Britain have been made in TVEI. Many features of TVEI illustrate a process-based curriculum with central
concepts of learning through activity, group work, entitlement curriculum and profiling through records of achievement. BTEC emphasises the learning process and differentiated assessment but fails to espouse fully self-directed learning. YTS concentrates on transferable skills, problem-solving and standards of competence but within a tightly controlled national framework. We might conclude from this that GCE 'A' levels can be placed at the pedagogical end of a curriculum innovations continuum and training schemes initiated during the 1980s demonstrate some aspects of the andragogical model.

Core Skills Consensus?
In ten years the search for a curriculum which would provide an all-purpose general training programme for entrants to the labour market has extended into the foundation of education and training. All the following features of current curriculum practice can be directly traced to the search for core skills:

a) standard components for every subject in the school curriculum (the National Curriculum);
b) standard skills programme for youth training;
c) entitlement curriculum in technical vocational education (TVEI);
d) generic core programmes for GCE 'AS' and 'A' levels;

e) the national framework of vocational qualifications (NVQ).

So is there a consensus about the nature and application of core skills across the education / training system, and can this lead to the introduction of nationally prescribed curricula for post-16 VET?

A National Curriculum Council (NCC) report in March 1990 outlined suggested themes, guidance and core skills for all 16-19 curricula. In this model, the main emphasis in the post-16 curriculum would be social and economic understanding together with scientific and technological understanding and aesthetic and creative understanding (NCC, 1990: 7). The NCC themes included the five cross-curricula themes in the National Curriculum for 5-16 year olds: economic and industrial understanding, environmental education, education for citizenship, careers education and guidance and health education. Six core skills were identified: communication, problem-solving, personal skills, numeracy, information technology and modern language competence (NCC, 1990: 8). Although the list is not novel, the consensus behind the NCC report is echoed in the Jessup report for the National Council
for Vocational Qualifications (NCVQ, 1990). Both reports for the Government draw on previous work by the Confederation of British Industries (CBI), the Trades Union Congress (TUC) and Business Technician Education Council (BTEC). The FEU reported a favourable response from colleges to the NCC report (FEU,1990:8) and one college principal writing in the Society of Education Officers' journal commented that

"the harmony between the enterprise and education cultures will not be lost on readers"

(Ruddiman, 1990:346)

So it would seem that the search for a core skills curriculum has united Government departments and educationalists. However at least one dissenting voice is found in an Employment Department Training Agency discussion paper (Employment Department, 1990a). The paper finds that both the NCC and NCVQ reports over-emphasise GCE 'A' and 'AS' level courses, largely ignore vocational courses and are weak on ideas for implementation. It points out that the introduction of Training Credits (see Chapter 10), which could further fragment post-16 provision, is ignored. The financial implications of a core skills structure and the Government's requirement for many parts of the proposed system (for example, NVQ) to become self-
financing are not addressed. Not unsurprisingly given the Employment Department’s earlier extensive advocacy of core skills in the national training schemes, the Department’s paper complains of "a sense of deja vu" in the NCC proposals (Employment Department, 1990a: para 7.3). There is some justification for this as a self-congratulatory edge appears to colour the consensus for core skills which conveniently ignores the more difficult questions. One of the areas which the proposals ignore is that of public recognition and esteem for a new structure. The failure of the Certificate of Pre-Vocational Education (CPVE) to command popular support is an example of consumer resistance to new courses. Introduced in 1986, just 4 years previously, CPVE was expected to unify prevocational work and provide a respected foundation for vocational and job-specific training. At its introduction CPVE was hailed as meeting the needs of 80 percent of those staying on at 16 years of age. FE teachers generally found the course motivated students and provided a useful bridge to employment or further education. However, the numbers taking the course have stuck obstinately at around 300,000 a year and the course has failed to gain the support of employers.
who have little conception of its place in the qualifications hierarchy. What evidence is there that any other omnibus course or imposed matrix of qualifications would be any more popular or appreciated? Might it be that consumers of 16-19 VET - students and employers - already recognise basic skills such as those advocated for a core curriculum as the business of schools and of interest only when absent? The most striking feature of all the reports that have described core skills over the last few years is not only the consensus about ends and consistency of means but that the skills being offered are those that could be expected to be acquired before 16 years of age. This is at best a remedial curriculum, at worst an immense failure of school education and lack of vision about the potential of post-16 vocational education and training.

Economic Aspects of Core Skills
Administrative logic for a common curriculum is faultless. If everyone learns the same skills to recognised levels of attainment, the system - and its resourcing - can be determined by outputs (having made some allowance for varying inputs). Development can be
directed towards increasing the number and quality of outputs. Assessment and evaluation can be readily defined by numerical performance targets. Efficiency and cost-effectiveness can be identified by accurate record-keeping systems. This is part of the attractiveness of the National Curriculum. The reductionist model can serve the dual purposes of demonstrating clear links between resource and output and stimulating a market economy in education and training. Examination results are the exchange currency for this economy where, by placing these results before consumers (parents and children), supply of pupils and demand for education become self-regulating. Vocationalism through the vehicle of core skills remedies not only perceived deficiencies in individual parts of the education / training system and ensures that entrants to the labour market possess the same skills, but also ensures that the system is self-regulating through consumer choice. Just how valid these assumptions are will be examined in looking at the correspondence between VET and the labour market in Part 4.

And what of the application of core skills to adult
vocational curricula? The lack of a national structure for updating and retraining for employees makes this difficult to estimate. One interesting possibility is that voluntarism, lack of prescription and individual choice in the post-16 curriculum will be eagerly prized by graduates of the National Curriculum. Already there is a clear demand from adults for qualifications in subjects not available during their school education such as Latin, sociology and natural history. The narrow judgement that these subjects are 'nonvocational', or that core skills are progressive, or that national criteria for post-16 provision would answer the problems of an under-educated workforce, must be questioned.

Summary
In establishing vocationalism as the primary curriculum force, the Government stimulated considerable debate about the nature of the school curriculum and its relevance, or otherwise, to future employment. This has inevitably given rise to debate about the nature of a post-16 common curriculum (especially as the Secretary of State for Education reserved powers in the 1988 Education Act to extend a national curriculum to post-16 institutions). The
search for core skills has resulted in core studies being prescribed for every subject in the National Curriculum with cross-curricula themes of economic and industrial understanding, environmental education, education for citizenship, careers education and guidance and health education.

While Employment Department curriculum initiatives, most notably TVEI, promote an 'entitlement' curriculum and YTS links 'occupational family skills' with a competence-based curriculum, the DES struggles to maintain both core elements and specialism in the academic post-16 framework. Although many Government reports describe GCE 'A' levels as elitist, wasteful of the nation's talent, over-reliant on past knowledge, and of little relevance to working life, even so they remain the dominant entry qualification for higher education (and graduate professions) and the only qualification of a large number of entrants to the labour market. Despite advice from HMI that

"It is not possible for programmes of GCE A level study and vocational courses to have common modules of core skills" (HMSO,1989c:11)

and noting that considerable work needed to be done on levels of attainment, modes of assessment and
reporting and teaching strategies (HMSO, 1989c: 12), the Government intends to legislate for core skills within a regulated curriculum for all 16-19 year olds (HMSO, 1991a, Cmd. 1536) while retaining GCE 'A' levels. It hardly seems possible that school examinations can be fully coherent with the National Curriculum and provide breadth, relevance, continuity and progression with the post-16 curriculum while GCE 'A' levels remain in their present form. I suggest that the retention of 'A' levels may be explained in terms of the maintenance of existing social structures rather than a rational response to vocationalism. The full implementation of the National Curriculum and related assessment arrangements up to key stage 4 (16 year olds) is planned to be complete by 1997. This means that, for good or ill, a prescribed school curriculum will be taken by the majority of children. Mrs Thatcher, when Prime Minister, summed up the dangers in an interview with the editor of the Sunday Telegraph:

"You see, once you put out an approved curriculum, if you have got it wrong, the situation is worse than it was before"
(Thatcher interview published 15 April 1990).

The implementation of standardised curriculum and
assessment for pre-16 year olds should fundamentally change perspectives on the post-16 curriculum.

Three main arguments have supported proposals for a post-16 common core curriculum: to ensure continued technological development and economic growth; social and educational equality; and the superiority of certain types of knowledge (Kelly, 1986: 130 -134). I have suggested that youth training programmes seek to use core skills to embody principles relating to training for flexibility and relevance to the labour market, TVEI is premised on social and educational equality, and GCE 'A' levels clearly posit a rationale of superiority of (certain kinds) of knowledge. Efforts to establish a general national framework of skills for training have unquestioningly seen core skills as the panacea for ensuring that young people have transferable and flexible skills capable of meeting changing demands in the labour market and the economy. A consensus across all political parties, Government departments, trade unions and employers supports a core skills curriculum that includes communication, numeracy, personal effectiveness, problem-solving, technology and economic awareness.
From an administrative perspective, a standardised core skills curriculum could underpin a self-regulating organisational structure. There is little evidence to suggest that students can be attracted to a general prevocational programme and general resistance to new qualifications further undermines the capacity of a core skills curriculum to become generally accepted. Moreover, the efficacy of common core skills to instil practical relevance in VET 16-19 curricula and fulfil the promise of a competent workforce remains unproven. The model may be economical because standardisation should give economies of scale. However, the pre-occupation of core skills proponents with essentially remedial elements of a foundation education, means that the effectiveness of core skills in value-added to the economy is likely to be negative. This is because the model is essentially remedial, regressive and prevocational.

The question remains: have state policies designed to identify and implement core skills radically shifted the curriculum for 16-19 year olds to vocationalism, rationalisation and stratification thereby
reinforcing restricted roles and cultural
expectations? Or does standardisation of learning
outcomes, economic individualism and attempts to give
vocational courses parity with academic courses
broaden opportunities and erode cultural boundaries?
Before reaching even tentative answers to these
questions, I shall explore developments in competency-
based VET which has been the natural inheritor of core
skills development in post-16 curricula.
This chapter completes Part 3 examining curriculum issues. Chapter 4 provided an overview of vocationalism and the rise in the power of employers over the delivery, funding and curriculum of VET. Chapter 5 concentrated on the development and outcomes of the core skills curriculum and described how work on core skills has led to the introduction of the National Curriculum in schools and work on common learning outcomes for VET for 16-19 year olds. I concluded that the proposed post-16 core skills curriculum was essentially remedial and regressive and that there was little evidence that 'consumers' would be attracted by it.

This chapter considers competency-based curriculum theories which have evolved out of research on core skills and become the centre of Government schemes to align VET to the labour market. In ten years, competency-based curriculum theories have become a large-scale, all-embracing theoretical position. The practical functions designed for a core skills...
curriculum in providing a bridge between VET and the labour market have been superseded by competency-based theories which encompass principles of curriculum design, content, management, delivery and assessment. The inherent tensions in this development are examined in this chapter, in particular, the attendant epistemological, organisational and attitudinal issues. Finally the salient features of the competency-based curriculum model are compared with the dimensions of the economic model outlined in Part 1.

Links to Core Skills

The work to define and establish a core skills curriculum led primarily to the standardisation of curriculum structures for schools and to a definition of 'common learning outcomes' with roots in a remedial, regressive curriculum (see Chapter 5). Although the underlying theme of vocationalism pervaded the quest for core skills that would ensure that all entrants to the labour market possessed basic skills, the core skills research largely concentrated on lists of desirable subjects. The natural inheritor of this work is competency-based curriculum theories.
The impetus for development of the wider perspective came with the Government's programme to establish a National Council for Vocational Qualifications (NCVQ) with a remit to standardise and unify all post-16 VET qualifications into a common structure.

**Occupational Competence**

The 1981 Consultation Paper: *A New Training Initiative* (MSC, 1981) proposed to:

"develop skills training including apprenticeship in such a way as to enable young people entering at different ages and with different educational attainments to acquire agreed standards of skill appropriate to the jobs available and to provide them with a basis for progression through further learning."

(MSC, 1981: paragraph 23.1)

This set in train a number of far-reaching developments including the establishment of a national framework for all vocational qualifications based on standards of competence. Following reports commissioned from the Institute of Manpower Studies and the committee which reviewed vocational qualifications (MSC/DES, 1985), proposals were made in the White Paper: *Working Together - Education and Training* (HMSO, 1986, Cmd.9832) to set up the National Council for Vocational Qualifications (NCVQ) with a remit to
- secure standards of occupational competence and ensure that vocational qualifications are based on them;
- design and implement a new national framework for vocational qualifications;
- approve bodies making accreditation awards;
- obtain comprehensive coverage of all occupational sectors;
- secure arrangements for quality assurance;
- set up effective liaison with bodies awarding vocational qualifications;
- establish a national database for vocational qualifications;
- undertake any necessary research and development;
- promote vocational training and qualifications. (Kenney and Reid, 1990:318-319)

As the Council's work progressed strong ideas have developed about the nature of competence, ownership and recognition of qualification, assessment and accreditation. Early NCVQ definitions of competence related to performance ability in employment contexts, but as epistemological issues have increasingly dominated debates within NCVQ, the definition of competence has broadened and been subsumed into 'a statement of competence' based on specified standards in:

"the ability to perform in a range of work related activities, and the underpinning skills, knowledge and understanding required for performance in employment" (NCVQ, 1989a:para.2.2)

In this definition, competence relates to 'work-related activities' and 'employment' and not 'life
roles' as educationalists had earlier argued (see FEU, 1979, 1982, 1984b, 1985a, b, 1986, 1987, 1989a). The focus is on employment and standards are to be defined by employers. Qualifications are to be based on fundamental criteria encompassing macro and micro conditions of the labour market and the needs of individuals:

"The NCVQ requires all NVQs to be—

* based firmly on the national standards required for performance in employment, and to take proper account of, as far as possible, future needs with regard to technology, markets and employment patterns;

* based on outcomes of learning specified independently of any particular mode, duration or location of learning;

* awarded on the basis of reliable and valid assessment, undertaken in working or other appropriate environments to ensure that the national standards have been met;

* available to all those who are able to achieve the required standards, by whatever means, and to be free from barriers which restrict access and progression;

* free from overt or covert discriminatory practices with regard to gender, race and creed, and to pay due regard to the special needs of individuals." (NCVQ, 1989a: 3)

This is an impressive agenda. The 1991 White Paper (HMSO, 1991a, Cmd. 1536) goes further: 'new NVQs' will be

"a guarantee of competence to do the job, not just in theory but in practice" ..."and] "require the demonstration of a range of skills and the
application of knowledge and understanding relevant to the related occupations"
(HMSO, 1991a: 16, 19)

All this development grew out of earlier work on core skills. In the last chapter I argued that the concept of core skills envisaged by NCVQ, FEU and others was at best remedial in that it covered skills that could be expected to be acquired from the school curriculum, and at worst was a lost opportunity to maximise the potential contribution of a post-16 VET curriculum. Hyland (1993) while agreeing with the pivotal role of core skills, doubts that the route chosen is "suitable for such a mammoth task" ...

"The introduction of pilot GNVQs in 1992 has served to re-assert the importance of core skills and general learning processes in the drive to upgrade VET - a move which was originally suggested in the 1989 report Towards a Skills Revolution and reinforced in the latest CBI document. There is now a broad consensus that such upgrading will require radical measures which, in addition to incorporating core skills in all 16–19 programmes, involve the development of broad-based vocational studies in post-16 education which can achieve the quality and status of those in the French and German systems.

"... Not only do NVQs seem to be singularly ill-equipped for the task of transforming vocational learning, the behaviourist thrust of the CB [competence-based] strategy which underpins them is totally at odds with existing models of experiential teaching / learning in the post-16 sector. Dominant and preferred models, particularly in further education and adult training (see Gibbs, 1988, Learning by Doing, FEU) stress the importance of active self-reflection on
the part of students and the development of knowledge and skills through the transformation of experience." (Hyland, 1993:10)

Hyland goes on to complain that further work must resolve the problems in the theory and practice of competency-based qualifications. These are serious criticisms of a system which carries a large political and financial investment. These and other issues fundamental to the competency-based model are examined later in the chapter, but, before describing the NCVQ agenda in detail, it would be useful to look at some of the early ideas for a competence-based curriculum.

Early Ideas

In a detailed analysis of the history of vocationalism in further education, Silver charts persistent attempts to "formulate long-term goals and solve immediate economic problems" (Silver, 1990:100).

Some of these attempts have resulted in bolting on liberal/general studies to technical courses, some have constructed itineraries of core skills, some have equated vocationalism with an interdisciplinary approach. The aim of these initiatives has been to design a work-related curriculum that is utilitarian and functional but not narrow (Silver, 1990:138). In
the 1980s the approach seen as offering the most promise was the search for the definition, delivery and assessment of competence.

"Competence was seen as including skills, but also knowledge, attitudes and experience. It was a broadly based approach to the learning of roles, it was specific and general, it was concerned with process and integration" (Silver, 1990:123 based on FEU, 1985a,b, 1986).

The Further Education Unit (FEU) in *Towards a Competence-Based System* (FEU, 1984b) defined competence as all the personal attributes necessary to life roles. Three years on, the emphasis on an approach broader than employment is confirmed. Competence is defined as:

"the possession and development of sufficient skills, knowledge, appropriate attitudes and experience for successful performance of life roles" (FEU, 1987:39).

This definition is deliberately broad enough to encompass life roles and the gamut of Government school-to-work schemes. FEU is at pains to demonstrate a high degree of congruity between 'competence' and the aims of GCSE, TVEI, CPVE, YTS and programmes for unemployed adults such as Replan (FEU, 1987:23-38). This is not however the same as the approach to studies in work across the curriculum for young adults described by Corson (1991). In Corson's approach
there are two groups of competencies: prior (the ability to converse, read, write and calculate) and dependent (acting autonomously, responsibility, showing care and concern for others, and considering questions of beliefs and values). These competencies arise within a curriculum framework which seeks to promote a love of work for its own sake and respect for values of 'craftsmanship' (Corson, 1991: 173-178). These are the benchmarks for curriculum design in 'studies for work':

"1. there is no ulterior motive in work other than the product being made and the process of its creation;

2. the details of daily work are meaningful because they are not detached in the minds of workers from the product of the work;

3. workers are free to control their own working action;

4. craftsmen are thus able to learn from their work and to use and develop their capacities and skills in its prosecution;

5. there is no split of work and play or work and culture;

6. the work activity of craftsmen determines and infuses their entire mode of living." (Corson, 1991: 172)

Corson makes clear that he supports humanist approaches to the management of work and that this approach must drive the curriculum. Although this has
roots in liberal education theory there are also strong echoes of the nineteenth century reaction to industrialism of the Art and Craft movement and an idealised, romantic view of work. This work-related curriculum model also raises issues about the role of technological and social change and the reality of opportunity to work in the way described. While Corson's description may find subscribers among educationalists, it does not chime with the Thatcher Government's (1979 - 1990) intermediate training initiatives. There has therefore been little public ground on which to advance a non-utilitarian view of a work-related curriculum.

Middle ground between the romantic and the utilitarian is struck by Taylor (1991) in describing the competencies drawn up by the secretariat of OECD in 1980. These distinguish three competency domains: intellectual, psycho-social and practical. The resulting list of competencies (reasoning, ability to learn, personal and social skills, knowledge of the world of work, surviving and developing in employment, literacy, numeracy, manual dexterity, elementary technology, job-search and health and safety)
Taylor, 1991:208) has commonality with youth training scheme programmes of the early 1980s. This view of competence is also much closer to common learning outcomes (see the discussion of Core Skills in Chapter 5) than to definitions of 'standards of competence' used by NCVQ.

The concept of competence has changed in ten years from 'output skill' to

"the underpinning skill, knowledge and understanding required for effective performance" (Ward, 1991:13 reporting the latest definition used by NCVQ).

As Silver points out, the concept of 'skill' has virtually disappeared and is supplanted by a definition of vocational preparation that closely resembles 'education' (Silver, 1990:125). The concept of competence has transformed the definition of VET from that of a commodity (a good capable of being exchanged or sold) to that of productivity (capacity to satisfy wants or create utilities). This implies a shift from the simple exchange of an individually-owned asset to a set of production relationships between education and employment driven by supply and demand of the economy. Such a far-reaching programme placing occupational competence at the heart of
every vocational qualification (MSC/DES, 1985) raises important philosophical, social and economic questions. Is the competence-based curriculum extreme instrumentalism whereby VET serves only the demands of the market place? Or is it realistic and pragmatic in the face of rapid technological and sociological change and increasing complexity in work roles and tasks? Does supplanting 'skill' with 'competence' further economic individualism and properly provide for benign wealth creation in the post-industrial era? Before seeking answers to these questions, it is necessary to describe the structures devised to deliver the competency-based curriculum.

Structure of Competency-Based VET

The NCVQ has set up an elaborate system of groups and assessors representative of each occupational sector to develop each set of occupational competencies. Competencies are to be determined not by educationalists, but by those familiar with the skills required to perform each occupational role brought together in Industry Lead Bodies (ILB). Competence must be based on an analysis of occupational roles and cover effective performance. Thus both elements of
production (work skills) and productivity (work attitudes and performance) are to be assessed. Competencies are intended to be occupationally holistic, transferable, interpersonal and to promote flexibility. Each national vocational qualification (NVQ) will be formed from units of competence which consist of a coherent group of elements and associated performance criteria. 'Elements' of competence are the smallest and most detailed specifications of competence that allow specification of performance criteria. The definition of the elements and criteria must be precise and general:

"The elements and performance criteria should -
be stated with sufficient precision to allow unambiguous interpretation by different users;
not be so detailed that they only relate to a specific task or job, employer or organisation, location or equipment"  (NCVQ, 1989a:6)

Every NVQ will be placed in a framework of levels with parity of standards within the level and assured progression between levels. Levels of competence are defined as

1 - Basic or Foundation
2 - Regular
3 - Skilled
4 - Advanced
5 - Professional

6.13
Access to qualification is to be independent of: the mode of learning; upper and lower age limits (except where legal restraints make this necessary); and a specified time spent in education, training or work. Assessment will be locally available in indigenous languages (provided the candidate is also competent in English) with special assessments appropriate to those with disabilities. There should be no restriction on access to assessment for the unemployed or those in categories of employment which may restrict attendance for assessment. Even more significantly to the academic/vocational curriculum debate, NVQs are to have equal standing with GCE 'A' levels and be an accepted route to higher education (HMSO, 1991a:16,19).

While the NCVQ places competence-based qualifications at the centre of the Government's drive to upgrade VET and consequently upgrade skills in the workforce, the Department of Employment (ED) offers a more pragmatic view:

"NVQs are not ends in themselves. Their importance lies in the clear goals they set both for individuals and for programmes of learning...The underpinning message is likely to be that NVQs assure the quality of employees; quality employees produce quality goods and services; and quality goods generate profit".

(Employment Department, 1990b: paras.1,8)
This quotation comes from a brief prepared for the National Training Task Force (NTTF) which is a group of industrialists set up by the Government to co-ordinate national training programmes, including Training and Enterprise Councils (TECs) - see Chapter 4 for discussion of the role and influence of employer groups. The significance of the emphasis on the profit motive is that it comes not from industrialists but from civil servants and Ministers (and perhaps that is why the link between quality and profit is not questioned). The competence curriculum encapsulates the Government's market forces philosophy to ensure that VET is instrumentalist (serving economic ends) and chauvinist (making Britain great). An example of emphasis on the latter was the announcement, in the autumn of 1989 by the Secretary of State for Employment, of 'World Class Objectives' for education and training. The following targets were to be achieved:

By the end of 1992 -
1. The NVQ system should be in place covering all types of employment and all occupational levels up to and including the professions;

6.15
2. No young person should be employed in a job without training;

3. Two-thirds of young people should have achieved NVQ level2 (regular competence) or its academic equivalent;

4. Twenty-five per cent of young people should reach NVQ level3 (skilled competence);

5. All employees should be taking part in company driven or developmental activities.

By the end of 1995 -

1. All young people should by the age of 18 have a recognised qualification at level 2, and at least half should progress to a qualification at level 3;

2. At least half the workforce should be aiming for updated or new qualifications.

By the year 2000 -

1. A minimum of half the workforce should be qualified to NVQ level 3 or its academic equivalent. (Barrett, 1990).

These targets, although not publicly endorsed by the
Government since 1989 - probably because even the first group of targets were not achievable - are the basis of annual contracts agreed with each TEC and as such are being actively pursued through youth and employment training programmes. The NVQ programme forms the link between the economy, qualifications and the labour market and is a cornerstone for implementation of policies designed to radically change the structure and performance of VET. This in turn uses elements of the competence model for the development of 'a qualified society'.

A Qualified Society

The competence-based qualifications structure promulgated by NCVQ is intended to establish a 'qualified society'. Through links with school education, wide use of NROVA (national record of vocational achievement) and a competence-based system of accreditation of vocational curricula, NCVQ's stated aim is:

"to establish a qualified society - one in which many more people will gain qualifications which are relevant to their work. In this society individuals will seek vocational qualifications to obtain promotion or employment in a new field. It will be a society in which employers will recognise a qualification hallmarked as an NVQ as evidence that the holder can do the job on offer" (NCVQ, 1989b:4)
This appears to be a recipe for qualification for instrumental ends writ large. Work is described as the engine to drive individuals to seek improvement and work is considered as the reward for such efforts. Work structures are givens in this scenario and are not seen as influenced by, or responding to, changes in VET. This is contrary to the work of D'Iribarne and Silvestre (1986) which indicates that reciprocal influences affect both VET and the labour market. Employers' expectations are apparently unrelated to changes in the economy and to technological changes. Apart from these issues, even if the NCVQ proposition is taken at face value, serious questions remain. What of the epistemological, organisational and attitudinal difficulties inherent in such an undertaking? Curriculum discontinuity of this magnitude has never been attempted in Britain. Changes introduced in the National Curriculum were based on previous curricula refashioned by practitioners. NVQs are derived from analysis of employment skills by non-educationalists using criteria which are antithetical to the theory and practice of the current system. What of the problems of defining and assessing competence, of
ownership by industry, of standardisation across hundreds of awarding bodies? What of the problems of motivation of trainees, of changing the attitudes and practice of trainers and of delivery structures, of the cost of individual assessment and accreditation? What of the problems of acceptance and credibility by an elitist education tradition based on exclusion from education and training rather than inclusion based on comprehensiveness, open access and equality of opportunity?

Epistemological Issues: the Problem of Knowledge

Two fundamental and related controversies of the competence debate are the definition and role of knowledge and understanding in a performance-based model and observable assessment. What precise parameters can be placed around the knowledge inherent in performance and how can it be defined as an outcome of competence? How can knowledge and understanding be assessed by performance criteria? Does the formulation of workable answers to these questions lead to a 'reinvention of education'? It is clearly appropriate to include some or all of the knowledge and understanding underpinning occupational
competencies in a curriculum and assessment framework for employment-related competence. All but the lowest levels of tasks in employment require an obvious input of general skills and knowledge. Some examples of NVQ pre-occupations with knowledge and competence may illuminate the difficulties inherent in a competence-based structure.

An Employment Department: Training Agency project (1990) to identify underpinning knowledge in 'standards of competence' in the Building Society sector started from the assumption that 'required knowledge' could be identified as elements within units of competence. This proved to be untenable and led to the identification of knowledge under the heading of 'evidence required' (Employment Department, 1990c). The concept of 'evidence required' does not seem to advance the debate very far since it would appear to leave the definition of the knowledge required to underpin successful performance unresolved. That is unless competence-assessment per se is accepted as subsuming all necessary knowledge, skills and attitudes. Wolf (1989) shows the circularity of this approach when she talks of 'unpacking knowledge and understanding':

6.20
Knowledge and understanding are not divorced from performance. It is more appropriate to see behaviour (or 'performance') as deriving from knowledge structures.

Knowledge and understanding are constructs which have to be inferred from observable behaviour, just as much as competence itself.

Knowledge and understanding are often and/or best learned 'in use'.

Knowledge is highly contextualised. To infer knowledge with confidence, especially when it has broad applications, one needs breadth of evidence." (Wolf, 1989: 45)

This seems to say that knowledge underpins all contextualised, observable behaviour so confirmation of competence relies on 'breadth of evidence'. She confirms this in saying that

"thinking about assessment in these 'evidence accretion' terms is crucially important to the whole competency based approach, because it avoids the problems of Popham's type of criterion-referenced testing" (Wolf, 1989: 48).

(Popham (1984) pointed to the inanity of assessing ever more trifling sorts of behaviour in order to make test items interchangeable.) Dangers of reductio ad absurdum certainly lurk in any model where assessment drives the curriculum. Another approach is to define knowledge explicitly, and potentially very broadly, within the ambit of

"the underpinning skill, knowledge and

which is seen as including concepts, principles, theories, relationships and 'cognitive structures' (Ward, 1991: 13). Again this would seem an attempt to find answers by reframing the question.

Perhaps it is significant that a book written by the director of research, development and information at NCVQ (Jessup, 1991) two years after accreditation of the first NVQ units and with more than 150 qualifications accredited, devotes a chapter called 'Outstanding Issues' to the 'Problem of Knowledge'. Jessup questions whether all outcomes can be specified and rehearses the conceptual issues around learning and transfer. One view is that knowledge is a problem in relation to curriculum (how to define what should be taught) rather than one of performance (successful performance includes knowledge). However observation of performance, particularly at higher levels of occupational skills, may not provide evidence of required knowledge. This could be either because assessment of performance is too limited (and cannot be sufficiently extended) or because there may be a body of knowledge that cannot be inferred from
observation. This could be linked to the tacit knowledge that comes with practice of a skill (Nyiri, 1988). Jarvis (1992) calls this practical knowledge:

"Practical knowledge is learned after classroom knowledge, because the practitioners bring to the practice situation their own biographical store of knowledge, including that learned in the classroom, and they use that knowledge as one of the constituent elements in learning from the new situation." (Jarvis, 1992: 188)

This goes to the heart of the competence model: how can the curriculum be based on occupational competences, if such competencies cannot be reliably defined and demonstrated.

Preliminary results from another Training Agency project (Ward, 1991) to identify underpinning skills and knowledge within certain catering competencies illustrated further complexity in accommodating knowledge in competencies. The project researchers found that even though the 'standards of competence' were defined within 'social, mental, knowing what, knowing how and knowing who skills', they were unable to identify any underpinning social, physical or cognitive skills. Furthermore, items of underpinning knowledge were identified as being required by the 'standard of competence' that were not automatically
assessed in the course of performance (Ward, 1991: 13). This may be a problem of the low level of occupational tasks in the competence levels that the project examined (NVQ 1 - basic/foundation and 2 - regular) but nevertheless illustrates some of the practical, theoretical and philosophical issues.

The Employment Department: Training Agency project (Employment Department, 1990c) which researched the knowledge component of units of competence defined for the Building Society sector of financial services occupations was unable to identify 'required knowledge' and suggested that this could only be approached through 'evidence required' (see discussion above). The research further contended that the knowledge requirement in standards of competence is related to the 'range statement' which signifies the range of contexts in which the competence should be demonstrated. Since the context range can never be wholly demonstrated in assessment, 'knowledge competence' might bridge the 'assessment gap' and be separately assessed (Employment Department, 1990c). In reaching this conclusion the research seems to bring the concept of competence full circle. Competence-based VET is premised on the inadequacies of
knowledge-based systems which test cognitive learning in an education setting. It is surely perverse to bolster competence-based assessment with knowledge assessment. Even to retain the employment context for assessment could lead to some strange results. For example, demonstrating competence in health and safety practices in work may have to be accompanied by a running commentary to demonstrate knowledge and understanding of the principles. If knowledge assessment is taken out of the work context, cognitive tests seem inescapable. However, apart from the obvious pitfalls in this approach of the separation of theory and practice and the breakdown in the basic rationale for competence-based qualifications, the argument raises the ever-present issue of criterion-referenced assessment.

There is a lurking suspicion in these false starts and abandoned hopes that knowledge-in-competence may be an heuristic assumption. In analysing the assumptions about linguistics and Artificial Intelligence (AI), Dreyfus comments:

"a misconception about the relation between theoretical and practical understanding...[is] that one can have a theory of practice" (Dreyfus, 1979:201)
He goes on to argue that in neither linguistics nor physics is there evidence for this:

"If there could be an autonomous theory of performance, it would have to be an entirely new kind of theory, a theory for a local context which described this context entirely in universal yet nonphysical terms" (Dreyfus, 1979: 202).

So perhaps the quest to identify, describe and assess knowledge and understanding (and NCVQ literature always uses these terms together) is ill-conceived and Jessup (1991) is right to concentrate on the validity of competence. There is an irony too in that those charged with developing the competence-based model for all vocational education and training in the 1990s should be wrestling with epistemological issues at a time when much of the National Curriculum concentrates on teaching facts and 'correct' knowledge. Many areas of education in the late 1970s and early 1980s witnessed a reversal of trends towards integrated approaches to academic study (Jarvis, 1983: 101) with which initiatives such as NVQ and TVEI are clearly at odds. Finegold (1988) characterises these two distinct responses of Government to the post-16 curriculum as prescriptive and co-operative. DES policies such as the National Curriculum are described as centralist
and interventionist and Employment Department policies such as TVEI are contrasted as humanist and flexible (Finegold and Soskice, 1988). I shall examine whether this analysis can be substantiated in a more detailed review of Government curriculum initiatives in Chapter 10. The point about this distinction here is that the core skills structure of the National Curriculum is characterised as inflexible (and many critics of the assessment tests and prescriptive curricula would agree), whereas the 'entitlement curriculum' approach is characterised as flexible and creative. Both stem from a vocational stance that VET curricula must replicate work practices to achieve successful outcomes. Both derive from the same model and seek to standardise results. The separation between the National Curriculum and the competence-based curriculum appears in the recognition that occupational competence takes myriad forms. This leads the competence-theorists straight to problems of assessment - which perhaps the authors of National Curriculum tests had not solved as effectively as they hoped.

Observable Assessment
For the competence theorists the 'problem of knowledge' continually returns to assessment as the key to defining underpinning knowledge and understanding and to certificating its acquisition. If competence which includes all relevant knowledge and understanding can be reliably demonstrated, the identification of required knowledge is incidental, or is a curriculum issue not a conceptual problem for the competence-based model. This shifts the focus from identification of required knowledge to the reliability (is it replicable?) and validity (is it relevant and authentic?) of assessment. Successful performance of competence then is based on no more and no less than meeting performance criteria and all else is deemed irrelevant. Or is it? A hypothetical example of competence related to work-place safety management may again illustrate some difficulties with this approach. A manager could be expected to demonstrate competence in maintaining a safe environment under usual conditions and standards of performance criteria would define competence. Performance criteria at managerial level could be expected to include criteria related to novel conditions and these could be tested in simulations or theoretically. The assessment
problem is then one of constantly constructing genuinely novel situations and the degree of 'novelty' to be defined within the competence. However this does not "guarantee competence" since the manager may demonstrate other behaviours in actual situations. Nor does it satisfy the 'context range' for the competency since not all abnormal conditions could be included. One conceptual solution is to define the standard of competence by either observable conditions or known theoretical test conditions. It does not need a re-iteration of generations of debate about the validity of separating observable from non-observable behaviour to realise that this does not solve the 'problem of knowledge' or deal with validity issues. For the standard of competence to be relevant and authentic certainly at the higher levels of occupational competence a way must be found of dealing with future (unknown) competence. For NCVQ theorists this has developed into the concept of 'learning transfer' but before considering this in detail, it will be informative to look at the ways in which 'standards of competence' are derived.

Standards of Competence
Standards of competence are defined by NCVQ as having "meaning and relevance in the context of the occupational structure in the sector of employment concerned" (NCVQ, 1989a:4) and are the means by which attainment is measured. Standards are devised by an 'analysis of competence' using two main approaches: functional analysis and occupational role models (Tuxworth, 1989).

"Analysis of Competence... provides the reference point for subsequent assessment and... the guiding light for the learning programmes which trainers and educationalists devise" (Fennell, 1989:3)

Functional analysis (FA) involves brainstorming by groups of experts (employers) in workshops led by FA consultants in

"an act of communal 'problem solving' in which answers are already 'known'

(Employment Department, 1989:3-4)

The process is iterative (Miller, 1989) and uses

"the focus on 'whole work roles' ... an outcome approach... a 'top down' method"


The whole process is described with zeal by Fennell:

"As more and more Industry Lead Bodies get into their stride it will become essential to recruit a large number of 'barefoot doctors' who possess the basic skills to analyse occupational areas for national standards development. Only then can the true nature of the 'standards movement' begin to emerge... This means that many ordinary managers, training and personnel staff will find themselves engaged, in a way never seen before, in defining national standards which reflect the demands of"
the working world as they know it."  
(Employment Department, 1989: 3)

Are we to understand then that the process by which standards of competence emerge excludes consideration of competence for future conditions? On the one hand the basis of much of the competence structure appears to be extant work practices and conditions, but on the other, the model must be broad enough to include competence-transfer. The second approach to competence analysis uses consultations with 'superior role holders' to establish provisional lists of competences which are verified with a larger sample of the target population. This method leads to identification of 'soft skills' i.e. generic skills (Tuxworth, 1989: 18). Tuxworth argues for 'triangulation' between the two approaches to incorporate both the characteristics of the highly competent and analysis of occupational functions (Tuxworth, 1989: 18, 22). This is very much a case of saying that the analysis will be right when the methodology is right - it does not challenge the legitimacy of the prescription. A 'critical incident' approach which analyses "notable examples of good or bad practice" is advocated by Wolf (1989: 51). This also relies on practitioners but is thought more likely to throw up non-routine contexts than the other
approaches. These methods for eliciting standards of competence are at odds with theorists such as Donald Schon (1983) whose ideas point to a more complex interaction between competent performance in professional occupations and the skills and knowledge it is based on. Schon quotes commentators such as Charles Reich:

"professionals ... can be counted on to do their job but not necessarily to define their job" (Schon, 1983:12)

This is in part because of the inherent instability in professional knowledge brought about by technological change and higher client expectations. It is also due to the essential 'reflection-in-action' exercised by skilled practitioners. Schon (1983) demonstrated that professionals experiment, drawing on previous knowledge and experience, to solve new problems. Something of the same process is called 'practical heuristic knowledge' by Nyiri (1988:21).

Competence-Transfer
Perhaps the enthusiasm of FA practitioners and consultants does not represent the range of current thinking about competence-based assessment. Influential NCVQ officials such as Jessup have
acknowledged the need for validity in standards of competence and for work on 'competence transfer'. Competence-transfer is a concept that seeks to include the impermanence of occupational skills and knowledge within criterion-referenced assessment. However, this forces an acknowledgement of the tentative nature of performance criteria and could jeopardise reliability in the competence structure. It would seem that either performance criteria are too limited to maintain validity or too futuristic to maintain reliability. Faced with this choice, economic functionalists tend to regard reliability (in assessment of performance) as less important than the test of future utility in the labour market. The next step in this scenario is to jettison the concept of reliability which is exactly what has been proposed.

"I therefore suggest we drop the concept of reliability in the NVQ model of assessment and concentrate our energies on maximising validity" (Jessup, 1991: 193)

Jessup acknowledges that the simplistic 'black box' approach is inadequate but still puts the emphasis on performance criteria to drive the curriculum:

"what is assessed, will set targets for what is taught" (Jessup, 1991: 124)

He concludes that the approach must compromise and

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accept that underlying principles may have to be assessed in some contexts. This does not however deal with future utility unless that too can be subsumed into the concept of 'validity'. It seems self-evident that the competence model must encompass future competencies which could be expected in successful occupational roles if it is to demonstrate efficiency and effectiveness as an economic curriculum model. This is not to challenge the capacity of competency-based VET to anticipate major technological and occupational changes in the future, but to concentrate on 'the skill of inventing tomorrow' (Challis and Russell, 1984) which is frequently cited as an essential characteristic of successful workers and successful economies. The competence model cannot have authenticity, relevance and credibility unless it defines competence for extant and future occupational roles. Without this it fails the individual by denying occupational creativity, it fossilises the labour market and stagnates the economy.

Progress versus Achievement
There is a further issue related to the concreteness of standards of competence which is the issue of
continuous assessment. In many parts of academic and vocational education there is a growing recognition of the disadvantages of assessment based on performance under particular circumstances at a fixed point in time. Continuous assessment is now used at every level from primary to higher education as a vehicle for more realistic and reliable certification of performance. It would seem strange for a system such as NVQ which sets out egalitarian, non-institutional, atemporal principles to reject continuous assessment. It would seem neither possible nor desirable to differentiate progress from achievement. If performance has improved but not reached the competence standard, can it reasonably be regarded as failure? Twining describes the problem from another perspective:

"The point at issue is whether the same assessment can be formative and summative. As a rule of thumb: if the learner is competent then the assessment is summative, if the learner is not competent then the assessment is formative."

(Twining, 1990:8)

Twining points out that one of the stated principles of competence-based VET is that attainment of competence should be constant and the time taken to achieve competence should be variable. Under previous VET systems, time was the constant and attainment was

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the variable (Twining, 1991: 13). Some researches have acknowledged that absolute standards may be undesirable and some discussion of 'half-standards' has emerged. However this would seem self-defeating for NCVQ which designed the framework of certification levels from basic to advanced to cope with lower levels of competence in terms of less skilled work, and have introduced a national system of credit accumulation to allow small units of competence to be aggregated (NCVQ, 1988c). Such a system is unlikely to be able to sustain degrees of competence within an occupational role without losing credibility as a qualification. Even if, in practice, reaching a standard of competence could be treated as an issue of curriculum organisation (certification is delayed until the standard is reached or no longer desired), conceptually the competence model is premised on defining absolute standards of competence. I have already discussed the problems this raises for 'future' competence, but there is another paradox. If some elements of competence assessment are to be solely of 'knowledge competence' then theory and practice are unacceptably separated and progress versus achievement becomes a possibility that leads to
the cul-de-sac of incomplete demonstration of practical competence.

Impact Evaluation

Whether or not an absolute standard of competence leads to the formalisation of qualification, it is clear that competence-based education and training is fundamentally concerned with outcomes. Not only does this position disregard most of the learning issues in competence acquisition but the curriculum ceases to be the 'means' of qualification and has only tenuous links with the 'ends'. The role of assessment in the competence model can be described as one component of 'impact evaluation'. That is, all considerations of learning are forcefully pushed against and fixed upon competence-evaluation. Thus 'impact evaluation' is not only the means (and rationale) for assessing competence as an outcome for the individual but impact evaluation also legitimises the curriculum. Since the standards are derived by analysis of competence in employment requirements, the validation of competence rests on attainment of the standard (by the individual) and faces the further tests of applicability (by the employer) and utility (in the
labour market). This means that the system must prepare not only for current employment requirements and labour market structures but also for future (unknown) requirements of individual occupations, specific and general business organisations and macro-economic movements. Even with regular updating of standards of competence across the occupational span, this is a heavily front-loaded system.

Values and Competence

A further problem with the competence model is one of failure to challenge, or in any way develop, the value structures of work and employment. Not that traditional VET, or indeed the education system as a whole, has conspicuously contested the underlying rationales of work practices and conditions of employment. While progressive-liberal approaches to education have promoted humanist principles for life (including work) in the VET curriculum and, since the 1960s, many employers have espoused human resource development strategies in the management of workers, the two sides of the labour market interface have not seriously challenged the structure and organisation of work. Perhaps the only area of VET which has critically examined work practices in recent decades
is the literature of training for unemployed youth and adults (see Finn (1987a), Glesson (1989)). These critics have been concerned with training for low-skill jobs with traditional gender and class stratification, and with the paradox of training without jobs. However, the radicalism of these views has been on behalf of workers, and not from any conviction among workers or employers. And yet, if competence, as the dominant VET curriculum ideology, has no framework for challenging dehumanising work practices, sexist and racist work cultures or social and environmentally destructive production, is not the model fundamentally flawed? How can a system aimed at future economic well-being and growth achieve integrity and success (in its own terms) if it has no in-built checks and balances for the occupational structure of the economy? Competence-based VET claims to provide the mechanisms for analysing, assessing and guaranteeing vocational competence so that the curriculum will ensure creative workers and optimum outputs. In the widest sense, a 'qualified society' would surely lead to not only economic but social, political and environmental well-being.
Philosophical Problems

The epistemological difficulties encountered in the search for standards of occupational competence echo some familiar elements of curriculum philosophy. The dichotomy of rationalist - empiricist surfaces in the search for standards and performance criteria. In many ways, the competence movement is diametrically opposed to rationalist assertions of the permanency and certainty of knowledge. Occupational competence in particular must assume that knowledge has in-built obsolescence and is subject to interpretation based on multifarious approaches to the purpose and meaning of work. Rationalism is avoided by focussing on outcomes rather than inputs. Further, attempts to define the knowledge and understanding that are assumed to underpin competence have floundered. Perhaps the competence-based curriculum can be acquitted of rationalism (though the underlying structure has rationalist elements) even though this may not entirely square with some elements of the market-forces model as I shall explore later. So, is the competence-model essentially empiricist? The concentration on analysis of occupational tasks which is then synthesised into elements of competence...
demonstrated in observable behaviours seems to indicate so. In relegating required knowledge to a feature of observable standards of competence, empiricist tendencies dominate. This can be helpful if it embraces the provisional nature of knowledge:

"current empiricist epistemology will view all knowledge as hypothetical" (Kelly, 1986:41).

Is the model also pragmatist? That is can it be shown to demonstrate that knowledge is

"tentative, hypothetical, subject to continuous change and evolution" (Kelly, 1986:47)

Well not really, at least not in the public face of NCVQ which is striving to claim validity and replication for 'standards of competence'. Can the answer be that the competence-based model is best described as a theory of practice? This would mean that the curriculum is driven by standards of practice based on competence and assessed to replicable levels. The model might then disengage from occupational competence and self-limit its achievements to prevocational competence. Perhaps a very credible system could be premised on 'capability' rather than competence, leaving headroom for workers to acquire competence in work-based experiential learning. It may be that the only realistic curriculum model in
circumstances of rapid technological, social and economic change must take this approach. It may be that competence-based curricula can be instrumental and used solely to support economic activity but this does not, indeed cannot, exclude the possibility of unknown outcomes in the changing conditions of the labour market.

Beyond Pragmatism?

If the competence model is really to break new ground it must manifest features of new thinking and not merely re-arrange the mix of recurrent dilemmas in education and training. And perhaps the preoccupations with the 'problem of knowledge' and standards that have typified the competence debate so far have obscured more important issues. One such area must surely be occupational creativity - this will inevitably feature as higher levels of occupational competence come within the NCVQ framework. In denouncing sterile technical rationality in the previous VET curriculum (skill divorced from context) and seeking to replace it with competence (skill derived from and demonstrated in context) the pragmatists may have overlooked the role of
creativity. This aspect of professional competence has been pointed to by Schon as 'capacity to think on one's feet' and an essential requirement in professional occupations. This is called 'reflection-in-action' by Schon (1983) and is a process of active experimentation and reflection (perhaps almost simultaneously). This is not reflective thinking which directly evaluates the experiment, or passive assimilation of the experience. It is more an attempt to describe the adaptation that can be observed in professional occupational behaviour. Schon describes professional knowledge as a hierarchy of an underlying discipline (basic science) developed into applied science and a third stage of skills and attitudinal knowledge applied to delivery of the profession. This pattern is clearly exemplified in professional training and has been institutionalised into curriculum practice (Schon, 1983: 24-27). This is an approach typified by technical rationality which has evolved from a positivist tradition which holds that all problems (if adequately defined) can be reduced by empirical research (if adequately conducted) which would produce results to mitigate the negative effects. Therefore professional practice is defined
as a process of problem solving within a clearly articulated framework of known expertise or empirical practice. For Schon this ignores, or obscures, problem setting in professional practice. Problem setting is seen as more skilled than problem solving and involves

"the process by which we define the decision to be made, the ends to be achieved, the means which may be chosen. In real-world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problematical situations which are puzzling, troubling and uncertain ... When we set the problem, we select what we will treat as the "things" of the situation, we set the boundaries of our attention to it, and we impose upon it a coherence which allows us to say what is wrong, and in what directions the situation needs to be changed. Problem setting is a process in which, interactively, we name the things to which we will attend and frame the context in which we will attend to them." (Schon 1983:40)

This process of 'naming and framing' may seem in some ways like an extended description of problem solving processes familiar to professionals (used here to embrace high performers in non-professional occupations as well). But the distinction drawn by Schon between problem solving and problem setting may help to illuminate the potential hazards of competency-based approaches which treat standards of competence derived from work practices too shallowly. Teasing out the elements of problem setting (and
problem solving) at high performance levels may assist in the search for occupational creativity which is essential to the credibility of economic curriculum models.

This type of professional skill is close to what Eraut (1988) calls situational knowledge. Eraut divides knowledge skills for managers in education into six categories: situational knowledge, knowledge of people, conceptual knowledge, process knowledge, control knowledge and knowledge of educational practice. Some of these domains are clearly interdependent, but situational knowledge comes closest to skills of practical intuitive anticipation. Burke (1989) interprets this area as:

"much but not all of this knowledge is consciously held, though it is rarely written down...It is affected by the person's role, personality and perspective. It constitutes the work-a-day common sense understanding that arises from living a situation rather than consciously studying it. It is an insider's perspective often involving some discussion and deliberation but frequently built on intuitive assumptions." (Burke, 1989:110)

These ideas throw light on two major issues for the competence-model: competence in novel situations and the niche for knowledge in standards of competence. Schon (1983) indentifies different types of
reflection - sociological, philosophical, operational even emotional - any of which may lead to a change in knowledge or performance that could be described as occupational creativity. A crucial element of the reflection is that it takes place within the 'action-present' that is the time in which action can affect the situation. This is an important idea because it encapsulates the kind of competence implicitly sought for the workforce by those searching for a more effective VET system. Schon's ideas usefully bridge theory and practice in a framework where skills are dynamic and responsive to changing contexts (Jarvis, 1987:172). Current tenets of NCVQ that competency-based VET should seek to frame competencies which can be reliably tested by standards validated in observable contexts are likely to come under considerable strain at the highest levels of occupational performance. This discussion has drawn attention to the process elements in occupational performance and the indivisibility of observable and non-observable knowledge, understanding and skills. This helpfully takes us further with consideration of an andragogical approach to competency in professional occupations which is described next.
Competence Applications

Knowles (1985) describes a model of competence which takes its starting point in a process framework rather than a content-based approach. In this model, 'competence-based education' describes a range of applications with school children and with adult learners including management training, professional updating, self-directed undergraduate study and external degree programmes (Knowles, 1985). The main model distinguishes between pedagogy and andragogy (Knowles, 1980). The pedagogical approach defines the learner as dependent, directed, subject-orientated and extrinsically motivated. The andragogical model defines the learner as self-directed, experienced-based, life-centered and internally motivated. These approaches are not exclusive or age / subject-orientated but rather offer a framework for the organisation and transmission of education. However the choices for curriculum design are rather more discriminating. Pedagogy implies that teachers and organisations control what is taught, how teaching is organised into units, and the sequence and means of transmission. Andragogy features a process of climate setting, mutual planning between learner and teacher.
(referred to as facilitator of learning), self-diagnosis of learning needs, objectives, plans, assessment and evaluation (Knowles, 1985: 8-20). It is as part of the process of meshing internal (individual) and external (organisational) goals that a model of competencies can be used (Knowles, 1985: 17). I do not intend to analyse the model in terms of learning styles or motivation theories but to highlight the aspects that might contribute to our understanding of competence. Firstly, in the andragogical approach, competency-based criteria are used to enhance the capacity for "self-directed study" (Loacker and Doherty, 1985) "independent, lifelong learning" (Neufeld and Barrows, 1974, 1983) and "institution-free education" (Daloisio, Firestone and Evarts, 1983). The rationale for initial professional training which concentrates on problem-solving rather than subject knowledge is the increasing obsolescence of knowledge and skills:

"the body of factual knowledge in the program is inevitably both incomplete and redundant; because of this, a high value is placed on the student's ability to manipulate data, to recognise and define problems, and to evaluate their solutions" (Neufeld and Barrows, 1983: 209)

Competencies are also a tool for assessment of prior
learning and assessment within courses (Loacker and Doherty, 1983) and for 'graduation criteria' (Eldred, 1977). A detailed exemplification of using competence-based training cited by Knowles (1985) as andragogy-in-action uses a specifically commissioned analysis of management competencies drawn from the study of 2000 effective managers as the basis of appraisal, individual competency development plans, competency acquisition and documentation of evidence of completion (Daloisio, Firestone and Evarts, 1983). This is clearly resource intensive and job-specific. Knowles acknowledges that change from content-based to process-based learning can present problems:

"policies, rules and regulations, and traditions that are not congruent ... norm-referenced grading, compulsory attendance, rigid schedules, and required content-orientated syllabi are often treated as sacred cows" (Knowles, 1985: 419)

All of which sounds an apt description of British attitudes towards the academic post-16 curriculum and should endear us to the competency-based approach. If we also accept the view that accelerating technological change and a concomitant explosion of knowledge will increasingly make the content of education programmes transient at best or obsolete at worst, then imaginative use of competencies to define
and measure learning makes a lot of sense.

The andragogy approach has been criticised as overly reliant on simple dichotomies between adult-child curricula and I would not wish to rely too heavily on the examples quoted above. However, there is as yet no tested competence-based curricula for workers in the UK labour force, and so the above examples are interesting extensions of the model into practical applications. A more fruitful insight into some of the issues in this chapter might be shed by Jack Mezirow's (1977) work on meaning perspectives. Mezirow's work is concerned with the transformation of experiences into systems of meaning derived from both everyday learning experiences and momentously insightful experiences. He suggests that a 'meaning-perspective' - our view of the world - can be transformed in social exchanges to accommodate new situations, facts and experiences. If I understand this aright, it has something to do with acquiring higher levels of understanding and increased maturity of behaviour:

"Transformation in meaning-perspective is precipitated by life's dilemmas which cannot be resolved by simply acquiring more information, enhancing problem-solving skills or adding to
This is a philosophical approach which may seem remote from the practical problems being encountered in the development of a competency-based curriculum. However, any curriculum risks being fatally undermined if its conceptual base is flawed, so the epistemological problems need to be solved.

Is Competence an Economic Curriculum Model?
The economic curriculum model set out in Chapter 2 is based on concepts of Economy, Efficiency and Effectiveness. Economy is the relative cost (affordability), Efficiency is related to value-for-money and Effectiveness is a measure of value-added (output state minus input state). Competence as a theoretical construct includes notions of: the quality or state of being competent; the innate human capacity to acquire, use, and understand language; and a sufficiency of means for the necessities and conveniences of life (Longman Dictionary, 1985). The vocabulary of competence curriculum theorists reflects a sense of expertise, fitness, proficiency and general skill. These ideas chime with quality management terms such as 'fitness for purpose', 'right
for the job', 'just in time' and 'getting it right' (see Peters and Waterman (1983), Handy et al. (1988) and others on quality management). Language competence is clearly axiomatic to VET and employment and in the competence curriculum is subsumed into general vocational competence. The third construct - the means for life sufficiency - is implicit in most Government policies for a curriculum based on economic individualism. This is not to suggest that economic sufficiency equates with the means for life sufficiency, but rather points to the controversy around definitions of competence. As with the polarisation of definitions of core skills, this reflects tensions between liberal educationalists anxious to accept some of the arguments in favour of vocational relevance and economic functionalists determined to devalue education that is unrelated to the labour market. Government policies reinforce the position of the latter and so competence as a core concept in VET is viewed almost exclusively in the context of economic sufficiency and subsumes proficiency and skill.

The competence model demonstrates Economy because, in
theory, nothing superfluous to the market will be produced. The curriculum can only contain elements that are directly functional to occupational competence in observable contexts. The competence curriculum depends on occupational validity and is defined by a demand in the labour market. The model therefore demonstrates Efficiency because optimum resources are used - the self-regulation of the market determines demand and over-rides supply-side issues. The model transposes the 'input' of curriculum (what should be taught) to the 'output' of impact assessment (what can be quantified). The sum of the effects of meeting the first two conditions ensures that Effectiveness is achieved because market forces will ensure that economic needs are satisfied. A beguiling prospect indeed!

However, on practical assessments the model is flawed. On all raw measures of cost, competence-based systems are expensive. The initial research and establishment of competencies involves a labour-intensive structure of inventing, writing, checking and validating. Training to deliver the new system and documentation for individuals obtaining competencies are also extensive. Above all, assessment procedures are
resource-intensive since every competence must be attested through performance within a structure that minimises subjectivity and maintains standards. In addition, the individualisation of competencies means that costs are replicated with every trainee - there are no economies of scale (as with written examinations for example), there can be no cost differentials (low level competencies can be as costly as high level competencies), and increased supply cannot drive down price. The affordability argument has repeatedly been cited in the negative form: that, as a country we cannot afford not to have a VET system that uses all the nation's talents. However, whether the competence-based model is the most economic is as yet unproven. Other countries such as Japan for example, educate most young people to a high level rather than supplement low levels of education with VET programmes. Value-for-money from a competence-based system has to measure the costs involved compared to actual costs and implied costs. Implied costs can include earnings forgone while training against the expected gains from achievement of higher qualifications. In theory, the performance-outcomes model should minimise the loss of earnings while in
training since it is possible to gain qualifications solely through assessment with no training input and such training as is required can be taken at any time in a career cycle. Such flexibility should aid an individual's economic planning and enable her to maximise earning potential, for example, by gaining qualifications in periods of partial participation in the labour market. The value-for-money dimension of increased earnings (or earnings potential) as a result of increased qualification is more difficult to substantiate. Apart from studies of the links between earnings and qualification for graduates and some tentative conclusions drawn from the Labour Force Survey, very little evidence of positive gain exists. A BBC survey of the attitudes of school leavers to further education found that two-thirds of the sample left school at 16 to earn money and most believed that earnings were unrelated to qualifications (BBC, 1992). Evidence from employers seems to support the view that employers are not interested in earnings differentials based on prior or work-based qualifications. The economics of individual employment of course does not account for the economic effectiveness of the labour force as a whole, but the earnings-perceived economic
value equation cannot be ignored.

The value-added gained from the competence-based system must be measured by Utility (defined as the power or degree to which human wants are satisfied) for the individual, the labour market and the economy. These are areas of considerable difficulty of measurement even when the system is sufficiently well established to provide a large comparative base. Notwithstanding such difficulties, this is the crucial criterion of validity for a national vocational education and training system. I would hazard some guesses at this stage of development and say that there is potential for incalculable benefit to the labour market and the economy from increased access, principles of inclusion and parity of esteem of academic and vocational, and the breakup of time-serving oligarchies in employment and training structures. Despite the difficulties therefore it is to be hoped that solutions to these problems continue to be explored since the competence-based model is surely more fruitful and promising than previous education and training based on restricted, non-contextual and theoretical systems. However, it will
be essential to frame solutions that move outside the concrete, observable and immediate parameters so far espoused by competence-based curriculum theorists. A VET successful model must be capable of economic validity at the level of the individual, the labour market and the economy. This can only be achieved by resolutions that define occupational knowledge as tentative and evolutionary, and define its curriculum importance in terms of paradox, complexity and change.
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET

AN ECONOMIC CURRICULUM MODEL

PART FOUR

EDUCATION / TRAINING AND THE WORKFORCE
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

PART FOUR EDUCATION / TRAINING AND THE WORKFORCE

CHAPTER SEVEN: VOCATIONAL EDUCATION AND TRAINING

Introduction
This investigation started with questions about the perceived failure of education and training to provide for qualification and skill requirements in the labour market and the economy and the failure of Government to provide a coherent framework in a period of rapid change in the structure and size of the labour market (see Chapter 1). The four chapters comprising Part 4 examine the education / training system in terms of vocational preparation and levels of qualifications in the workforce, the changing structure of the labour market and the effect of interventions in the balance between labour market supply and demand.

This chapter examines the evidence for the assertions by industrialists, politicians, some educationalists and media commentators since 1979 that the education / training system fails to educate and to train young people. It considers the vocational relevance of schooling and FE and evaluates the solutions to the
'training crisis' put forward by industrialists and others since 1981. The chapter concludes with an assessment of the contribution of youth and employment training schemes to vocational skills. Chapter 8 considers the evidence of skill shortages, qualification levels in the workforce, the evidence of a low-skill economy in Britain and examines the effects on labour market competitiveness. The chapter ends with a summary of training levels and makes links to the economic model discussed in earlier chapters. Chapter 9 looks at aspects of the interface between the labour market and VET in the context of the UK labour market. It takes further the issues around the structure of the labour market and divergence between the social systems of education/training and work, touched on in Chapter 4. The final chapter in Part 4 discusses the schemes, initiatives and policies introduced by the Government since 1981 which have been aimed at redressing imbalances between the supply of recruits to the labour market and the rapidly changing demands of a transitional post-industrial economy.
ills of the System

Failure to generate productive links between VET, the labour market and the economy has been a recurring theme of the post-war period (see Dale, 1986). In the 1960s and 1970s, education had been expected to

"fuel economic growth, facilitate equality of opportunity and afford some social justice to the deprived" (Ranson, 1980: 103)

Expansion in the 1960s and 1970s fuelled by a rising birth-rate, a growing economy and political optimism, by 1980 changed:

"Demographic and economic contraction, eroded beliefs about the contributions which education can make and the disquiet of parents and politicians ... produce a more severe and pessimistic context for education." (Ranson, 1980: 103)

The significant moves made by the Thatcher Government (1979 - 1990) in the early 1980s to introduce widespread, structured youth training for school-leavers and young unemployed adults, inspired by the political imperative to combat youth unemployment, did little to dent a solid critical commentary from education, the press and industry, pointing to deficiencies in each part of the system. The root problems were variously ascribed to: initial education which failed the majority of children; youth training (YT) which was inflexible and low-skilled; lack of
a national strategy for applied science and industrial support; failure to encourage a co-ordinated national system for adult education and training; and failure to upgrade skills and qualifications in the labour market and the workforce.

Learning to Fail
So what is wrong with initial education? Educationalists and industrialists have described the British school system as 'learning to fail' (Moser/BBC 1992). Sir Claus Moser in his Presidential address to the British Association for the Advancement of Science in August 1990, reported in The Guardian newspaper in January 1991, took the theme of "the need for an informed society". He expounded on Britain's "flawed educational conditions" which, unless urgently corrected would see us "become one of the least educated of advanced nations, with dire consequences". He strongly criticised the Universities Funding Council for withdrawing long-term funding commitments and called education initiatives such as vouchers and grant-maintained schools an irrelevance. He pleaded for political priority, and the necessary resources, to be given to upgrading educational opportunities and
quality. He set the agenda for "a focus on fundamentals" as:

"... reforms for the 16-18 age group, with linked attention to training and education, the needs of a skilled workforce as much as academic preparation; a coherent rethinking of the entire range of secondary school examinations and the consequentials in higher education; curricula reforms - already happily underway; improvements to ensure literacy and numeracy for all in primary schools; finding ways for widening opportunities for children from all backgrounds; approaching the role of universities more constructively; above all, finding policies to make school teaching into the respected and sought-after profession it deserves to be." (Moser/Education Guardian 8 January 1991:19)

Moser called for a Royal Commission to recommend policies to address these issues; this was immediately rejected by the Government in 1991. However, as a direct outcome of the publicity Moser attracted, a National Education Commission chaired by Lord Walton under the joint auspices of the Royal Society, the British Academy and the Fellowship of Engineering was established with private funding. The Commission's first report in May 1992 recommended a familiar litany: introducing legislation to make employers give under-18 year olds formal traineeships, backed by entitlement to FE courses; offering effective incentives for all young people to carry on learning;
and making broad-based education and training the usual route into employment (Raffe, 1992). This agenda was economically and presentationally difficult for the Government to implement in an economic recession when any measure which could add to workforce costs (at least in the short-term) would be political anathema; Lord Walton's Commission has yet to make an impact on this debate. At the same time, Channel Four set up its own enquiry with a Commission of eminent academics – A.H. Halsey, Neville Postlethwaite, S.J. Prais, Alan Smithers and Hilary Steedman – with a brief to gather evidence and report within 3 months. The Commission's work led to the publication of *Every Child in Britain* (1991) and a television series.

The Channel Four Commission's report (1991) makes 18 recommendations which "could be set in motion during the next 18 months" and would transform British schooling. The report concludes:

"Such a transformation would not only make possible a major improvement in our economic position but, at least as important, help to give dignity to many of our young people who today look upon themselves as failures. Getting the education system right would improve the quality of life (not just livelihood) for the next generation and beyond." (Halsey et.al. 1991:32).

The report's findings stem from the Commission's
analysis that the present system actively prevents at least 80 per cent of junior and secondary school children from attaining levels of qualifications common in the rest of Europe. Compared to eleven other advanced countries (including Japan and USA) Britain has the lowest staying-on rates at 16 years of age with about 28 per cent remaining in secondary education, 16 per cent moving to full-time and 22 per cent to part-time further education (DES, Statistical Bulletin, 1/90). Although recession in the labour market by 1991 pushed up the numbers of children staying-on at school by 10 per cent with a commensurate drop in those going into YT and employment, the UK percentage of children leaving education and training is higher than the rates in Germany or France (Employment Department/Careers Service report for England and Wales 1992a). The British system selects about 16 per cent of its pupils for higher education of whom around 12 per cent actually make it into full-time higher education (Smithers and Robinson 1989). These figures mean that over 85 per cent of children fail to achieve the success (qualifying for a place in higher education) that the system is geared to promote. In value-for-
money terms this is expensive, inefficient and inequitable. But the economic and social damage for four fifths of school leavers may be far more extensive if, as the Channel Four Commission believes, they are "left with an acute sense of failure" (Halsey et al. 1991:9) which pervades future aspirations for education and training. And perhaps the system itself is complacent and has come to accept the minor goal of increasing staying-on-rates when other countries for whom staying-on is the norm, have targets for reducing the number of youngsters dropping out (Fatchett 1989).

Failing to Make and Do
At primary and secondary education stage, there is evidence that children fail to gain skills in science and mathematics. On measures of average pupil attainment in science for 10 year olds and 14 year olds, England comes close to the bottom in a comparison of 23 countries (Postlethwaite and Wiley 1991). Similarly mathematics, particularly arithmetic, has poor attainment levels among British children compared to German children (Prais and Wagner 1985).
The numbers and proportion of GCE 'A' level students taking 'science and maths only' has declined by more than half between 1963 (44 per cent) and 1990 (21 per cent) (Halsey et. al.1991:15). Among the small percentage of children that take GCE 'A' levels nearly 15 per cent fail English and nearly 27 per cent fail mathematics (SEAC, 1990) so that in core skills the level of qualification is lamentably low. Thus the concentration on academic study for 11 years compulsory schooling leaves around 86 per cent of children without an entry pass to higher education and most of the remainder without an education that is appropriate to working life.

This is not to deny that the UK system is strong in producing high calibre science students. In a measure of science achievement at 18 years of age in 23 countries, England (sic) comes in the top three with Hong Kong and Singapore (Postlethwaite and Wiley 1991). This reflects early specialisation which concentrates on producing a few (5 per cent in UK compared with 20 per cent or more elsewhere) science students. The narrow subject range of 'A' level subjects with its concentration on verbalisation of
knowledge is reflected in applications to universities for predominantly knowledge-based subjects. Although applications for higher education are rising overall, applications fell by nearly 20 per cent in engineering and 8 per cent in physical sciences in the period 1985-88 (Halsey et al. 1991:15). A Polytechnics and Colleges Funding Council press notice (27 November 1991) confirmed that numbers of part-time students in arts, humanities and education courses increased 10 - 15 per cent in 1991 but science and building courses had only increased student numbers by around 5 per cent. This in part reflects chronic recession in building trades but also continues a downward trend evident from the mid 1980s. A leading industrialist claimed in an article written for The Observer (10 May 1992) that the 20 per cent fall in first-class degree graduates entering engineering and allied industries in 5 years and 40 per cent of graduate engineers entering on the technical side of the industry leaving within 5 years, must be reversed.

"Engineering is the vital means to an end. Until you can make something and then sell it, no wealth has been created. Financial services, on the other hand, are only 'enabling' mechanisms. If they, rather than industry, attract most of the best brains then industry will falter and fail the rest of us." Christopher Lewinton, Chairman TI Group
In the same week the Engineering Council published a report claiming that the standard of technology teaching and attainment in schools had fallen in the 2 years since the introduction of the National Curriculum (Smithers and Robinson 1992).

The main reason given for the lack of relevance of the academic curriculum for working life is its emphasis on verbalisation and written skills rather than practical applications and its squeeze on science and mathematics (see Chapter 5). This is because GCE 'A' levels are largely used to screen for entry to higher education and are not designed to have vocational application. Nevertheless many enter the labour market after taking 'A' levels and some very large employers, the Civil Service for example, have substantial recruitment at this level.

A Foundation for Working Life

The recommendations of the Channel Four Commission for primary and secondary schooling are an interesting contribution to understanding the perceived malaise of British education and are relevant to include here because of their implications for post-16 VET. For
secondary pupils the Commission recommends three streams: academic, technical and vocational. Progress would depend on attainment and demonstration of basic competence before moving to the next level. Challenging standards would be monitored by reliable external tests. There would be special arrangements for extra help for slow learners in holiday periods (and in repeated terms) with additional payments to teachers providing extra tuition. The three streams would be inter-related with easy transference and parity of qualifications between the academic and technical paths. Children would be taught in similar ability groups, irrespective of age, with teaching focused on basic skills. Schools, or 'houses' within schools, would have around 600 pupils and would foster good personal relationships. The national curriculum would be followed by all children in the first three years of secondary school with one-third of the timetable settled locally but each subject would be specifically focused on basic attainments. Examinations at age 14 (with additional teaching time for less successful children) would ensure a basic grounding before moving to an academic, technical or vocational pathway. The academic route
would be based on GCSEs combined into a diploma as a rigorous introduction to GCE 'A' levels. The technical route would seek to develop talents for design, making things and dealing with people and be based on GCSEs in different combinations. Vocational education would incorporate work-experience with various employers. Passing minimum standards at age 16 (including nationally administered written tests for all pupils) would be the first stage towards further education or employment. Modified GCE 'A' level examinations would be taken by academic and technical students. Vocational students (full or part time) would follow designated employer training which could give access to higher education. National vocational qualifications would require passes at all levels in written examinations as well as practical tests. Some resources would be redirected from academic to technical education and additional resources provided for support teaching and improving teachers' pay and conditions. Employers and parents would need to cooperate to ensure that the proposed technical and vocational qualifications lead to skilled well-paid employment (and conversely, trainees would receive proportionately lower wages than at present) (Halsey 7.13
et al 1991). This is a prescription which rejects the theory that market forces should regulate entry and remuneration in the labour market.

The evidence of the failure of GCE 'A' levels to meet economic needs is documented elsewhere in the thesis (Chapter 5) but despite critical Government-sponsored reports and pressure from some educationalists, defenders of 'A' levels appear inured to arguments for change. As recently as March 1992, the Government reversed modest reforms designed to increase the proportion of 'A' level course work and to broaden the curriculum through 'AS' examinations. However, moves by the Government in 1992 to introduce a parallel vocational qualification - the General National Vocational Qualification (GNVQ) - have been widely welcomed and presented as a virtuous circle by Sir Bryan Nicholson, Chairman of the Post Office and the National Council for Vocational Qualifications:

"Only 20% of 16 year-olds start A level courses and at the end of two years a third of them have nothing to show for it. More youngsters are interested in vocational than academic qualifications and GNVQs will offer a wide choice, which will raise attainment." NCVQ Press Notice 13 July 1992.

GNVQs are being piloted in 100 schools from September
1992 covering 5 subjects: leisure and tourism, manufacturing, health care, business and administration, and art and design. 12 separately assessed modules, taken over 2 years, will lead to a NCVQ 'Advanced' level award equivalent to 2 GCE 'A' levels. GNVQs consisting of cross-curricular themes, core skills (including problem solving, communication, personal skills, numeracy, information technology — and eventually a modern foreign language) will be assessed by coursework and final written examinations. These proposals, if fully implemented, will meet some of the Channel Four Commission prescription for a structure that is better able to produce an educated and qualified workforce.

Changing the Culture

Some of the Channel Four Commission's recommendations are already (at least in part) education policy - for example, the National Curriculum and targets for higher staying-on rates. Some elements, such as reducing school size, increasing teaching rewards and the culture of repeating work until successful, would require a volte-face in Conservative policy (and public perception of academic success). It runs
counter to the ethos behind grant-maintained schools which are expected to expand continuously in size as a confirmation of popularity with parents. It is counter to the prevailing funding regime which encourages schools to minimise teaching budgets. But more fundamentally the recommendations challenge deeply engrained systems based on meritocracy. Meritocratic systems hold that intelligence (often defined by performance in intelligence and verbal reasoning tests) plus effort should be rewarded. In this way resources are targeted on academically able children who are then regarded as naturally clever. This culture maintains that those who succeed should deserve to through talent and application and provides academic education with its strong support. Paradoxically, there is a strand of British consciousness that also supports the notion that able children can be expected to succeed almost without education (a Conservative Prime Minister without HE qualifications and 'captains of industry' who drop out of school are often cited as evidence of this). This ambiguity is evident in policy-making where schemes to make learning accessible to the majority (for example, TVEI) are set in a context of
academic competition. More damagingly, this duality gives only token support to the average and below average child because the ideology holds that it cannot be right to spend more on non-achievers than on 'natural' achievers. There are two very important myths to demolish here: firstly that the education system should favour meritocracy and secondly that attainment achieved through extensive support should have lower esteem than attainment achieved without support. It is the second attitude that particularly needs to change if the British system is to absorb the lessons of unequal development demonstrated in, for example, Germany and the Netherlands where the achievement of set standards is more important than the route by which they are gained. If the British education system focused on successful outcomes for all participants in education and training, it would be axiomatic to regard additional tuition, extra terms, small classes and small schools as necessary tools for achievement of this aim.

Technical and Vocational Education

In 1983 the Technical, Vocational Education Initiative (TVEI) was launched under the auspices of the
Manpower Services Commission (and continued under the Employment Department). TVEI started with pilot schemes but aimed to introduce technical and vocational curricula for all 14-19 year olds by the end of its 10 year programme. From 1983-84 to 1992-93, the Government spent £842 million on the programme (Hansard, 21 October 1993: col. 340). In the early 1980s, industrialists and politicians had become increasingly critical of the dominance of academic-value structures in education for children under 16 years and the lack of vocational skills in 16 - 18 year olds. The moment was ripe for the MSC to build on the new vocationalism being forged through intermediate systems such as YT to make an incursion into school curricula. The Government's growing research interests in competency-based curricula (see Chapter 6) also led it to see applications for more active learning styles in school curricula. TVEI was introduced in a less bureaucratic, process driven way than was usual with initiatives run by Government departments (Dale 1986:51). The model used for TVEI was policy implementation through hypothecated funding in a way that ensured not only compliance with practice but also proselytised the target audience.
The main stages of the model were to develop policy features through pilot projects with willing partners; disburse generous funds to attract those who can deliver innovation; invite voluntary co-operation - and commitment - in exchange for resources; and tie acceptance of the resources to acceptance of the policy and an ability to deliver (Dale, 1986:61). In this way, education authorities competed both for funds and to demonstrate the strongest commitment to the new philosophy. In 1986, TVEI was extended nationally to all education for 14-19 year olds with a wide remit to develop broad-based educational entitlement related to the modern economy including developing "effective links between schools, colleges and industry" (Nuttall, 1990:8). For Dale, the introduction of TVEI was a political intervention premised on a business or commercial model of moving resources into a new 'line' when the existing one is proving ineffective. The executive acted to restore confidence in the product in a way designed to deliberately break with haphazard incremental change at the hands of educationalists (Dale, 1986:41-43). The main elements of TVEI reflect new vocationalist aims to make the curriculum relevant to working life
by developing active learning methods and interactive relationships with employers. All 14 - 19 year olds

"..undertake studies with significant technological content and gain practical experience of enterprise through problem solving activities. They have planned work-related experience and apply the knowledge and skills they learn to solving 'real life' problems. They have access to self-study and open learning techniques and are assisted to develop qualities such as self confidence and resourcefulness as well as communication skills... Career and educational counselling is also provided."

(Kenney and Reid, 1990:329)

Much has been written about the impact and outcomes of TVEI (see Esland (1991) for a critique). I am not concerned here with its effects on the delivery of teaching but its place in the range of Government initiatives designed to vocationalise the educational experiences of young people. The generalist attitude-changing and experiential objectives of TVEI are not easy to assess by outputs from the education system and even more obscure to measures linked to the labour market. However, one measure could be an increase in take-up of vocational courses by 16 and 17 year olds in full time education. There has been an increase from 22 per cent in 1986-87 to 25 per cent in 1991-92 of the age group in full time education taking vocational courses and the number participating has
increased. However the percentage taking GCE 'A/AS' level courses has also increased from 54 per cent to 57 per cent (Hansard 23 October 1992 col:386). These figures reflect a decline in the percentage taking non-qualification courses and cannot be attributed to the effects of individual programmes. It would require more space than I can give here (or would be pertinent to my cause) to give an adequate summation of the effects of TVEI claimed for it by its exponents. My impression from the literature and from some first-hand experience of TVEI in the classroom is that it has radically changed perceptions of curriculum content and delivery through its promotion of concepts of coherence, entitlement to student-led activity-based learning and emphasis on access, quality and equity expressed in a 'learning contract' between the providing institution and student in education for 14–18 year olds (FEU 1989b). TVEI's main achievements may be in making the delivery of academic subjects more practical and in legitimising vocational interests in the academic curriculum. It has not yet made the curriculum more technical or vocational.

7.21
16 - 19 VET

Having rehearsed the failures of schooling, what is the verdict on the further education system? If anything, more disparagement has been heaped on 16 - 19 VET than on initial education in the last decade. The criticism has largely centred on a system which does not attract young people to stay in education and training beyond the school leaving age and the piecemeal nature of vocational qualifications. School examination results have an impact on the post-school destinations of 16 year olds. One in four of those with the highest GCSE grades go on to take GCE 'A' levels, those with the next best grades often retake GCSEs to improve the grades (and rising staying-on-rates may achieve no more than some improvement in grades), some take vocational qualifications and 15 - 20 per cent go into youth training. There is some overlap as around 40 per cent of YT placements are expected to lead to qualifications (the effects and outcomes of youth training schemes are discussed in Chapter 10). It is therefore important to recognise the effects on workforce qualification of this output of the education system.
The Government has introduced a range of programmes designed to change parts of 16 - 19 VET of which the most significant and durable are YT and NVQs. However these were not designed to redress any inadequacy in the level or volume of trained workers. YT is primarily a measure to deal with school leaver unemployment (see discussion in Chapter 8) and NVQ is aimed at stratifying and codifying the structure of vocational qualifications (see discussion in Chapter 6). Among YTS trainees, over a quarter need numeracy and 17 per cent need literacy tuition (Training Agency 1989c). A survey by the Adult Literacy and Basic Skills Unit (ALBSU) which tested the skills of 10,000 FE students across all subjects (not including HE courses, students with learning difficulties, or adults on short non-vocational courses) found that over a third of students had reading skills below those of an average 14 year old. Almost half the students tested had numeracy skills at the level expected of average 14 year olds - even FE students on business courses - and 60 per cent needed numeracy support if their courses included an element of mathematics (ALBSU / Department for Education News Release 55/93: 19 February 1993).
During the early 1980s criticisms from employers about the lack of basic skills in new entrants to the labour market and observations of the system at close quarters by civil servants involved in MSC programmes, began to frame an agenda for debate. By the end of the decade, employers' organisations were leading, and funding, much of the research into what was wrong and what should be done (for example the CBI set up a training task force, and BP sponsored a number of studies and projects). In 1989 the CBI, British Petroleum and the TUC waded into the general debate about the mismatch between VET and the economy and proposed measures designed to 'upskill' entrants to the workforce. The Leader in The Times Educational Supplement dated 13 October 1989 fulsomely welcomed the evidence of both sides of industry taking "a major role in policy-making", and described the gathering momentum of the 16-19 debate thus:

"In the summer, a CBI task force produced a seminal document on the education and training of 16 - 19 year olds which was constructive, coherent and far-sighted in a way that no Government pronouncement on the subject has approached. It has sparked off ideas in the Labour Party, the TUC and the Departments of both Education and
Employment, and finally seems to have pushed the needs of that neglected age-group to the top of the agenda.

"Now the British Petroleum Company has published a report on 'Increasing participation in higher education', which could do the same trick for an area on which there has been much woolly, or double-thinking, and which also focuses with cool logic as much on the reform of education 16 to 18 as on higher education itself."

(The Times Educational Supplement 13 October 1989)

The CBI focused on comparisons with VET in major competitor countries, the mishmash of initiatives, and obtaining a more efficient return on spending. Its report was careful to support Government initiatives and to promote the role employers should play "to bridge the skills gap" (CBI 1989:i). The report made four main recommendations: all 16-18 year olds should have training (whether employed or not) and reach NVQ level II or its academic equivalent; an entitlement for all young people to structured training, work experience or education leading to NVQ level III or its equivalent; half the age group achieving level III by the year 2000; and all VET to be designed to

"develop self-reliance, flexibility and broad competence as well as specific skills" (CBI 1989:ii).

A 'careership' scheme with training vouchers and integrated careers guidance, core skills and work experience would be the main vehicle for implementing
the recommendations. The cost of upgrading 16-19 VET would be met from money saved from capping higher education student grants. In much the same vein, the TUC proposed a

"massive expansion of training...matched to the needs of enterprises, and services, local communities and industrial sectors, to build into a national training strategy to meet the needs of the economy as a whole." (TUC 1989:1)

The TUC supported training credits, broad based vocational qualifications and entitlement to VET opportunities. Child care, career break schemes and women's training initiatives should be introduced to widen access; disabled and unemployed people should have additional training resources and mature student grants should be available. Employers should be encouraged to adopt a Training Charter and establish workplace training committees and sector interests should be co-ordinated through industry training organisations. TECs and a National Training Authority (NTA) would be tripartite representing employers, unions and Government. The NTA would be responsible for training strategy, quality assurance, regulation, information, infrastructure and funding.

The report (Smithers and Robinson, 1989) sponsored by
British Petroleum (BP) shared common ground with the other reports in their analysis of demographic trends and low staying-on rates and the destructive academic examinations filter. BP favoured student loans for FE rather than vouchers and extension of an academic and vocational national curriculum beyond the compulsory school-leaving age combined with a co-ordinated examination system (Smithers and Robinson 1989). These studies did not directly address the economic recessionary context of these policies, other than describing economic woes as confirmation of the lack of training and skills in the workforce. The Government, until fiscal imperatives changed the policy in mid 1992, maintained its commitment to funding youth and employment training and took up some of these ideas (training credits, national targets, combined academic/vocational qualifications). These are discussed in Chapter 10.

New Entrants to the Labour Market
The evidence confirms that the initial education system does not provide an adequate level or balance of education throughout schooling or encourage the majority of children to further their education and
training after compulsory schooling ends. Those who leave school with intermediate academic qualifications (up to 'A' level) are not equipped with knowledge and skills relevant to the occupations they pursue. Those who fail to achieve academic qualifications are left without any credit for years of schooling or grounding in technical and vocational skills. The low levels of technical and vocational education in the initial education system results in a self-perpetuating cycle of low esteem for non-academics (both teachers and students) and low attainment of qualifications. This situation would not be irredeemable if further education or intermediate training schemes provided an adequate pre-vocational preparation. This does not appear to be the case. Children who in other countries might have qualified in technical and vocational skills can only be offered low-level further education and youth training schemes. These two main routes to vocational qualifications open to school leavers are underfunded and face an impossible task in attempting to provide VET from basics to levels on a par with, for example Germany, after compulsory education has finished. Funding of British YT fell from an average unit cost per place of £88 per

Underfunding of FE has been a feature of provision for many years. A college principal from Western Australia seconded to the Department of Employment: Training Agency for 6 months in 1990 reported to civil servants on the shocking state of deterioration of teaching facilities and obsolescence of plant and equipment he observed in British colleges. While officials and their advisers were concerned about this, the policy dictated that project funding excluded capital spending and, in practice very little could be claimed for replaceable equipment (Blamire: private papers).

This policy was designed to pump prime projects that were primarily concerned with engendering positive attitudes towards Government initiatives such as NVQ and open learning and were not designed to maintain the fabric of colleges which was a DES responsibility.

Treasury figures for funding for FE colleges and 6th Form colleges to be transferred from LEAs in 1992-93 give a baseline of £2.5 billion (more than 5 per cent of local authority spending) but this huge sum conceals the underfunding of decades and the failure
of spending to keep pace - or exceed - GNP. In 1987, 64 per cent of German school leavers concluded a vocational training contract. The dual system for 16-18 year olds typically covers 2 days a week in vocational school where 40 per cent of the curriculum covers general education. The balance is in-company training governed by federal law and local regulations to a common framework with flexible, employer-led delivery (Eltis, Fraser and Ricketts 1992:8).

Failing to Qualify
Given the 'Cinderella' nature of British FE and the origins of YT as an unemployment scheme, it is not surprising that the proportion of intermediate vocational qualifications in the workforce in the UK (20 per cent) trails behind France (33 per cent), the Netherlands (44 per cent) and Germany (56 per cent) (quoted in Halsey et.al.1991:18). The UK record for qualifying technicians (29 per thousand) is also seriously weaker than either France (35 per thousand) or Germany (44 per thousand). For qualifying craftsmen the gap is considerably wider with UK having 35 per thousand compared to France (92 per thousand) and Germany (120 per thousand) (Prais and Wagner 7.30
1988:34-47). The Channel Four Commission's report concludes that the lack of intermediate qualifications and failure to produce enough scientists and engineers

"... has obvious consequences for quality of workmanship, productivity, earning power and for full employment in a competitive and technologically progressive world"  
(Halsey et al. 1991:17)

The Commission's final recommendation for a registration scheme for qualified craftsmen and technicians intended to raise their status and encourage qualification (Halsey 1991:31) hardly seems sufficient to dent these levels of underachievement. Gann (1991) in a study of new technology, employment and operative skills in building services echoes the need for strengthened certification schemes and goes further with proposals that include flexible and coherent training; improved career structures; incentives to encourage firms to train; and ways of ensuring that all firms contribute to upskilling the building services industry.

Training Schemes
Government projected spending for training, enterprise and vocational education in 1992-93 at £2.7 billion

7.31
is two and a half times more, in real terms, than spending in 1978-79. Employers are expected to spend £20 billion in 1992-93 (HMT 1991). These figures include estimates of the cost of people being away from their work for training. The bulk of direct Government spending goes on YT and Employment Training (ET) which are claimed to be the largest schemes in Europe. Spending on youth training between 1979 and 1991 amounted to £11,290 million at constant 1991 prices (youth opportunities programme 1979-1985 £2693 million; youth training scheme 1983-1991 £8597 million.); and spending on adult training amounted to £11,318 million (community programme 1979-1989 £6247 million, job training scheme 1982-1988 £2303 million, employment training scheme 1988-1991 £2768 million) (Hansard, 13 March 1992 cols:691-694). Expenditure plans for 1992-93 indicate spending of £851 million on YT and training credits and £807 million on ET (Treasury Brief 4 May 1992). So is this an adequate and appropriate investment and what are the results in the workforce?

Early schemes for unemployed school leavers (the Unified Vocational Preparation (UVP) programme, the
Work Experience on Employers' Premises (WEEP), and the Youth Opportunities Programme (YOP) where all replaced in 1983 by the Youth Training Scheme (YTS). The earlier schemes were heavily criticised as cheap labour without adequate preparation or work experience and in response the Government combined the features of structured training off-the-job with work experience under contract to approved employers into the new scheme. The initial YTS format of 12 months including 13 weeks training or further education was extended to 2 years with up to 20 weeks training in 1986 with the support of the CBI but some reservations from employers (see Bevan and Hutt 1985). Further "flexibilities" were introduced in 1990 when responsibility for YTS passed to Training and Enterprise Councils renamed as Youth Training (YT). Much has been written about youth training schemes since their inception in 1979 - most of it uncomplimentary (see for example, Gleeson (1989) for a summary of views largely condemning YT as a substitute for employment designed to socialise young workers into low-skill, unprotected jobs). This section concentrates on the relationship between YT and skills in the workforce. In 1978-79 there were on

7.33
average about 6000 young people receiving training in YOP compared with 260,000 in YT in 1991 (Hansard, 22 October 1991 cols.788-9), 303,000 in January 1992 and 293,000 in January 1993 (Hansard, 16 July 1993 col:685). The employment minister claimed in the 1991 Parliamentary answer that 89 per cent of people who complete YT go into jobs or FE and some 68 per cent do so with a qualification. These figures obscure the numbers of trainees who fail to complete 2 year YTS and say little about the impact of YT (and its predecessors) on the qualification levels of young workers attributable to youth training. The Youth Cohort Study in 1984 reported that 22 per cent of YTS trainees were unemployed as were 22 per cent of those entering the labour market. By early 1986 around two-thirds of YTS trainees had found full-time employment doing much the same work as those who had never been on YTS, although young men with YTS experience were more likely than those without to be in manufacturing jobs (Training Agency 1989d). These figures indicate that the number of young people in employment correlate with general employment levels rather than any effects of youth training schemes. YTS has not reduced skill shortages although companies facing 7.34
skill shortages are more likely to recruit trainees to fill vacancies. A survey by Deakin and Pratten (1987) showed almost 50 per cent of YTS trainees being trained for skills which were not in short supply, and others recruited into companies with shortages in advanced and specialist skills not applicable to YTS, or for skills previously covered by apprenticeships which would probably have been recruited without YTS. 92 per cent of a sample of 236 employers gave negative replies when asked if they had noticed any general increase in the supply of skilled or experienced workers which could be attributed to YTS apart from the effects of their own programme (reported in Kenney and Reid 1990:322).

Employment Training

When Employment Training (ET) was introduced in 1988 the new scheme absorbed various adult retraining programmes which the MSC had run since 1983 and developed substantially out of the Job Training Scheme and the Community Programme (HMSO, 1988a). It was initially targeted at people aged between 18 and 50 who had been more than six months out of work but later extended generally as one of a range of options 7.35
including Job Club and Restart. The programme mix of assessment, training and work experience was intended to reach 600,000 people in the first year. In the event ET was not popular either with employers who criticised its inflexibility and low-grade recruits who often lacked literacy and numeracy skills or with long-term unemployed people who were paid only 10 above unemployment benefit to forgo employment offers for up to 12 months. Doubts continue to be raised about whether ET programmes are long enough or sufficiently rigorous to bring people up to skill levels required to successfully compete in the labour market. Evaluation of the results of employment training is not easy to come by. The Employment Gazette noted in March 1990 that

"there has been to date no thorough evaluation of the effectiveness of Government sponsored adult training" (Payne, 1990a:144)

The same article reported on a Government sponsored study by the Policy Studies Institute of off-the-job skills training delivered via the Old Job Training Scheme (OJTS) which has been subsumed into ET since September 1988. OJTS offered courses lasting from 3 to 6 months at technician, skilled clerical and secretarial, operative and skilled manual levels. More
than 2 years after leaving training, 81 per cent of trainees were in employment. Against a matched control group with labour market trends discounted, the training increased the probability of employment of up to nearly 25 per cent. The study concluded that training of different types was equally valuable and that training increased the earnings of those whose earnings before training were very low. It also mitigated the disadvantages for re-employment of long-term unemployment, health problems, being over 45 years old and not having formal qualifications. Gaining an externally validated qualification on the training course made the probability of skill-related employment significantly higher. Such qualifications were gained by almost 50 per cent of trainees irrespective of age or educational background. Training was accompanied by a substantial shift in occupational patterns. Technological trainees showed a net shift into professional, management and administration and related occupations in science, technology and similar fields. Clerical and secretarial trainees moved away from personal service and sales occupations into clerical and related occupations and only a third of manual trainees
returned to their occupational area before training (Training Agency 1990d:143-149). Overall, this study showed that the majority of OJTS trainees acquired skills and employment in the training category. However this success may relate to high motivation in selected trainees, comparatively intensive training and support, and a rising job market. The effects have not been carried through into ET.

In 1990-91 around 390,000 trainees entered employment training schemes (Hansard 11 March 1992 cols.571-572) and 48 per cent completed their agreed training (Hansard 28 November 1991 Cols.615-642). The key question is whether ET contributes to an increase in skills in the workforce. The table below shows activity for employment training leavers 3 months after leaving the scheme for the period between March 1990 and February 1991 (figures for the previous year are very similar).
Table 4

Employment Training: Leavers Activity 3 Months After Leaving

<table>
<thead>
<tr>
<th>Percent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full time Job</td>
</tr>
<tr>
<td></td>
<td>with work placement</td>
</tr>
<tr>
<td></td>
<td>other employer</td>
</tr>
<tr>
<td></td>
<td>Part time Job</td>
</tr>
<tr>
<td></td>
<td>Voluntary Work</td>
</tr>
<tr>
<td></td>
<td>Self employed (inc.EAS)</td>
</tr>
<tr>
<td></td>
<td>Full time VET</td>
</tr>
<tr>
<td></td>
<td>Other govt. training</td>
</tr>
<tr>
<td></td>
<td>Job Club</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Hansard 28 November 1991 cols.615-642

These figures show that, whatever the type or quality of work preparation undertaken during participation on ET more than half of the trainees failed to secure a place in the labour market after training. When these figures are added to the number of people in a Job Club (since these are all unemployed) and to those doing voluntary work (which does not contribute to the labour market) the percentage who fail to translate ET
to workforce skills rises to around 60 per cent. (Figures for the year to June 1991 - when recession was biting in the labour market - show 59 per cent unemployed 3 months after leaving ET (Employment Department, 1992). It is also likely that those in part time jobs were on the margins on the workforce in temporary, unskilled work. Fewer than a third of trainees entered the workforce full time and around the same number gained a qualification.

Table 5

Employment Training: Qualifications of all Leavers between March 1990 to February 1991

<table>
<thead>
<tr>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worked for a qualification</td>
</tr>
<tr>
<td>Gained a qualification</td>
</tr>
<tr>
<td>Awaiting results</td>
</tr>
<tr>
<td>Not gaining a qualification</td>
</tr>
</tbody>
</table>

Source: Hansard 28 November 1991 cols.615-642

These figures show that over half of ET entrants do not train or complete the scheme and return to unemployment having used up their entitlement to Government training under the present rules. The Restart scheme of interviews and short 'help and
advice' courses which are obligatory for everyone claiming unemployment benefit (failure to attend, or leaving the course early, can lead to a 40 per cent reduction in benefit) has an even higher failure rate. The Employment Service chief executive responsible for Restart disclosed in a letter to Clare Short MP that 4,000 of the 435,688 people (under 1 per cent) who attended Restart interviews between April and June 1991 were placed in jobs (The Guardian 29 November 1991). This is wasteful, expensive and counter-productive to generating a training culture in the workforce. Although these results are likely to have been influenced by the downturn in the labour market, the programmes continue to condemn individuals to fruitless quasi-job search in inappropriate programmes. Moreover, the structure of ET prevents resources being targeted on the changing demands of the labour market. The Economist in a leader in January 1992 noted that the recession was making it difficult for unskilled workers to enter the labour market and, at the same time, skilled workers are being made redundant:

"Businessmen who got involved in training in order to deal with the skills shortage are spending their time administering chunks of the welfare state... Most trainers had assumed that their job
was to turn the sons of manual labourers into computer-literate office workers. Now they are having to find work for unemployed executives." (The Economist 25 January 1992:31)

Such difficulties contributed to several high profile training agencies including Fullemploy and the Apex Trust, going into liquidation in 1991-92 and the collapse of Astra, the private group which took over Government skill centres, in 1993.

Clear consequences for the economy result from these low levels of qualification - not least for the effect on UK competitiveness within the European community. The Single Market Act 1991 created freedom of movement within the European Economic Community for goods, services, capital and people from 1 January 1993. This has far-reaching implications for education / training provision, delivery and qualifications, including post-compulsory education and training professional qualifications and professional accreditation. In theory at least, there will be free movement of labour, and, apart from some linguistic pre-requisites for some occupations, the Act will have created the biggest single trade area for commodities and labour in the world. The European Commission intends to drive forward policies aimed at
the integration of skill requirements, the upskilling and qualification of the population of working age, and the removal of barriers to access to education / training and jobs. There is much to be done. Participation rates for 16 - 18 years in full-time education and training in 1988-89 range from 36 per cent in the UK to over 80 per cent in Belgium and Japan (Education Statistics for the United Kingdom 1992 Table BB (1992 edition draft). The percentage rate for new entrants to higher education in 1988 in the UK was 37 per cent compared to 49 per cent for Belgium in 1986 (Hansard 8 December 1992 col:563).

Hywel Jones, Director, Task Force Human Resources of the European Communities, describes three issues in the Community which pose greater problems than in Japan or the USA:

"the European education and training systems are not providing the minimum competencies and qualifications for the vast majority of young people to get into the labour force - this is the direct route to social exclusion...

the training systems are not fast enough in their response to new skills needs resulting from technological change and sharpening economic competition...

social policies have remained in a passive 'income maintenance' posture despite the fact that loss of skill in adult life is now the main threat to social security, leading directly into long-term
Jones points out that in the UK demographic changes are aggravating the problem of the low skills base. Those aged between 50 and 74 years will increase by 29 per cent by the year 2030 and the numbers of young people will decline by 26 per cent up to the end of the century and their numbers are not expected to increase before the year 2020. These figures illustrate a dramatic shift in population balance away from the population of working age and towards those expected to be supported by gross national product. For Jones, solutions lie in consolidation of 1970s and 1980s responses to education and training into a comprehensive, high-quality system for 16 - 21 year olds, plus a wide commitment to lifelong learning programmes throughout working life (Jones, 1992:245).

Evidence to support the Commissioner's gloomy prognosis can be found in studies comparing matched samples of plants in Britain and Germany manufacturing motor vehicle components, kitchen furniture and women's clothing and medium-sized hotels.

"Machinery is better maintained, there are fewer breakdowns, the workforce is more flexible,
production is organised more systematically. The result is a more reliable product, there is greater output per person employed, less rush and fuss at work, and higher real incomes." (Halsey et.al. 1991:22)
The explanation of these differences is said to be in the flexible pathways for secondary pupils, comprehensive general education with late specialisation, strong parental support and public esteem for vocational qualifications and a labour market structured on success in the educational system (Halsey et al. 1991) see Chapter 8 for further discussion of the effects on UK competitiveness.

Summary

Overall, the UK initial education and training system nurtures narrow academic specialism for an educational elite at the expense of the rest and fails to provide a platform for technical and vocational qualifications needed in the workforce. The concentration in the UK education system on narrow, in-depth subject specialism is designed to produce high-quality graduates at the expense of a vocationally-adequate education for the majority of children. The money-led curriculum concentrates resources on the minority and rationalises its elitism with approbation for the
narrow-depth values of the academic curriculum. It is clear that for many reasons the major Government training strategies and schemes are failing to improve the quantity and level of skills in the workforce. The shortcomings of the VET curriculum can be summarised as: not adequate to maintain our economic competitiveness; too narrowly focused on academic aspirations and achievements to exploit the potential of potential participants and in quantity and quality fails to provide sufficiently qualified people; wasteful of human and financial resources and less well structured and resourced than most of the industrialised world; those who do qualify have specialised too early with a resulting lack of general education and even less application of vocational skills; high calibre academic skills are produced at the expense of low attainment for the majority; funding for science has not grown with the economy; technology transfer which would enable scientific discoveries to be applied in the economy lacks a national strategy, funding and political importance; vocational and technical education and qualifications have low esteem and inadequate resources; and goals and achievements focused on ability rather than on
attainment and competence.

The picture so far is a damning indictment of our system of preparation for working life. Of course schooling and higher education are expected to give young people a grounding for various life roles beyond vocational skills and competence as workers. But the position now reported by many researchers is of inadequate preparation for working life directly threatening our economic competitiveness. Direct links between the type and quality of initial education and the skills and knowledge of initial entrants to the labour market are clear cut. What is not so clear is the effect on the labour market overall. Even in the direct market for labour, it could be argued that higher levels of training would improve competitiveness (Carr, 1992: 79-87). A comparison of engineering and food processing plants in The Netherlands and Great Britain reported higher productivity:

"through better maintenance of machinery, greater consistency of product-quality and lower manning levels (greater workforce flexibility, less learning-time on new jobs)."

(Mason, Prais and van Bart, 1992: 45-63)

If occupational demands are such that tasks can be

7.47
learnt on the job or if the labour market (or significant sectors of it) provides training for young workers which builds on general education and continues to provide retraining and updating throughout working life then initial deficiencies may be overcome. The next chapter looks at the evidence of qualification in the workforce.
Qualifications in the Workforce

The level of qualifications in the workforce is generally rising. It is improved by the rising proportion of new entrants with school and higher education qualifications and older workers without qualifications retiring. Even so, over a third of the workforce have no qualifications at all and only around a third of employees received training between 1985 and 1988 (HMSO, 1989a). Even among younger workers, almost 30 per cent of those aged 16 - 19 years and almost 20 per cent of those aged 20 - 24 years have no qualifications (Employment Department 1988a). Figures released by the Labour Party in 1990 claimed that Britain had the lowest percentage of skilled workers among 10 EC countries with 56 per cent of the male and 76 per cent of the female workforce being unskilled, the overall UK figure being 62 per cent unskilled. The same source reported that in France 80 per cent of the workforce has a recognised qualification, Italy 79 per cent, the Netherlands 76
per cent and Portugal 50 per cent (Henry McLeish reported in Education 8 June 1990: 550). It could be argued that qualifications (in the sense of certificates etc. gained away from the workplace) do not necessarily 'qualify' people to do a job, and that the most competent workers are not those with the most qualifications (Berg, 1973). There are two perspectives to be explored here: the extent to which qualifications are a pre-condition for skilled occupational performance; and the relationship between levels of qualification in the workforce and the performance of the economy overall. The first perspective includes the question whether the possession of qualifications is synonymous with possession of skills. This question has links with competence-based training and assessment discussed in Chapter 6 and will be explored further in looking at vocational training initiatives in Chapter 10. The second perspective of the relationship between workforce qualifications and economic effectiveness will be examined by looking at the evidence of skill shortages (since these derive from employers' perceptions) and the evidence of higher productivity linked to higher levels of qualification in competitor
Skill Shortages

Skill shortages - generally defined as the inability to recruit sufficient number and calibre of workers - can be a sign of economic growth or of structural employment changes. Local and short-term shortages are always with us and may be the result of unattractive wages and conditions or inflexible recruitment (see Kenney and Reid, 1990:280-286, for discussion of the causes and effects of skill shortages). These may be overcome by organising work differently or by retraining. A general measure of firms expecting skill shortages to limit output monitored by the CBI shows that reported skill shortages generally rise in economic booms and fall in recession as you would expect (Cassels, 1990:4).

A House of Lords Select Committee on the European Communities examining vocational training and retraining reported:

"The existence of a skills gap in the United Kingdom is well documented... Whilst British children on average achieve fewer and lower level educational qualifications than is the case for most Member States, British adults on average achieve fewer vocational qualifications, at a lower level, than is the case with Britain's main
trading competitors. Seven out of ten of the British population left school at the minimum school leaving age, seven out of ten had only the shortest training for the immediate job when they started work and seven out of ten have had virtually no training ever since. In 1989 a third of the British workforce had had no training whatsoever at any stage of its working life."

(HMSO, 1990b:12)

The Select Committee concluded that the evidence it had received

"stressed that there is an urgent need to improve vocational training ... to combat existing skill shortages, falling numbers of young people and the problems created by the accelerating pace of technological change"

(HMSO, 1990b:12)

The Committee pointed out that the UK under the European Social Charter (Cmd 2643) had binding international legal obligations to provide technical and vocational training for all. The Community Social Charter went further declaring that

"every worker of the European Community must have access to vocational training and to receive such training throughout his working life"

(ECC, 3rd Report 1989-90 Title I, Article 15)

The Charter has not been signed by the UK, alone among Community Member States. The future effects of guaranteed rights to lifelong training across the European Community, means that not only is the UK already behind its competitors in workforce qualifications, but its European competitors can be expected to widen the gap.

8.4
In order to study the links between recruitment difficulties and skill shortages in more detail, the Department of Employment: Training Agency undertook a major study in 1989-90 into skill shortages in Britain. The survey interviewed 143,000 establishments across all industries (except agriculture, forestry and fishing). The study defined skill shortages broadly as insufficient people available with the skills necessary for the work to be done. This definition was applied to potential and existing workers. Almost 25 per cent of British firms reported recruitment difficulties stemming from lack of skills and 17 per cent claimed a significant gap between the skills in their workforce and those needed to meet their business objectives. The effects of skill shortages showed as inability to compete effectively on quality or price; or to make full use of new technology; or to invest in new products or processes.

Using recruitment difficulty as a proxy for skill shortages, the study reported widespread skill shortages throughout the economy. 22 per cent of establishments reported difficulties during the 3
months of the survey (December 1989 - February 1990) and a further 24 per cent reported recruitment difficulties during 1989. Of those experiencing difficulties, over 40 per cent reported severe restrictions to business development or lost business resulting from failure to replace skilled staff. A further 43 per cent incurred additional running costs or high recruitment costs. Another 17 per cent of employers believed that their workforce lacked the skills to cope with automation and changing customer demands (Training Agency 1990d). Recruitment needs arise from having to replace workers who leave and from expansion of the workforce. Recruitment difficulties may be attributed to factors other than the unavailability of workers with the required skills, for example, inappropriate recruitment and selection methods, or unattractive working conditions. But skill shortages may also be due to a failure to integrate business and personnel strategies, or insufficient investment in training, or poor use of current skills and potential capacity in workers. The survey in 1989 indicated endemic and chronic skill shortages. By 1992, a significant downturn in the economy had done much to reduce

8.6
reported skill shortages. The cutback in recruitment (as shown by graduate unemployment discussed above), and the shedding of skilled workers in a deep recession made discussion of skill shortages somewhat academic. However, without a significant upturn in the qualification profile of the workforce, it can be assumed that skill shortages do not disappear but are dormant until economic activity rises. The Training Agency study in 1989-90 found the industries most affected by skill shortages were engineering and electrical engineering, the vehicle and textile industries, and the health sector. Another Training Agency study into sub-graduate level skills in engineering, construction, textiles, food-processing, chemicals/ pharmaceuticals, financial and related services, transport and tourism concluded that skill shortages were due to a combination of:

- sector training held below optimal levels by each firm's fear of poaching;

- restrictions on numbers trained imposed by the industry and by overstated entry requirements, lack of access courses, or lack of income support while training;

- high failure rates in some training schemes;

- serious leakage of trained people from the occupations trained for, partly because workplace experience is not introduced early enough;
- individuals resistance to training for sectors whose recent history has been one of considerable job losses. (Training Agency: Higher Level Skills Project February 1989a)

Employers in roughly equal numbers reported difficulties in respect of professional, associate professional and technical, clerical and secretarial and craft-related occupations. These are all occupations in the UK labour market which require pre-trained recruits and inservice updating. In expanding labour markets, these groups have been traditionally recruited by 'poaching', that is, employers offering higher wages and benefits to attract trained workers from competitors. The survey suggests that recruitment difficulties reported in 1989-90 were significant and were not overcome with traditional blandishments. The report stresses that employers need to use information about skill supply to develop flexible solutions including training. The report advocates three strategies for tackling immediate skill shortages and ensuring a highly skilled workforce for the future: using labour market intelligence; flexible recruitment and promotion; and training and development. Not unsurprisingly, these strategies all feature in the Department of
Employment's remit and form an important part of its case for increased Treasury support for its programmes. The detailed strategies rehearse some familiar themes and solutions:

"Firms need to improve the flow of information about their skill needs to the market place...close collaboration with TECs... and building closer links with educational institutions through Compacts, student sponsorships and work placements...reassessing recruitment criteria to widen the types of people considered, ...use the current skills within the workforce more effectively...retain existing staff. adopting more flexible working practices...more effective use of new technologies... and having a formal manpower and training plan to allow all staff the opportunity to retrain and upgrade their skills." (Training Agency Skills Bulletin 1990 No.14).

The study itself showed that many employers already used these tactics. Many had changed recruitment and employment practices and over 40 per cent had built links with schools and colleges (including education/business partnership schemes such as SCIP and Compacts), 63 per cent had a training plan - formal or informal - and 60 per cent had a budget for training. Although the Government produces extensive labour market (LMI) statistics and reports (published by the Employment Department) and has invested in databases of local sectoral information (for example, NOMIS run by the Training Agency/TECs), it has
failed to establish national systems for using LMI. Indeed the transfer of Training Agency functions to TECs has dispersed the TA regional office network which previously provided regional monitoring of labour market movements. This intelligence was strengthened in some regions by direct input of LMI into local education authority plans for FE (see Part 2 for a discussion of the links between LMI and work-related further education in London). But the use of LMI even among large employers appears limited (although perhaps Training Agency data is too generalised to be of value in business planning in large concerns). However, an opportunity to place this resource in the hands of small businesses through TECs has been undermined by requirements on TECs to 'sell' such information. Public and private sector employers have proved strongly resistant to paying for information - either educational opportunities or LMI - which they perceive should be provided as part of the infrastructure of Government support. Similarly, the Government throughout the 1980s has resisted all proposals for any form of training tax (both allowances and levies) or even a voluntary code of practice requiring employers to invest in either
management or technical training.

Skill Shortages and New Technology

New technology can have an impact on skill shortages in two ways. It may be adopted to overcome skill shortages or its adoption may itself create a skill shortage. Evidence from a small study of Sheffield firms (Foley 1990b) suggests that more than half the firms adopting new technology experienced skill shortages and less than one third of non-adopters of new technology suffered similar problems. However firms introducing new technology appeared more aware of labour supply problems (falling numbers of new recruits and the need for training) than their non-adopting counterparts. What is interesting is that a third of non-adopting firms thought that introducing new technology would not require additional training (Foley 1990b). The rate of technological change may be important in determining whether skills can be acquired outside the labour market, or whether occupational updating is required.

Britain's Real Skill Shortage

The limitations of using vacancies as a proxy for
skill shortages is taken further by Sir John Cassels, formerly director-general of NEDO and director of the Manpower Services Commission, in a brief, highly concentrated contribution to the training debate in a book entitled *Britain's real skill shortage - and what to do about it* published in 1990. The ideas developed in the book grew out of seminars with industrialists, educationalists, civil servants, trade union officials and researchers held early in 1989. Cassels concentrated on the workforce and the Government's stated commitment to improve Britain's "education and training performance even faster than its competitors" (HMSO, 1989a:76).

The book is important both because it is written by a former insider and because it attempts to quantify the competence of the whole workforce, to examine future challenges and to suggest improvements - in a succinct 70 pages.

Cassels argues that, while surveys of particular industries and sectors are useful indicators, they give a fragmented picture across the labour market. The difficulty of amassing evidence covering all types of employment - manufacturing, services, public sector, agriculture, transport etc. encourages...
economists to use skill vacancies as the salient measure by which to judge the gap between labour market demand for skills and VET supply of skilled workers. However, this measure is likely to be skewed by effects in the economy other than supply and demand of skilled workers and does not include skill shortages in posts that do not remain unfilled. For example, most vacancies at managerial and supervisory levels are filled irrespective of the quality of candidates but may not be occupied by sufficiently qualified staff. Taking vacancies alone obscures the true extent of skill shortages. The essential question is

"whether the British workforce as a whole is competitive with the workforces of the countries with which we compete." (Cassels, 1990:6)

His analysis draws heavily on UK studies by the Institute for Employment Research and the Policy Studies Institute and comparisons of British and German industries by the National Institute of Economic and Social Research. These studies all show low levels of qualification at all levels in the workforce.

Comparisons with Germany at

§.13
technical/craftsman/supervisor level show Britain (with a roughly comparable workforce) to have between a half and two thirds fewer qualifying each year as mechanical fitters, electricians and building craftsmen (Prais and Wagner 1983). France produces two to four times the number of trained building workers and mechanical and electrical craftsmen (Steedman 1988). Steedman recently reported with some irony that just as the UK was beginning to close the gap with France and Germany in numbers and quality of craft trainees, the British City and Guilds qualification had been withdrawn in favour of National Vocational Qualifications (see Chapter 6 for discussion of NVQ). She found a startling contrast between the two awards. While City and Guilds is broadly comparable to French and German qualifications, NVQ does not require any mathematics to gain the level 2 award. NVQ assessment is based on demonstration of practical competence alone whereas the continental equivalent backs practical tests with written examinations in mathematics and technical subjects. German and French employers regard calculations as important and relevant to craft trades - particularly allowing craftsmen to work unsupervised.
on site. By contrast, British employers appear ready to accept a lower level of mathematical proficiency and compensate by using more levels of supervision (Steedman 1992). In France 40 per cent of the electrical and electronic maintenance workforce is employed at technician level (Harris 1989) - this has no parallel in Britain due to more rigid job demarcation. Among skilled electrical workers only 43 per cent in Britain have a BTEC/ONC qualification or equivalent, or higher, compared with 74 per cent at this level of qualification in France.

At foreman/supervisor level the main British qualification (the Certificate of the National Examination Board for Supervisory Management) is taken by only 15 per cent of the number taking the German Meister qualification and requires only about a third of the course work. In addition Meister candidates spend 3 years following their craft level qualification working in a specific trade (Prais and Wagner 1988). France and Germany train five times the number of higher level office workers than Britain (Prais and Wagner 1983; Steedman 1987). A senior manager at GEC (General Electric Company) sums up the difference in British and German retailing:

©.15
"To enter retailing in Germany, to quote just one service sector example, some 40,000 school leavers take a two-year apprenticeship leading to the equivalent of a craft level qualification and a further 36,000 take a three-year course. The training will include commercial practice, double-entry book-keeping and law, in addition to the sort of product information that customers need. The effectiveness of the German training is evident to anyone entering a shop and may be one contributory factor to the high consciousness of quality among German consumers, whereas many in Britain all too often seek a low-priced, poor-quality 'bargain'." (Harris 1989:67)

Solutions to the problem of low qualification levels proposed by Cassels (1990) concentrate not on initial education as Moser (1992) does but on national policy aims for post-16 VET to be achieved by the year 2000. Cassels proposes that: all 16 to 18 year olds should be in either full time education or VET with work experience; at least 75 per cent of 18 year olds should qualify for a new academic and vocational 'A' level; at least 25 per cent of 18 to 19 year olds should take degree level courses; and all adults should be guaranteed access to education and training (Cassels 1990:39). Other commentators inspired by the Moser television debate (see Chapter 7) suggest: abolishing GCE 'A' levels (Mary Warnock); vocational/academic certificates for 16-18 year olds to encourage a virtuous circle of public confidence in

§16
the public education system (Andrew McPherson); a comprehensive publicly-financed VET system for all (Sir Ralf Darenhalf); legislating for employment with training for all young workers (Sir Christopher Ball). These comments came from a BBC2 programme in January 1992 but could just have well been heard on a variety of platforms in the last 10 years.

Graduate Qualifications in the Workforce

Britain's total graduate output also compares unfavourably with most of our major competitors. For every 1000 of the age cohort, UK has 138 graduates, France 202, Japan 229, and USA 230. Only West Germany has similar levels of graduates in the age cohort, but has higher numbers of engineering and technology graduates than the UK. (Halsey 1991:16). These figures are for 1984/85 except for France which uses 1981 figures; and although British applications to higher education have risen since the mid 1980s, numbers are also rising in other countries. My concerns in this thesis focus on the interface between training and the labour market so I shall not explore the reasons for a low proportion of graduates in Britain or remedies for increasing participation which have been well
documented elsewhere (see Smithers and Robinson (1989) for analysis of trends and strategies for increasing participation in HE; Ball (1989) on widening access; Ball (1990) on funding expansion and alternative forms for HE; and the NIACE discussion paper (1989) on access to HE for adults). However it is relevant to consider graduates in the workforce as part of the overall contribution of education and training to productivity in the labour market.

International comparisons of vocational qualifications in the workforce show higher-level qualifications in the UK about on a par with France, Germany and the Netherlands at around 17 per cent of workers with degrees and higher level diplomas (Halsey 1991). This points to a higher level of graduates in the workforce than could be expected from our lower level of graduates per thousand of the age cohort. The explanation is probably in the close correlation between professional occupations and graduate output.

If so this indicates a dearth of graduates in other occupations. This is borne out by 1975 figures for managers with degrees in Britain (24 per cent), Germany (62 per cent), France (65 per cent), Japan and
USA (85 per cent) (Handy 1988). More recent figures suggest that nearly 45 per cent of top managers in Britain are graduates but that the American figure is now above 95 per cent and similar rises are occurring elsewhere (Handy 1989). The 1985 Labour Force Survey gives 12.8 per cent of female and 12.1 per cent of male managers and administrators as graduates with 6.2 per cent holding a professional qualification. To add to this dismal picture, a recent survey found that many employers were lukewarm about the value of the masters degree in business administration (MBA) and critical of the quality of business school staff (CNNA, 1991:31). The low levels of graduates in the workforce is an effect, not a cause, of the lack of higher level skills takeup in the labour market. Many occupational sectors in Britain are not as structured for graduate employment as their European counterparts. This is a problem of labour market infrastructure to which I shall return in Chapter 9. The roots of low-skill occupational structure run deep - for example, a Treasury education briefing for December 1991 while pointing to the increase in full-time students in 1991 of 15 per cent in polytechnics and 8.7 per cent in universities, also concluded that

Table 6
Employment of Graduates in 1980-81 and 1987-88

<table>
<thead>
<tr>
<th></th>
<th>1980-81</th>
<th>1987-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public service</td>
<td>9.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Education</td>
<td>2.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Agriculture and forestry</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Manufacturing industry</td>
<td>8.2</td>
<td>12.3</td>
</tr>
<tr>
<td>Building, utilities etc.</td>
<td>3.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Financial services</td>
<td>10.0</td>
<td>18.3</td>
</tr>
<tr>
<td>Others</td>
<td>2.7</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>36.0</td>
<td>61.7</td>
</tr>
</tbody>
</table>

Source: Education Statistics 1989, Table 37, DES

While these figures can only give a snapshot of graduate destinations in the labour market, they show a shift during the 1980s away from public services (civil service, HM forces, local Government and hospitals), manufacturing industries and building (construction and design, utilities and transport). This reduction in the proportion of new graduate entry

§20
reflects loss of employment in these sectors, and perhaps a loss of attraction in these careers as unemployment has increased. The increases in the proportion of new graduates entering education (particularly schools) and financial services reflects employment expansion in these sectors in the late 1980s. The pattern of recruitment to financial services since 1987 has slowed as retrenchment has curtailed graduate opportunities. In education jobs, the Government has been driven in 1993 to propose a non-graduate teacher training scheme for primary schools to make up recruitment shortfalls. The loss of attraction of teaching may be due to comparatively low wages, perceived loss of public esteem for the profession and stories of work overload with the introduction of the National Curriculum and associated testing.

Graduates seeking to enter the labour market in 1991-92 found that the recession in the labour market has exacerbated the lack of graduate opportunities. Unemployment among first year graduates is higher than unemployment in the workforce as a whole (Association of Graduate Careers Advisory Services, 1992). This is

§ 21
a reversal of the trend in most European countries for the last decade when it has been accepted that higher education qualifications gave protection from unemployment. Students graduating in 1992 are in greater numbers chasing fewer jobs and competing with unemployed 1990 and 1991 graduates and postgraduates who took further qualifications rather than remain idle. The irony for many postgraduates is that they have often financed their study from private sources (in addition to income-forgone while studying) only to find that the labour market was incapable of offering recompense. The percentage of Government-funded postgraduates has dropped from 19 per cent in 1979-80 to under 10 per cent in 1989-90 (Hansard 2 June 1992 col.443). For the education system producing graduates is economical once students have entered higher education because fewer students drop out compared to countries with wider access, and degrees are obtained in 3 years rather than in 5 or 6 which is the norm in European countries. This is however at the expense of the vast uneducated, untrained, unqualified majority. For the labour market, graduate output falls far short of requirements compared to our competitor countries.

§.22
Employer-Based Training

The lack of entry qualifications in the workforce is not compensated for by adequate employer-based training. Despite Government estimates of spending on training in 1986-87 in the region of £33 billion or some 8 per cent of Gross Domestic Product (private firms an estimated £11 billion, public sector employers of £7 billion, Government spending £7 billion, and individuals contributing £8 bn. (mainly in wages forgone), (HMSO 1989:22-26), the CBI has called for

"... a quantum leap in the education and training of young people to meet both their aspirations and the needs of the economy in an increasingly competitive world. Despite annual employer expenditure of over £18 billion and recent important initiatives in the education field, our skill levels are lower than those of our main competitors and the gap may be widening. Action is urgently required." (CBI 1989:1).

These words preface a CBI task force report which examined much of the evidence already cited and concluded that Britain's workforce was in a low-skill equilibrium where low levels of qualifications enforced low expectations by employers in a spiral of low productivity and low investment. A joint NEDO/MSC study (1984) found that employers in Germany, compared
to their British counterparts, were spending approximately three times more on training. Steedman's study of construction firms (1986) found French workers' training more extensive and less firm-specific than their British rivals. Overall it is estimated British firms devote around 0.15 per cent of turnover to training compared with 1 - 2 per cent in Japan, France and West Germany (Anderson 1987:69). The answer to the CBI's criticisms of the low level of skills in the workforce would seem to lie in their own members' hands!

A third of all economically active adults have never had training and two-thirds have not received training in the last 3 years. The proportion of employees not receiving training by industry varies from retail (11 per cent) to construction and transport/wholesale (30 per cent). Textiles, clothing, communications, and local Government offer relatively low levels of training. The health sector offers the highest number of training days per employee and trains the greatest proportion of its workforce (HMSO 1989a:36-37). An employee's best chance of training is to be aged under 25 years working for a large employer. Those with
CSE level qualifications are twice as likely as the unqualified to receive training and more than half of those with GCE 'A' levels and with higher than 'A' levels receive training. Training correlates with educational attainment, social class and higher incomes. High earners, irrespective of education, are particularly likely to undertake job-related training. More men (27 per cent) than women (22 per cent) receive employer-funded training and 86 per cent of those men received 3 or more days training compared with 73 per cent of the women (HMSO 1989a:49-50).

The Training Study (HMSO 1989a) from which these data come does not take account of training undertaken by individuals usually in their own time and at their own expense. Enrolment data in England for 1990-91 show 1.29 million people over 19 years of age studying in FE colleges and 1.27 million people studying in AECs (Hansard, 21 October 1991 col:362). While these figures include retired people, they substantially relate to unemployed people and those wishing to enter the labour market though not defined as 'actively seeking work'. The failure to acknowledge Adult Education as a resource for training is singularly
persistent. Despite many examples where Government agencies and departments (particularly the Training Agency) have replaced FE colleges with AECs as providers of Government training when FE colleges have proved more expensive, less responsive to sponsors and less accessible to trainees, the 'invisibility' of AE remains.

However, before examining the apparent failure of Adult Education to enter the political agenda in a way that promotes change, it is worth examining the assumption that training the workforce is inherently good and leads to greater employee satisfaction and increased productivity. Jarvis cites Berg's (1973) argument that educational achievements do not correlate with work performance in America and similar conclusions reached by Bowles and Gintis (1976:123):

"competitive academic performance - is only weakly associated with the personal attributes indicative of individual success in economic life" (Jarvis, 1985:121).

Jarvis supports the notion that, since examinations function to define ability to enter many responsible occupations and professions, they may also be said to define ability in a cohort. But, he points out, the existence of certificates both legitimise poor
occupational performance (although professional bodies might argue that their regulatory procedures which punish extremely poor performance are designed to prevent this) and "every educational innovation creates a new rich and a new poor" (Jarvis 1985:122). Paid educational leave (PEL) might mitigate the effects of lack of resources for study (both time and money) but has not been widely adopted - perhaps on grounds of high cost but perhaps also because adults might resist taking time away from the labour market for fear of losing promotion opportunities or falling behind in acquiring familiarity with new technology and workplace innovations. However, the central question might really be about the "fitness of purpose" of academic qualifications as a vehicle for skills and knowledge acquisition attuned to occupational competence. I have argued the inconsistencies in the competence-based qualifications approach in seeking to marry occupational performance with competence assessment in a curricula vacuum (Chapter 6). But this criticism also acknowledges the inappropriateness of many non-competence based curricula. The key to successful correlation between qualifications and economic effectiveness may lie in a
mix of academic preparation, skills assessment and supervised occupational experience. The configuration of each element in the mix, how individually tailored the mix should be (between the extremes of individual programmes and mass standardisation), and the boundaries between pre-vocational, vocational and updating curricula requires work outside the scope of this discussion. However, there is enough here to suggest that the aggregate effects of qualification on the workforce and the economy may show a different pattern from individual effects.

Consequences for Competitiveness
The discussion so far has concentrated on evidence of pre-vocational and workforce qualification levels and what could be done to increase their quantity and quality. But raising skill levels and increasing the number of workers with relevant qualifications is not an end in itself. VET and its outcomes do not function in a vacuum divorced from effects on the labour market and the economy. The importance of vocational qualifications must be measured in terms of effects on the economy and on our competitiveness in world markets. To examine these effects it is helpful
to start with the basic movements of the labour market. The dynamics of the labour market are such that, at a simple level, it is self-regulating. If supply of labour is weak (as in low unemployment or decline in the numbers of young people leaving school or greater takeup of full time education) and demand is strong, employers are forced to adjust. They may do so by replacing jobs with new technology, streamlining processes, shifting production to areas of the world with supply, raising rewards to compete more strongly for the available workers, or limiting production. Much of this will also apply when the demand for skills outstrips supply. Individual employers (and employment sectors) may use forward planning strategies to ensure a steady supply of trained recruits through partnerships with schools, sponsorship of FHE students and graduate recruitment schemes. At local level these may be sufficient to satisfy regular replacements for trained workers who transfer within the occupational structure or leave the workforce. These strategies do not however address any fundamental requirement to upgrade skills in the labour market. The concentration by the Government on education/business partnerships and local
college/employer networks (discussed in Chapter 10) reinforces links in the supply chain between potential workers and employers but is ineffective in addressing lack of competitiveness of the labour market. In order to make a case for redirection of priorities, it is necessary first to show that the UK workforce is uncompetitive by comparing our performance with competitor counties.

One measure is a comparison of output. Work at the Policy Studies Institute shows manufacturing output between 1970 and 1987 to have risen by 7 per cent in the UK, by 29 per cent in West Germany, by 70 per cent in USA and by 90 per cent in Japan (Cox and Kriegbaum 1989:table 52). Another comparison by Eltis, Fraser and Ricketts (1992) of the UK, Germany and Japan in the period 1970-1990, found Germany and Japan had outstripped the UK in almost every respect. Output per person is rising in Germany and Japan against average unemployment in the 1980s of Japan (2.5 per cent), Germany (6 per cent) and UK (10 per cent). On share of international trade, the percentage of total G10 countries in manufacturing exports rose from around 12 per cent in 1970 to 16 per cent in 1990 for Japan,
West Germany maintained a share of 20 per cent throughout and the UK declined from 10 per cent in 1970 to 8 per cent in 1990 (Eltis, et al. 1992:2-3). On a comparison of gross domestic product (GDP) the UK dropped from second position in 1966 to fifth position in 1986 behind USA, West Germany, Japan and France (NEDO 1987). The CBI economic review in 1989 claimed that manufacturing productivity in France and Germany was ahead of Britain by 27 per cent and 22 per cent respectively, with services industries ahead by 22 per cent and 29 per cent respectively (Harris 1989). A series of studies of matched manufacturing plants in Britain and Germany carried out by the National Institute of Economic and Social Research showed on a simple comparison of labour productivity, the average differential was 63 per cent to the German worker (Daly, Hitchens and Wagner 1985). The productivity gap in the furniture industry was 50 - 60 per cent in favour of Germany (Steedman and Wagner 1987). In other industries too the trend to higher productivity could be shown (Cassels 1990: 16-18). The German workers also employed higher technology skills, produced higher value-added products with better design and detailing. In all cases this was attributed to higher
levels of qualification and training in the workforce. Work comparing British and German firms found that the better trained foremen in Germany can cope more quickly and competently with production problems and are more flexible in adapting new technology (Prais and Wagner 1988). In a comparison of matched hotels, average labour requirements were found to be about 50 per cent greater in London and about twice as great in English provincial cities as in Germany despite higher wage costs and lower room prices in Germany (Prais, Jarvis, Wagner and Ray 1989). One German company reports 40 per cent lower productivity at its UK plant than in Germany due to lower skills. Japanese plants in South Wales with rigorous training for workers (and imported managers from Japan) on the other hand report similar productivity levels for UK and Japan (Eltis et al. 1992:10).

On measures of innovation again the UK record is poor. Innovation can only be measured indirectly but evidence based on trends in patent applications show Germany maintaining its level of patent applications between 1970 and 1988 at around 33,000 a year and the UK level declining over the same period from around
25,000 to around 20,000 a year. Japan at the same time increased patent applications from around 100,000 to around 310,000 (Source OECD given by Eltis, Fraser and Ricketts (1992:6). Patent applications in Japan are primarily for potential uses to which an invention - or part of a new process - might be put. Japanese industry concentrates on squeezing out competitors by filing claims for every conceivable use for an innovation. While this accounts for some of the difference in the number of patents it does not account for all the difference. One clue to Japan's prolific rate might be in the high level of employee commitment to improving company products. Eltis gives the example of 17,000 Toyota employees in 1990 generating 2 million suggestions for improving productivity of which 87 per cent were implemented (Eltis, Fraser and Ricketts 1992:7). NEDO also claims that German and Japanese finance systems support long-term investment in industry which encourages training and product innovation in response to falling market share. This was demonstrated when cheaper products from Pacific rim countries flooded the European clothing and kitchen furniture markets. German companies concentrated on product research and
development linked to higher-skill training for operatives with the result that they were able to capture a major share of the short-run, high production values, quality end of the market. Britain on the other hand concentrated production on cheaper, mass-produced goods and subsequently lost further market share to companies in South East Asia with lower labour costs. NEDO also point to lower average inflation (over the last 20 years) in Germany and Japan with a bigger gap between profit and interest rates on capital giving an average rate of return between 2 and 3 times the British level. The narrower differential between profit margins and borrowing costs for British companies means managers spending time on cash-flow rather than freeing managers to supervise and develop production. In Japan, Germany and the USA, in order to protect market-share, successful companies are forced to innovate and to render products obsolete before the competition brings new products to the market. This encourages openness to ideas and 'simultaneous engineering' where traditionally sequential processes of product development are allowed to overlap thereby halving timescales for development (Eltis et al 1992:12-17).
Additional support for industrial development comes from research and development arrangements which in our competitor countries is based on partnership between Government (basic research) and industry (applications and technology transfer). In Japan 20-30 per cent of company R & D expenditure is used in this way often through seconding key staff to Government research establishments. All this is only possible with a flexible workforce trained to skill levels that can not only adapt to new processes and superior utilization of plant and machinery but can also contribute to product development. New technology is now widely available so a competitive edge can only be achieved by innovative, resourceful and skilled staff.

Skills as Capital
Profitability in the post-industrial economy depends on the skills and capacity of the workforce to counter and exploit external events and influences. The 'capital' in the economy is this capacity (which includes science and technology) which has replaced former capital goods such as land, minerals and manufacturing. The economy and individual enterprises
are subject to transnational movements in trade, inventions, wealth-creation and conflicts and to local socio-political-economic change. This means that individual enterprises, and the economy as a whole, can be maintained and developed only through the extant qualification levels of the workforce (qualification here is used to describe skills, knowledge, understanding and experience). For the economy to be able to respond successfully to external and structural pressures the workforce is required to increase its capacity to exploit novel situations. VET systems are required that can provide recruits to the workforce at least as well qualified as its current workers. These recruits must bring the most up-to-date skills to the enterprise and be capable of further innovation in product and management skills. Without this level of qualification in the workforce, the economy cannot protect its growth potential and may actually go into reverse as markets decline and output is increasingly dependent on out-moded products and processes. In these circumstances the economy is caught in a low-skills equilibrium in which the labour force cannot generate a sufficient level of qualification to maintain output and growth. In
periods of high levels of external change, individual enterprises do not have time to develop successful novel reactions in its current workforce and therefore depend more crucially on the VET system for appropriately qualified entrants. In an under-educated, low-skills workforce the only way people acquire new skills is through employee training programmes which are both general and company-specific.

Summary
This chapter and the previous one set out a range of examples showing that at all levels the education and training system in Britain is inadequate. Although the number of young people with qualifications at GCE and university level is rising and school and FE staying-on rates are increasing, our major competitors are also producing increasing numbers of qualified workers and most of these countries start from a higher base. The British VET system does not produce enough qualified young people with relevant qualifications; fails to qualify or train a significant proportion of school leavers; and leaves more than three-quarters of the population without any
credit for compulsory or post-compulsory education. These failures combine to deny the majority of labour market entrants a good general education, a sound grounding in science, mathematics and technology or adequate vocational training. Moreover low skill levels reinforce a low-skill equilibrium in the workforce, low motivation to train, and low-esteem for any alternatives to academic success. The British system produces insufficient numbers of graduates, an inadequate preparation for working life even for those with academic qualifications, and low-grade intermediate qualifications for technicians and craftsmen. Government training schemes waste resources on low-level training with low retention rates and few qualifications; are unable to remedy skill shortages; do not increase employability or prevent loss of employment; and fail to promote adult education and training. Less than half of ET trainees complete their training, even fewer gain qualifications, very few translate employment training into workforce skills. At least a third of the labour force have no qualifications and two-thirds are unlikely to receive any form of training. Against this background, Government skill initiatives focus at
best on reinforcing links in the supply chain and fail to address upgrading the skills of the majority of the workforce.

Work-related provision through Adult Education courses is being squeezed by Government funding plans which limit the range of vocational opportunities for adults. Unstructured employer responses to skill shortages and to production, research and development and innovation are ineffective in meeting the real challenge of international competitiveness. The pressures of world competition and changes in structure in the labour market strains the capacity of an under-qualified workforce. Failures by Government and employers to upgrade skills or provide structured retraining opportunities across the whole workforce produces a labour market that is fatally uncompetitive. I have found no evidence to the contrary.

In terms of the economic model discussed in previous chapters, the Government's strategy is uneconomic, inefficient and ineffective. It is not cheap at an average cost per filled place per annum of 2,700 for £39.
YT and 6,100 for ET (Hansard 3 February 1992 col:34)
and is certainly inefficient in its own terms of increasing employment skills for individuals and the economy. This is inefficient for the economy as a whole because it uses resources which could be more successfully targeted in higher skills training for those in employment and occupational skills through adult education and training for those wishing to enter the labour market. Above all, the strategy is ineffective because Government policies are wrongly targeted on remedial, low-level skills training for those out of work instead of using the resources and influence of Government to co-ordinate VET and employers' training to upskill the workforce; and is ineffective in providing a competitive economy and raising standards of living. The next section looks in detail at strategies for co-ordinating supply and demand in the labour market and the likely effects on VET against changing patterns in the labour market and the economy.
VoCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

PART FOUR EDUCATION / TRAINING AND THE WORKFORCE

CHAPTER NINE: LABOUR MARKET and VET INTERFACE

Introduction

The first two chapters in Part 4 - Chapter 7 - Vocational Skills Chapter 8 - Workforce Qualifications, described the levels of qualification and training available to the UK workforce. This sets the scene to examine the links between the education / training system and the labour market in the context of vocationalism. Chapter 9 - Labour Market and VET Interface and Chapter 10 - Using VET to Redress Labour Market Imbalance, identify the dominant features of the relationship between education, training and the labour market and complete Part 4.

Chapter 9 starts by describing the main features of the labour market and the changing structure of the UK labour market in the 1980s and 1990s. Models for analysing the interaction of the labour market and VET are compared starting with the legacy of industrialisation in post-industrial economies and its effect on education and training systems. The
interdependency of economic and educational change is examined and two strands affecting the interaction of the labour market and education and training systems: "credentialism" and "occupational choice". Both are important in considerations of the way that qualifications translate into skills and the factors which influence individuals in the labour market in a market-based economy. It is useful to shed light on these elements in determining whether or not the 'free movement' of the labour market is self-regulating in the way that the exponents of a market forces' ideology claim. Chapter 9 concludes with consideration of the social aspects of education / training systems and compares the models of dual and convergent systems. Chapter 9 forms the background to the exploration in Chapter 10 of the elements of coherence and dissonance between VET systems and labour market requirements.

Chapter 10 starts by examining the states of equilibrium and dis-equilibrium of labour market supply and demand. It then focuses on Government initiatives since the publication of A New Training Initiative (MSC, 1981) aimed at using VET to redress imbalances in the supply of labour and the demands for
qualification in the labour market. The primary model is that of intermediate training, notably youth training schemes. This has been augmented by job preparation and employment training, mainly targeted on unemployed people. The final section of Part 4 looks at these developments and interventions using employers to change education / training systems against features of the economic curriculum model described in earlier chapters. The summary draws together an assessment of the achievements of VET interventions since 1981 in terms of economy, efficiency and effectiveness and the transformation towards post-industrial education/training systems.

Labour Market Features
In general terms, modern industrialised economies are characterised by a trend away from goods production and land based products, towards services and knowledge-based industries. This trend may lead to a loss of skilled employment in some sectors as machinery and computer-controlled processes reduce the requirement for skilled labour (Braverman 1974). The natural curve of industrialisation shows agricultural jobs replaced by jobs in services and, when this
source of surplus labour is exhausted, services start to absorb surplus labour in manufacturing industry (Rowthorn, 1986). This entails a shift from traditionally male jobs to increased female participation in the workforce - though new female employment is likely to be part-time and non-unionised. Increased use of technology also leads to an increase in employment opportunities for more highly skilled workers and a corresponding decrease in employment for manual, unskilled labour. A further effect may be that technology replaces employment and major employers in terms of gross national product (GNP) no longer sustain a large labour force. Keegan (1993) points out that progressive corporations such as the computer software company Microsoft, is massive in terms of traded stock and yet employs fewer than 11,000 people worldwide. The structure of industries such as retailing, merchandising and food preparation is changing through franchising systems. These operate through supplier sub-contractors, or through franchises which operate as sub-contractors operating under corporate marketing and distribution structures. Workers are entering the labour force later and leaving earlier and the number of hours worked
decreases each year as holiday and special leave increases. There is pressure, particularly from women, for alternative work patterns and career structures and many workers experience frequent career changes interposed with periods out of the labour market through unemployment or self-development (education, travel etc.) (Ginsberg, 1975: 80-110).

Alongside changes in the structure of the labour market, modern economies undergo radical changes in the organisation of labour with a rise in multinational and trans-national companies and accelerated growth of large organisations through mergers and takeovers. Local labour markets are influenced in different ways by multinational trade movements and the investment policies of businesses and financial institutions. These impact on education/training systems in different ways. For example, Policy Studies Institute / Institute for Economic Research (1990) studies found that the restructuring, diversification and internationalisation of firms had a positive impact on demand for new graduates in the 1980s (HMSO, 1990a: 53). Post-industrial economies also show a trend towards
an increase in self-employment and single-worker businesses and this too affects demands for VET.

The perverse conditions in the UK labour market between 1981 and 1991 of low demand for labour coupled with high levels of supply, followed by rising demand and declining supply, intensified public and professional scrutiny of the relationship between the labour market and VET. As I shall show later in this section, the pressure points of imbalance in labour market supply and demand press most heavily on the role of the Government and its agencies. This pressure arises in part from the perceived role of the Government to initiate action in response to national crises, and in part from the socio-political lobbying that accompanies a rise in public concern, particularly about actual, or feared, social disorder. An example of innovation in response to industrial restructuring occurred when large-scale closures of manufacturing industries in the north of England led, at first, to intensive counselling and retraining redundancy schemes being set up with joint funding by the industry and the Government (for example, the British Steel scheme at Consett and British Coal schemes for coal-field closure areas). As public
concern switched focus from male industrial unemployment to youth unemployment, Government responses changed in tandem. Public alarm in the early 1980s about high youth unemployment - fuelled by inner-city riots - led directly to the creation of youth training schemes. At the same time that socio-political movements prompted the Government to respond, the original fluctuations in the labour market had a major impact on education and training. Before looking at these relationships in detail, I sketch in the main characteristics of the UK labour market and the main movements in supply and demand in the 1980s and early 1990s, using information drawn from Department of Employment statistics and labour market accounts analysis (Green and Owen 1991).

UK Labour Market

The profile of the UK labour market in 1992 showed the population of working age (the workforce) to be around 34 million, 52 per cent men and 48 per cent women (assuming men work from 16 - 64 years of age and women work from 16 - 59 years of age). The economically active in the workforce had increased from 25.1 million in 1981 to 26.4 million by 1987, largely...
through an increase of 1.1 million in the number of working women. Of these by 1990, around 22 million of the workforce (excluding the armed forces) were employed, 3 million were self-employed, 0.4 million were in Government training schemes and 1.9 million were claiming unemployment benefit. Government figures gave a rise in the total workforce in employment of over 3.25 million from March 1983 to a peak of 26.9 million by June 1990, falling to 25.8 million by March 1992 (Treasury Brief 13 April 1992).

Of the estimated 14 million men in employment, less than a million worked part-time; of the 11 million employed women, nearly 4 million worked part-time - the great majority married women. The numbers of people self-employed rose every year between 1979 and 1990. The total self-employed by 1990 was 1.2 million higher than in 1979 (Treasury Brief 4 May 1992).

The percentage of the population of working age not in employment (that is: unemployed by the International Labour Organisation's (ILO) definition, plus economically inactive) decreased from 26.6 per cent in 1979 to 25.1 per cent in 1990 (Hansard 24 February 1992 col:453) - Britain's labour market participation
rate compares favourably with the United States and is higher than in most of the European Community. Between June 1979 and June 1983 the workforce in employment shrank by 1.75 million and unemployment rose to 2.8 million. Over the next 3 years the number of jobs increased by 0.9 million although unemployment went on rising to a peak of over 3 million. From 1986 to early 1990, the number in employment increased by 2.4 million through a combination of job creation and more people attracted into the workforce as the economy expanded. As a result unemployment fell to 1.6 million, rising again during the second recessionary phase between 1991 and 1993 in which the labour market shed jobs and economic activity slowed down. A report by the Employment Institute commissioned by The Guardian (March 1992), concluded that net job creation between 1979 and 1991 was under 100,000 jobs after allowing for the people on training schemes and double counting of two jobs done by one person (The Guardian 19 March 1992).

Changing Structure of Employment
In common with most industrialised economies, the British labour market is in transition from dominance
by heavy manufacturing industry to services and 'intelligence' industries. The trend over the last 30 years of transition from land and mineral-based industries to industries based on communications and personal/financial services, is influenced by technology and the rise in service industries. By the 1960s the growth of public sector employment (notably the civil service, local Government, health and education) had dented the domination of manufacturing, domestic service and agriculture labour markets. Between 1961 and 1975 employment in public sector and administration increased by 40 per cent more than employment in industry (Bacon and Eltis, 1976: 11-13) — what Wooldridge calls the "pontificating classes" had "expanded exponentially" (Wooldridge, 1990: 13). This echoes trends in the American labour market where the number of professionals doubled to 8 per cent between 1900 and 1950, increased to 13 per cent by 1966 and is predicted to be at least 25 per cent of the total labour market by the year 2000 (Schon, 1983: 7). By 1989, 58 per cent of the UK workforce in employment worked in services, 20 per cent worked in manufacturing and 12 per cent were self-employed (7
per cent were employed outside these categories, plus 1 per cent in the armed forces and 2 per cent in work-related training schemes).

Contributions to GNP across the UK economy show that around 43 per cent comes from administration, financial and public services; 23 per cent from manufacturing industries, 15 per cent from distribution, hotels and catering; and around 6 per cent each from construction, transport / communication, and land-based/ energy industries (Hansard 30 June 1992 cols:469-470). The distribution of wealth-creation in the economy is roughly reflected in the distribution of the labour force. Manufacturing industries employ around 5 million and service industries employ around 15.5 million people (Cassels 1990:23). Between 1981 and 1991 the number of employees in manufacturing dropped by 1.4 million while the number in services rose by over 2 million (Hansard 25 February 1992 col:453). Since 1991, both sectors have experienced significant job losses with manufacturing employment falling by around 19,000 jobs a month during 1992. Rowthorn (1986) argues that the enormous reduction in manufacturing industry since the
second world war (1939 - 1945) is explained by the natural progression of service industries replacing agriculture and manufacturing as the major source of employment - the maturity thesis - due to the 'workshop' economy of changing raw materials into manufactured goods no longer being necessary to the balance of trade - the trade specialisation thesis (Rowthorn, 1986). The participation rate changes between 1981 and 1987 reduced the size of the male labour force due to heavy job losses in predominantly male sectors of employment. The increase in female labour more than balanced the decrease in male participation rates though not in equal proportions of full-time and higher-paid employment (Green and Owen 1991:300). Comparing managerial jobs (3.2 million) and professional occupations (2.3 million) and associated professional and technical occupations (2.0 million) in 1987, the Institute for Employment Research suggests that each of these groups will increase by 1995 to managerial (3.5 million) professional (2.7 million) and professional/technical (2.4 million), and each group will increase its proportion of jobs in total employment. Craft and skilled manual jobs are also projected to rise (from

9.12
The organisational structure of the labour market is also changing substantially. The number of small businesses and their importance in the labour market has been steadily increasing throughout the 1980s. Businesses employing fewer than 20 people are estimated to account for 36 per cent of employment outside the civil service. Nearly two thirds employ one or two workers and three quarters of the rest employ ten people or fewer (Training Agency, February 1990b). The size of businesses is an important factor in whether employees can be released for training away from the workplace, or can offer work-based training to new entrants; this will be discussed later in this section in relation to training schemes.

Supply and Demand
As the above statistics show, the UK labour market underwent periods of sharp contrasts in the 1980s and 1990s as demand for labour fluctuated wildly reflecting contraction and expansion in the economy. The economy fluctuated between declining economic conditions from 1979-83, rising demand in an improving
economy 1983-86, the boom of 1986-1990, and the start of the second recession in 1990-91. The demand for labour has correspondingly shown sharp falls, rises and falls.

Fluctuations also occurred in the supply side of the labour market with unprecedented numbers of young workers entering the labour market in the early 1980s as the high birthrate in the mid 1960s worked through to a peak of over 900,000 school leavers in 1982. From a peak of 3.7 million in 1983 the number of 16-19 year olds fell to 3.5 million in 1986 and is forecast to fall to 2.6 million by 1994 (HMSO 1988a:17). The Government made assumptions, based on these figures, that there would be a significant shortfall in the availability of young workers and compensatory recruitment and retraining programmes would be needed to ensure an adequate supply of labour. Traditionally heavy recruiters of young adults, such as the armed forces, set up special committees to consider how to overcome the projected shortfall in recruits. However, special measures proved unnecessary as reductions in the armed services due political changes in eastern Europe and job-shedding throughout the economy from 1989 - 1993 more
than balanced the projected shortfalls.

In line with predictions about the 'demographic timebomb' of low numbers of school leavers, the Government also forecast a significant drop in the number of students entering higher and further education by the mid 1990s as a result of the dip in the birthrate after 1964-66. However by 1990, after studies by Smithers and Robinson (1989) showed that the drop in birthrate was heavily concentrated in social classes 3, 4 and 5 which traditionally provide only a minority of HE students, the Government revised its forecasts and set targets for higher education participation rates to increase steadily to nearly 23 per cent of the age cohort by the end of the century (Secretary of State for Education, September 1989).

The decline in labour market recruitment since 1990, together with provision of more FHE places, has encouraged a rise in staying on rates in schools, and increased the numbers studying at colleges and universities by around 5 per cent a year. After taking account of the decline in the 18 to 19 year old population in the early 1990s, enrolments in FHE are expected to plateau after 1994. The number of
qualified female school leavers (with 2 or more GCE 'A' levels or equivalent) going into higher education is expected to increase from over 76 per cent in 1984 to 90 per cent by 2000. At the same time, more older students are entering the system. By 1990 over 50 per cent of HE entrants were aged over 21 years and by 1995 the number of mature FHE entrants is projected to be 23 per cent above the 1988 level. Renewed growth in participation rates in the late 1990s is projected to increase FHE output to 63 per cent above its 1980 level by the end of the century (HMSO, 1990a: 16).

Unemployment

Unemployment in December 1979 stood at 1,055,000 and by July 1990 had risen to 1,617,100 or 5.7 per cent of the workforce. Government estimates gave the number of unemployed people by April 1992 at 2.647 million, up 1.051 million since April 1990 at 9.4 per cent of the workforce; unemployment was expected to rise well into 1993. The trend in long-term unemployment (defined as those out of work for over one year) is also rising and increased by 93,000 between October 1991 and January 1992 (Treasury Brief 13 April 1992). By August 1992, the number of people out of work for more than a year stood at over 900,000 showing a hardcore of
structural unemployment as a continuing feature of the labour market (Treasury Brief August 1992). These estimates are based on the number of people out of work and receiving unemployment benefit. The annual Labour Force Survey uses the ILO/OECD definition of unemployment which includes those looking for work rather than the tighter definition (people looking for work within the past four weeks, available to start a job within a fortnight and who have not worked all at within the past seven days) used for monthly Government announcements. Labour Force statistics show unemployment rate as a percentage of the total labour force rising from 5.1 per cent in 1979 to 12.3 per cent by 1985 (OECD, 1986). Since 1981 there have been 30 changes to the way the unemployed count is defined - 29 of the changes have reduced the total. Government figures exclude those who are ineligible for benefit - such as those whose spouse or partner is in work or already claiming benefit - even though they may be actively seeking work. The figures do not include those on sickness or invalidity benefit, people who do not meet the minimum contributions criteria for benefit, youths under 18 or anyone on a training scheme. According to the independent
Unemployment Unit, in mid 1992 the total number of unemployed was around 1 million higher than official figures when calculated by the earlier definition. On any measure, unemployment has risen substantially since 1980 (despite the slight improvement from its peak of over 3 million in 1983) and undeniably has shaped Government policy for VET in a decisive way.

The dramatic increases in the number of unemployed people between 1981 and 1984, between 1984 and 1987 (partly disguised by net migration of jobs adding to the economically active population during this period), and the rise of 1.056 million between 1990 and 1992 cannot be explained simplistically. One scapegoat for unemployment favoured by the New Right has been the power of trade unions to make 'unrealistic' wage demands. Historically market economists argued that demand for labour would balance supply through the regulation of wages: when labour was scarce, wages would rise and encourage people into the labour market and when labour supply exceeded demand, wages would be depressed and allow employers to increase the size of their labour force (an argument still being used in a Treasury Briefing of 18
May 1992). In the early 1980s 'free marketeers' argued that the power of trade unions to dictate wage levels kept the price of labour above its market clearing price thus distorting the market. However this fails to explain rising rates of unemployment in the 1990s (with the UK having the worst rise out of 23 countries in the OECD apart from Finland) when trade union influence on wage bargaining had significantly declined. It also fails to explain why areas with below average wage rates, such as Cornwall, have permanently high unemployment. The CBI's director of employment affairs was reported in August 1992 as saying

"pay is being driven more by business factors- the need to keep prices competitive, to defend profitability and to win orders - than by inflationary pressure from the Retail Prices Index or skill shortages" The Guardian 10 August 1992:10

However a cynic might say that it is 'easy to keep the grass short in winter'. Pay settlements for chairman and top executives (particularly of former public utilities) which have risen on average over 100 per cent in 1991-92, indicate that in these cases pay is not driven by supply and demand. A more plausible explanation of the effect of wages on demand, is that tripartite influences of available workers /
productivity / labour requirements interact to determine levels of pay. In areas, such as Cornwall, where labour requirements are insufficient to provide employment for the available workforce, wage levels are depressed by over-supply of labour. Low wage rates cannot drive up the number of people who can be offered work unless demand for goods is rising. The classical theory of wage levels as the regulator of supply and demand can only influence specific types of employees - and in very small numbers. The overall trend, in service industries particularly, is to drive down the wage percentage costs of production. In modern economies, new technology and internal restructuring are also used to drive down the major overhead of production / delivery of service which is the cost of the workforce. Although, at specific local levels, wage rates may be used to influence recruitment, the amount of business likely to be generated and profit margins, rather than the level of wages, are more likely to dictate employment rates.

Other factors advanced as determinants of unemployment include the differential between wages and welfare payments which may restrict the mobility of labour and the availability of housing in areas of labour
shortage (Barry 1987:169). A more complex interaction of pay bargaining, social security, inflation and wage responsiveness gets the credit for states of high / low unemployment in an analysis of data from 19 countries by Layard et.al.(1991). A multi-functional analysis is offered by Green and Owen:

"When interactions between labour supply and demand are considered at the local scale, it becomes clear that the level of unemployment is a function not only of the level of employment, but also the level of labour supply, which is in turn composed of changes in the population of working age, and the changing propensity to seek employment. Both increasing and decreasing levels of unemployment may be associated with job growth/loss. Indeed, changing employment prospects may also induce important labour supply responses such as in-migration and participation increase in the case of employment growth, and out-migration and withdrawal from the labour force in a situation of localised job loss." (Green and Owen 1991:297)

Labour market accounts analysis used by Green and Owen (1991) paints a far more complex picture of labour market supply and demand than simple ratios of unemployment and job vacancies and is particularly useful in describing trends that take account of the dynamics of population and economic conditions. Green and Owen use labour market accounts analysis to discern trends in labour market supply and demand. This technique plots the separate influences of
demography, economic activity, employment, unemployment and net worker migration in each region to produce a measure of job shortfall / job surplus. This measures

"the extent to which employment creation has failed (succeeded) in matching the increase (decrease) in labour supply between two dates." (Green and Owen 1991:297)

The technique is useful because it combines estimates of the number economically active in the population with a participation change component representing persons hitherto inactive becoming active, or persons leaving the labour force, by aggregating data for Department of Employment travel-to-work areas. It also takes into account changes in employment, unemployment and movements in population. Although the technique is of particular use in looking at variations between regions, it is also useful for my purposes in describing shifts in the labour market and the more complex picture of labour market buoyancy. Labour market accounts analysis yields results which would not be apparent from a simple analysis of employment and employment change. For example, in the early 1980s, higher numbers of school leavers combined with employment loss could not be discounted by relatively
strong 'wage market' movements. Economic recovery in the mid 1980s helped to ease demographic pressure (which was itself easing) but the greater availability of work attracted more people into the labour force - notably married women. Similarly, employment loss in service and technology industries and in management, banking and finance in the early 1990s had a markedly different effect in different areas and different employment markets. Some of these effects may not show in simple statistics. For example, in parts of south east England where there were many two-job households during the late 1980s, subsequent job loss which reduced such households to one job would not show in unemployment statistics if the household was not eligible to claim benefit. Using labour market accounts analysis, interaction between natural change, participation change and employment change showed job shortfalls of around 2 per cent of the economically active population between 1981 and 1984 and job surpluses of around half the shortfall between 1984 and 1987. Shortfalls and surpluses in job creation result in change in the level of unemployment and the migration of workers in response to changing job opportunities. Severe shortfalls are characterised by
net out-migration, severe employment decrease, unemployment increase, withdrawal from the labour force and lower than average participation performance. Areas experiencing severe shortfalls in this period included declining coalfield areas, manufacturing centres and ports. In deteriorating areas, the impact of demographic change increased labour supply and slowed in-migration attracted by job surpluses in the early 1980s which added to the labour supply. Areas of economic growth on the other hand, are characterised by substantial net-immigration, lower impact of demographic change, greater than average employment increases and job surpluses (Green and Owen 1991:300-312).

Interaction of the Labour Market and VET
Having described the main features of the UK labour market since 1980 as a background to education / training requirements, I now turn to the factors which influence interactions between the labour market and education / training systems. There is a two-way interaction between education / training and modern economies which has its roots in industrialisation and the development of universal education. Britain's
educational system developed in response to nineteenth century industrialisation which created a labour market dominated by large-scale manufacturing industries. As a result the educational system evolved to produce a relatively small number of skilled workers and highly educated professionals.

Legacy of Industrialism

It is a useful starting point for this analysis of the interface between the labour market and VET (and more crucially, the changes necessary to move to post-industrial systems), to look at the legacy of industrialisation (see Judge and Dickson, 1987 for analysis of labour market development from 17th century). The mainsprings of modern labour markets and education / training systems can be traced to key social, political and philosophical values engendered during the process of industrialisation. Kerr, Dunlop, Harbison and Myers (1960) seminal analysis of industrialisation in major societies defines industrialisation as:

"the process of transition from the traditional society toward industrialization, which is an abstraction - a limit approached by industrialization" (Kerr, et al., 1960:1)

Kerr et.al. emphasise that industrialisation is
essentially a transforming process affecting the structure of society and all its institutions. Using cross-cultural studies, they describe a typography of five main types of industrial elites (dynastic, middle class, revolutionary intellectual, colonial and nationalist) each with distinct characteristics and outcomes in the nature and structure of labour markets and education / training systems. The differing styles of industrial elites reflect their pre-existing cultural traits, strategic concepts and policies for shaping the cultural systems to support industrialisation (Kerr et.al, 1960:100-118). Economic systems undergo metamorphosis in the course of industrialisation with economic constraints providing the parameters of economic policies. Five types of economic constraints are influential: level of technology; natural resources; education; level of population; and financial capacity (Kerr et.al, 1960:98-101). Economic potential correlates to the level of each factor. Thus social and cultural systems shape and are shaped by industrialisation. Educational development affects economic potential at the level of

"...the skill, training, and experience of workers
and the skill, organising ability, and competence of the managerial and professional groups and government personnel". (Kerr et.al 1960:100)

In the process of establishing education systems structural elements are determined. These include whether the education system should be geared for participation by an elite or for everyone, and whether the system should be broadly general and liberal or narrowly specialised and technical. The resulting capacity of the education system to provide the appropriate level of professional, technical and managerial skills in the labour force is as crucial to industrial growth as availability of capital goods. Industrialisation requires continual training and retraining of the workforce to keep abreast of occupational and structural changes brought about by continuing technological developments. Many of these criteria remain crucial to a healthy post-industrial economy and the requirement to train and retrain the workforce has dominated the debate about VET and the labour market throughout the 1980s and 1990s. Later in the thesis, I consider whether the post-industrial prescription should be the same as that suited to the industrialisation process.

For Kerr and his colleagues, assimilation of
Industrialisation is brought about by political action which removes blocks to the process of moving from traditional values and structures to technological entrepreneurship. The transformation is successful, all-embracing and irreversible (Kerr et. al 1960:267).

Successful economic development requires

"an educational system functionally related to the skills and professions imperative to its technology...not primarily concerned with conserving traditional values or perpetuating the classics; it does not adopt a static view of society...

The higher educational system ... stresses the natural sciences, engineering, medicine, managerial training ... and administrative law. It must steadily adopt new disciplines and fields of specialisation. There is a relatively smaller place for the humanities and arts, and the social sciences are strongly related to the training of managerial groups and technicians for enterprise and government...

A technically trained workforce needs to be able to follow and adapt to changes in its specialisms and to learn to shift to new fields. Generality is also requisite for those co-ordinating and leading the specialists." (Kerr et.al, 1960:36-37)

The stage of economic development in Britain in the 1980s and 1990s in many respects can be described as post-industrial. The decline of manufacturing, rise of service industries, pre-eminence of small enterprises and autonomous branch units in multinational conglomerates, telecommunications and digital
processes have moved the labour market beyond the industrial pattern (some commentators describe the current state, for example Judge and Dickson (1987), as de-industrialisation.) It would not, therefore, be appropriate to apply the complete taxonomy developed by Kerr and his colleagues to the dynamics of the UK labour market. However, their prognosis for education is pertinent because much of the present system - and underlying VET policies - reflects the accretion of ideas and practices rooted in earlier systems. An understanding of this framework can illumine the search for appropriate post-industrial systems.

Briefly, the key elements of Kerr et.al's analysis differentiates industrial societies by their socio-political orientation. Societies may be predominantly characterised as either middle class, or revolutionary intellectual, or nationalist elites - dynastic and colonial orientations give way to the other types. Middle-class orientation is pragmatic, economically individualistic, politically egalitarian and policy-making is fragmented. This approach emphasises the open market, deliberately develops private entrepreneurs and eschews 'the nanny state'.

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Characteristics of revolution-led industrialisation include centralist orthodoxy with political power held by the dominant interpreters of the ideology with predominantly narrow, technical training programmes for on-and off-the-job training. In this model, nationalist industrialisation combines a pragmatic approach with a state-planned mixed economy of private initiative and state control (Kerr et al. 1960: 53-68). Such models rarely appear in a pure form but dominant features can be identified in most education systems which are rooted in a process of industrialisation. For example, it is possible to examine education policies of the Thatcher Government (1979-1990) against this structure. In this analysis, the predominant mode is middle class with open market policies designed to encourage economic individualism (for example, open enrolment, opted-out schools, enterprise training, self-starter self-employment schemes and formula-funding for schools and colleges). Paradoxically, as the New Right ideology based on free enterprise driven by the market begins to dictate policy, elements of centralist orthodoxy emerge (national youth training scheme, the national curriculum, standardised tests, centrally funded
schools and colleges and a national structure of vocational qualifications). A powerful mix of state control, private enterprise and economic individualism results. In this way political action forces assimilation of market values and the education system itself is industrialised.

Interdependency of Economic and Educational Change

Changes in the scope and content of educational systems can be explained in economic terms. For example, scientific discoveries and new technologies (frequently originating in the education system) change the nature of work and occupational structures leading to an increase in professional, white-collar jobs and a decrease in unskilled labour through automation. This directly influences the amount and type of skills needed by the labour force and the result is an expansion of education (Banks, 1976). Labour market demands for high educational requirements relate to organisational and technological change (especially in small organisations) and an emphasis on 'public service image' (Collins, 1974: 419-442). As education in turn is perceived to be a passport to better jobs, demand for
"setting up an inflationary spiral in which educational requirements become even higher" (Banks 1976:22)

Certainly an upward trend in occupational qualification levels can be demonstrated in many occupations. In teaching, for example, entry requirements over the last 130 years have developed from unqualified (often barely literate), through to certificated, and to the present graduate and post-graduate levels. (Recent moves by the Government to introduce non-graduate entry schemes for infant and primary teaching are reversing the trend.) This effect is of course also influenced by social development, higher aspirations and higher standards of living. Larger firms in particular concentrate market and product development on internal social reorganisations as a necessary condition of technological modernisation. Equally fundamental changes are occurring in the use of computer technology, electronics, fibre-optics communications, new materials and management systems (D'Iribarne & Silvestre, 1986:51). All these developments change work practices and feed through to changes in education and training. Products from the education /

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training system (trained personnel, scientific discoveries and applied research) in turn change the structure and organisation of the labour market. The symbiosis between labour markets and education / training is intensified by the direct interventions of Government, employers and individuals seeking to stabilise imbalances in the supply and demand for labour. (The effect of these interventions is examined in later sections looking at disequilibrium in supply and demand.)

Credentialism in the Labour Market

The interdependency of the education and training system and the labour market manifests itself, at one level, in supply and demand for certification. Accredited qualifications are the currency which translates the outputs of the education and training system into a labour market resource. There is a positive correlation between the two.

"Educational attainment (measured by qualifications) has a major effect on occupational destination (measured by outcomes)"

(Fergusson and Dale, 1989:46)

If the market were entirely free, the processes of demand and supply could be expected to regulate the demand for qualifications to the constraints of price-
mechanism and value-transference. One way to consider the value-transference of certificated education and training is to look at the level and distribution of earnings between occupational groups and labour market skill strata. (This discussion is not concerned with the effects of schooling, social class or ability on earnings - see Husén (1986:150-159) for studies which have examined these effects. I am concerned here with the broad links between certification and levels of reward in the labour market.)

The level, distribution and changes between earnings in different occupational groups are subject to complex interactions of fiscal factors other than the level of certificated qualifications. The general economic climate, tax changes, high unemployment, strong sector labour demands, institutional factors and public sector pay awards influence the movement in earnings. Pay differentials between skilled and unskilled workers had narrowed from 100 per cent in Victorian times to 16 per cent by 1952 (Harrison, 1984 quoted in Kenney and Reid 1990:281). Training schemes have contributed to this convergence. For example:

"the Engineering ITBs (1978) proposals for craft training helped employers to balance their supply
and demand for skilled labour more quickly because training time was reduced but it also inhibited them from recruiting apprentices they did not need at that time as they had to pay a full craftsman's wage at age 18, a much more expensive form of investment than the traditional apprentice, who would 'fetch and carry' on the factory floor for several years at a low rate of pay."
(Kenney and Reid, 1990: 282)

The differentials between trainees wage rates and workers wage rates are also said to be a disincentive to training. However, earnings for skilled workers (disregarding gender effects) roughly correlate to occupations differentiated on the basis of skill or training. Movement in the relative earnings of two occupations may

"encourage retraining, or tend to push new labour market entrants in the direction of the relatively expanding occupations" (Adams, 1988: 29)

There is a differential between manual and non-manual pay reflecting gross non-certification and certification differences. This broad relationship can be demonstrated in a 'snapshot' of average weekly earnings. For example, average gross adult full-time weekly earnings (in pounds sterling) in 1986 were £141 (manual) and £168 (non-manual). There is also a wide differential between the earnings of men and women; average gross adult full-time weekly earnings for all occupations in 1986 were £207.5 (men) and £137.2
(women) (Department of Employment, 1988). The same source shows occupational earnings generally related to professional and vocational qualifications (though other factors such as physical risk and unsocial conditions also influence earnings).

Table 7
Average Gross Adult Weekly Earnings:

<table>
<thead>
<tr>
<th></th>
<th>£ sterling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>Professionals in management and administration</td>
<td>298.2</td>
</tr>
<tr>
<td>Literary, artistic and sports</td>
<td>261.7</td>
</tr>
<tr>
<td>Other professions and managerial</td>
<td>245.9</td>
</tr>
<tr>
<td>Security and protective services</td>
<td>228.4</td>
</tr>
<tr>
<td>Metal and electrical processing</td>
<td>191.6</td>
</tr>
<tr>
<td>Selling</td>
<td>186.3</td>
</tr>
<tr>
<td>Materials processing/making and repairing</td>
<td>177.1</td>
</tr>
<tr>
<td>Construction, mining and related</td>
<td>172.6</td>
</tr>
<tr>
<td>Transport, materials moving and storing</td>
<td>172.4</td>
</tr>
<tr>
<td>Clerical and related</td>
<td>171.0</td>
</tr>
<tr>
<td>Painting and assembling</td>
<td>167.4</td>
</tr>
<tr>
<td>Catering, cleaning and other personal services</td>
<td>142.0</td>
</tr>
<tr>
<td>Farming, fishing and related</td>
<td>129.5</td>
</tr>
</tbody>
</table>

Source: Adams/Department of Employment, 1988 Table 5

There is a marked difference in average gross rates for men and for women in the same industries. In some industries women fare comparatively better than in others. The relatively better pay for women in security services reflects equal pay in the police and prison services although there is still a difference (17 per cent) between average pay of men (£228.4) and
women (£189.4) reflecting the lower grades occupied by women on average. This differential due to lack of seniority is more pronounced among professionals in education, welfare and health services where female average earnings are 72 per cent (£173.4) of average male earnings (£242.2). Average gross wages in selling rank 6 for men and 10 for women reflecting the lower paid - and part time women's jobs in retailing compared to selling jobs 'on the road' occupied by men. The wage differentials may in part reflect lower levels of qualification in women and the effects of employment history interrupted by breaks for childcare, but many studies have suggested that the level of women's work is limited by discriminatory employment practices (for example, see West (Ed.) (1982) and Elson and Pearson (Eds.) (1989).

The link between pay and certification is a little easier to demonstrate than a link between qualifications and work content. A 1986 survey of graduates and diplomates who qualified in 1980 found that nearly a quarter of those in work said that a higher education qualification was not a requirement of their job, nor had been helpful in getting it. 31
per cent of respondents to a smaller survey regarded themselves as over-qualified for the work they were doing (HMSO, 1990a:14-15). This indicates that the labour market rewards certification in broad terms, but may fail to provide the structure and content of individual jobs to underutilize the qualifications of job-holders.

The rough correlation between earnings and certification tends to break down when the earnings of young adults and adults are compared. Cassels, in a study of skill shortages in Britain, claims that an important weakness of the British labour market, compared to the German labour market, is that wages of new entrants do not reflect levels of qualification. In 1981 the earnings of UK 16 - 20 year olds averaged 55 - 83 per cent of basic pay for adult skilled workers compared to 22 -38 per cent for German 16 - 20 year olds in the same industries (Cassels 1990:34). This has three effects: unqualified entrants are not encouraged to certificate, the differential between wages for qualified and unqualified is too narrow to encourage training as investment, and high wage bills prevent employers investing in training. One way this can change is by the absorption of higher qualified
young people into the labour force, another way is to regulate for mandatory certificated training for all young people in employment.

The overall trend in modern economies is for rising certification levels in new entrants and the retirement (or unemployment) of non-certificated workers, to make the workforce more credential with the result that the qualification structure of the labour force changes

"from a pyramid to what might be represented by an egg standing on its top end" (Husén, 1986: 165)

At the bottom of this qualifications hierarchy will be unskilled workers with no or minimum qualifications in the least attractive jobs and most vulnerable to unemployment. Skilled, certificated, mainly manual workers form the next layer who will need further education and retraining throughout their careers. The next broad group comprises office, supervisory and technical personnel educated to a good level of formal education and skills who will also need lifelong updating. In the top strata will be two groups: graduates and sub-graduates (Husén, 1986: 142-143). There is already substantial overlap between graduates
and non-graduates for nearly all categories of job
taken by new graduates, and substitution in both
directions. The prevailing trend in substitution has
been towards new graduates taking jobs which were
formerly done by non-graduates (HMSO, 1990a:55). At
graduate recruitment level, an interdepartmental
review concluded that:

"...the choices between different types and
combinations of education, training and work
continue to be influenced by labour market
signals. In a more competitive labour market,
proper rates of return for the acquisition of
skills, which may relate more to career earnings
and prospects than to starting salaries, will be
important, particularly at occupational level.

Positive signals will encourage young people with
the necessary abilities to forego the apparent
attractions of immediate employment for the
prospects of long term rewards.

...The result should be a more efficient use of
what will always be a scarce resource. That will
be in the interests of the individuals, employers
and the nation as a whole." (HMSO, 1990a:59)

Occupational Choice

'Positive signals' from the labour market are expected
to steer young people into occupational choices
compatible with the needs of the labour market. In the
1950s Ginsberg (1951) described the process of
occupational choice as driven by decision-making in
teenage or early adulthood which determined future
occupational and career choices. The process was rooted in educational opportunities and social and cultural expectations and had a quality of irreversibility. The effect was to make occupational choice thereafter a process of compromise designed to achieve an optimal fit between individual interests, capacities, values and work opportunities. Developments in the American labour market by the 1970s led Ginsberg to revise his theory in several important ways: occupational choice is a continuous process which can extend throughout working life if the worker is sufficiently free socially and economically. Decisions are mutable and the principal challenge is to develop a strategy that keeps the worker's options open. Compromise, which in the earlier model was static and reactionary, is replaced by optimization which is fluid and dynamic (Ginsberg, 1975:40). A study for the careers branch of the Employment Department in 1980 concluded that research into attitudes, job finding and job changing painted an incomplete picture of transition from school to work particularly about the experiences of girls and youngsters likely to be at risk (Clarke, 1980:15). A large study based on the National Child
Development Study (NCDS) birth cohort reporting in 1989, combined social and educational factors with local labour market factors. These results showed the results of standard tests in English and maths at age 10 to be the single most important guide to later earnings prospects. The next most significant factors were school leaving age and continuity of employment. After controlling for a wide range of influences on earnings potential, above average occupational earnings correlate most strongly with continuous employment with one employer. Labour market migration to areas of low unemployment increases earnings potential, while job changing in areas of high unemployment reduces the chance of access to higher earnings (Elias and Blanchflower, 1989). Husén puts emphasis on formal education as the first criterion of selection by the labour market. In highly technological and growth-orientated industrial societies, this 'meritocratic syndrome' comes to dominate educational values in the education system and the labour market:

"meritocracy is the price we have to pay for economic growth and increased material standard of living. Under such auspices, career-orientation and excessive pragmatism tend to take precedence over learning for personal fulfilment" (Husén, 1986:250)
These arguments assume a basic relationship between education and training systems and employment in which VET is the handmaiden of the labour market. It is clear from this position that the value of the educational process for young people is equated with reward in the labour market. 'Efficient use' of young people in this way is seen as benefiting the economy and society. If such overt credentialism is essential to economic success (and I have cited many references in Chapters 7 and 8 which wholeheartedly support this proposition), it is worth pausing to consider if the relationship of the education/training system to the economy is structured for these ends.

Divergence between Work and Education/Training Systems

Husén (1989) refers to three models for initial education systems: bi-partite, comprehensive and dual. Traditional European systems are bi-partite, premised on separate value-systems for education and work. Academic and vocational purposes co-exist in parallel in the education / training system often with high disparity of esteem and low mobility between the academic and the vocational sectors. Learning is
localised and concentrated on general skills of communication, literacy, numeracy and social behaviours which are seen as a general grounding for adult life. There is little effort to specialise on work-related skills or to tailor the curriculum to any analysis of labour market requirements or desired employment outcomes (Husén 1989).

Traditionally, segregation of academic and vocational elements of the curriculum rested on selection of individuals on the basis of intelligence (as defined by intelligence tests) with low-scorers receiving a more vocationally orientated education. Although, as Kelly (1982) points out, in spite of the obvious needs of a technological society, demands for more vocational training in schools have never been strong in the UK. The pressure of 'vocationalism' of the school curriculum is for a

"good general education, a good grounding in the three Rs... and pressure on schools to emphasize in their curricula those subjects or areas of study that can be seen to have economic or industrial relevance" (Kelly, 1982:179)

The processes of industrialisation separated educational institutions and professional organisations from labour market structures. Divergence of education / training systems and work
in the initial education structure is mirrored in the structure of higher education. Increased status becomes vested in institutional and professional autonomy which resists convergence with other powerful groups such as employers (although the separation of academia and industry is becoming blurred, the higher education system does not yet show convergence with the labour market). The differentiated cultures of work and education develop different languages and communication systems, different social relations within the workplaces of industry, commerce and education, and different conditions of employment. The institutionalisation of each culture strengthens the threat of change (convergence) and increases the force of each system to maintain divergence (Onna, Feijen and Kraayvanger, 1990).

Onna, et al. (1990) describe four modes of relationship between work and education: overdeterminism of work over education; autonomous development of school and work; overdeterminism of work by education; and reciprocal influence. Chapter 4 examined the attempts to vocationalise the
curriculum since the early 1980s and concluded that the centralist elements of Government policy had had a greater influence than either Monetarism or the corporate influence of employers. Despite misgivings by some educationalists, the legacy of the VET policies of the Thatcher Government (1979 - 1990) does not seem to be 'overdeterminism of work over education'. The autonomous development of education and work systems in the preparatory education system has already been described as an effect of the industrial revolution. The complete separation of learning and work inflates the value of institutionalised learning and devalues other learning such as voluntary and community activities and learning in social or work settings. I have not found examples in the UK system of 'overdeterminism of work by education'. Such features would show overt credentialism in the labour market and a high commercial value placed on the social structures of education / training systems.

Two main justifications for maintaining the insularity of a bi-partite education system are put forward by educational professionals: disinterested advancement and equality of opportunity. Disinterested
advancement proponents argue that separatism supports detachment which encourages innovation and development of work-practices, organisational management and product research. By being separate from the immediate demands of the workplace, innovation can develop through experimentation, analysis and reflection. The second inherent strength of divergent work and education/training systems is said to lie in the reparative aspects which aid those who are unable to compete on equal terms in the labour market. For example, the emancipation of women into employment is encouraged by providing an avenue for qualification and skill acquisition which does not depend on employer patronage. Individuals may perceive greater economic benefit from a broad education which allows employment mobility and offers insurance against industry and organisation-specific decline or failure. The counter arguments are that divergence lengthens the period of formal education for individuals increasing the period of social and economic dependence, and may encourage passivity and lack of motivation. The curriculum may be increasingly theoretical and non-workrelated, teacher (or institutionally) determined rather than task-led and,
paradoxically, seen as narrow (irrelevant). The period of compulsory education may not match the physical and emotional maturation of the individual and be uneconomic because of delayed economic activity and subsequent inability to maximise the benefits of formal education in the labour market.

From the perspective of employers, separation may give rise to irrelevance in both the curriculum and practice, outmoded instruction and negative values of the workplace imparted by teachers to students. General education (even when it contains some vocational elements) produces generalised learning outputs for the labour market which may be wasteful in terms of the labour market (see Chapter 5 for discussion of the effects of the academic curriculum as preparation for employment). The selection of curricula is based on intelligence and not on practical skills which may produce mismatches with prevailing occupational and economic conditions. The dual socialisation of academic and learning structures in schools does not replicate the conditions of work and so does not prepare children for the socialisation of work. For example, social relations in schools are
most interactive among peers which encourages dependency; work structures are multi-lateral and demand social independency.

The UK post-16 education/training system for provision of intermediate qualifications (mainly in FE colleges and Government training schemes) has a mix of the characteristics of divergence and convergence between education/training and work. This is partly historical in that FE colleges have traditionally catered for the acquisition of craft and technical skills in close co-operation with local employers. Many FE courses are structured around theoretical and practical elements with a mix of classroom teaching, simulated work-experience and practice in the workplace. Employers on college governing bodies are able to influence college structures and curricula and, with the establishment of TECs, are increasingly able to direct FE funding. However, FE colleges do not yet represent a convergent system in the way that Government youth and employment training schemes are designed to be. The establishment of YT and ET originated in response to the severe effects of industrial restructuring in the labour market in the
early 1980s. These schemes (and many other variants of work-related schemes currently part of the Government's response to imbalance in the labour market) come closer to a convergence model designed to establish appropriate post-industrial relationships between training and the economy.

The comprehensive education / training model described by Husén (1989) brings highly diversified curricular provisions within one system - the classic American high school model. This is again a divergent system which differentiates the values, structures and practices of the education system and the labour market. The American post-compulsory education system features strong economic individualism with students undertaking a mix of work and HE. However, these elements are not necessarily organised to synchronise education with preparation for work, but are prompted by individual economic necessity to "work a way through college" because the state does not provide universal sponsorship. The individually-organised mix of education / training and work may provide the individual with convergent theory and practice but this is not institutionalised into the system.
Duality and Convergent Systems

The dual system (as in Germany) has academic provision for an elite leading to university, and an apprenticeship system for the remainder with part-time formal instruction and work-experience (Husén, 1989:12). The dual system can be described as the 'learning-effects of work' (Onna et al, 1990) in which work is used as the context in which to extend and deepen learning. Typically the system will combine elements of work experience and formal tuition. The elements may be sequential as in 'sandwich' or 'block release' courses or may be mixed as in YTS and other forms of training with on and off-the-job training elements. The system builds on foundation training and education and focuses the immediate curriculum on the needs of the work-place and the demands of the labour market. Dual models of education / training / work are potentially more responsive to the needs of the labour market. Although the structures offer a greater possibility of the integration of work-related and theoretical skills, the combination of localised theory and practice can present difficulties. Mismatches between
generalised foundation learning and specific work-related learning are likely to occur. Issues related to qualifications (defined as the total of skills, attitudes, knowledge acquired whether certificated or not), are raised particularly when the work-related learning is formulated in competencies (see Chapter 6 for discussion of the problems of a VET curriculum based on occupational competencies).

It is not my purpose here to compare the merits of each system (which in any case, are subject to many more cultural, historical and political structures and influences than I have sketched). Rather I am seeking to examine the consistency between aspirations for qualification of the workforce and the polymorphic education/training system (specifically post-16 education and training) in the 1990s which is required to fulfil these aims. It is clear that the initial education structure (with all its historical, social, political and moral determinants) largely determines provision for non-compulsory education / training and frames the assumptions about appropriate relationships between work and education/training systems. (Positivist proposals for reform of the UK initial education structure based on assumptions about the UK
economy, are discussed in Chapter 7).

The next chapter addresses the issues raised in attempting to align labour market supply and demand through manipulation of the VET system. It has been evident throughout the 1980s that the key response to unemployment - caused partly by increased supply - by Government, employers and individuals has been framed in terms of VET. In the 1990s the response to contraction in the labour market due to weak demand has also been framed around assumptions that VET is the vehicle to redress imbalance in the labour market. These assumptions are examined next.
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

PART FOUR EDUCATION / TRAINING AND THE WORKFORCE

CHAPTER TEN:
USING VET TO REDRESS LABOUR MARKET IMBALANCE

The discussion so far has looked at labour market features in relationship to the characteristics and interactions of the education / training system and the labour market. This chapter examines the dynamics of supply and demand for labour and its effect on actions by individuals, employers and Government to maintain equilibrium between these social forces. There are two main strands to the debate: the appropriate structure for education / training systems with a labour market in the process of post-industrialism; and the processes, relationships and outcomes that will sponsor equilibrium. Before exploring these questions - which are at the fulcrum of my investigation of the political process to change education / training systems by 'market' policies - it is useful to look in more detail at the disequilibrium of the last decade and Government measures to balance supply and demand for labour.
Dis-equilibrium in Supply and Demand

The dynamics of labour market supply include a range of features which can be grouped on each side of the supply - demand equation. On the supply side, these include the structure and composition of the workforce (discussed in relation to the UK labour market in the 1980s and 1990s in Chapter 9). On the demand side, the general economic conditions are the most influential factors. The next section identifies states when the aggregation of supply and demand leads to imbalances.

The national economy is composed of millions of transactions in the labour market which, in conditions of a 'free market' are expected to strive continuously towards equilibrium. In practice, it is the extremes of growth and contraction in the supply and demand for labour which give rise to major imbalance when the labour market is unable to equalise supply and demand. The dynamics of supply and demand in the UK labour market during the 1980s and early 1990s can be characterised as four types of dis-equilibrium:

a) problems of absorption of labour
b) inappropriate distribution of work
c) underqualification of workforce

d) underutilization / overqualification of workforce (Geurts, Hövels and Onna, 1986).

These states are not necessarily discrete nor self-contained. For example, I showed in Chapter 3 how the London labour market contains features of unemployment / skill shortage and under / overqualification within the same workforce.

Problems related to absorption of labour could be seen in the UK labour market from 1981 to 1984 when the supply of available labour was too great to be absorbed by a reducing labour market. Changes arising from restructuring created a mismatch in the distribution of jobs and of labour in the first half of the 1980s when closures in heavy manufacturing, docks and mining in the north of England, Scotland and Wales displaced workers who could not be re-employed in the same areas. Towards the end of the decade, an imbalance in distribution occurred in south east England where expansion in administration and financial services employment outstripped the supply of suitable workers. The demand overheated local economies and led, amongst other effects, to a credit
boom. The recessionary labour market after 1990 reduced the number of jobs in administration and financial services and displaced additional workers—mainly married women—who had been tempted into the labour market by the boom. During the economic boom between 1986 and 1990, underqualification emerged as a constraint on the labour market when many employers reported serious skill shortages. By the early 1990s, the economic recession and expansion of FHE had reversed skill shortages to over-supply of qualified workers. Skilled jobs were lost as scientific/technological employment fell (largely related to the decline in defence spending), and employment in services and public administration contracted in response to retrenchment of personal and corporate debt in the economy. At the same time, the number of workers available with graduate and intermediate level qualifications rose.

Dis-equilibrium in supply and demand for labour is usually felt first by individuals as job losses/job surpluses. The effects change individual and family social patterns. Businesses are also close to the immediate effects of trade increases/decreases or other changes affecting output, and their consequences
for employment. As dis-equilibrium affects more areas, or more sectors of the labour market, media and political activity leads to pressure for Government action. Each of these responses - by individuals, employers, Government - has different time-scales and different areas of effectiveness arising from the different states of dis-equilibrium. Dis-equilibrium in the labour market, and actions to restore equilibrium, are in a dynamic relationship with education / training systems. Output from education / training systems also dynamically interacts with the labour market and impacts on the balance of supply and demand for skills. These relationships and their symbiosis are explored in detail in the rest of this chapter.

Inadequate Absorption of Labour
The first condition of low demand in the labour market coupled with over-supply of available labour results in structural unemployment which has a most significant impact on employment prospects for young adults about to enter the labour pool. Workers already in the labour market are less likely to change jobs and so reduced turnover of labour decreases the number
of jobs available to new entrants at the first level of skill. Jobs shed by structural changes—particularly changes brought about by new technology—in some sectors of employment do not lead to job creation elsewhere. In any case, workers from declining industries cannot readily transpose to other types of employment. These conditions prevailed in the early 1980s when labour market supply increased with a rise in the number of school leavers (due to a rising birthrate and immigration of women of childbearing age who were culturally disposed to large families) (Rees and Atkinson, 1982). At the same time, economic recession due to sharp rises in the price of raw materials, a shake-out of traditional heavy industry, a loss of market share to Pacific-rim countries and UK fiscal policy directed at controlling inflation, all combined to reduce demand for workers. The social disturbance caused by high unemployment was amply demonstrated in Britain in the mid 1980s when riots in the inner cities and other signs of growing deprivation led to public pressure for Government action to stem the rate of high youth unemployment. In this way unemployment gained a high political profile and other processes of social retribution,
scapegoating, and substitutions appeared. The Government was then forced into interventions in the labour market largely designed to balance the supply side by absorbing surplus labour into intermediate systems which provided a substitute for work through training and work-experience schemes. In these conditions Government interventions typically centre on training and retraining schemes, labour mediation, social policy, and information systems to promote absorption (Onna, et al. 1990). Examples of such responses by the Government in the 1980s included youth and employment training, young-worker and early retirement subsidies, reduction in welfare payments, and the introduction of labour market intelligence systems to promulgate information to employers.

Individuals not in employment respond to over-supply in the labour market with extended search for jobs and seeking job-specific training. Employers may attempt to adjust their workforce age profile to replace older workers with younger people. This is seen to give employers wage rate gains and social benefits. Excessive fall-out from the labour market of older workers may lead to severe loss of qualification and
experience in the workforce. The displacement of older workers may lead to longer term problems in the economy as wage-earners are replaced with benefit-recipients. Loss of employment leads to less inward migration of young working adults. Both effects result in depreciation of the local economy because residents have less spending power. The knock-on effects of this reduction in local economic activity may be a further loss of jobs and an increase in absorption problems. Central and local Government may then seek to activate major changes in the structure of local employment through development agencies and investment in the economic infrastructure such as roads and transport systems. Similar responses may be made when the distribution of employment is unbalanced.

Distribution of Labour

Imbalance in labour market supply and demand also arises from inappropriate distribution of workplaces relative to the workforce and results in frictional unemployment. High demand can occur in an area which also has problems of undersupply. In many inner city areas, high unemployment (which may be structural in some aspects) occurs alongside labour shortages. This
may be due to a mismatch of qualification levels, or to discriminatory employment practices, or to excessive in-company mobility of labour. Governments may respond with regional incentive policies to promote economic development and positive fiscal discrimination schemes. During the 1980s this became a strong feature of European Community policy with substantial programmes directed at supporting regional infrastructure and job-creation in areas of severe job shortfall. Infrastructure support and industry-specific interventions had of course been used by the UK Government as a basic strand of industrial policy since the creation of Special Areas in the 1930s. By the early 1980s, however, the policy was largely discredited as supporting 'lame ducks' and the creation of Enterprise Zones between 1981 and 1986, offering publicly funded infrastructure of roads, training etc. and a 'rates holiday' for 10 years, designed to encourage businesses to migrate to low employment areas, was one of the last examples of direct industrial support. Governments also promote social mobility by exhortation using the media (press releases, photo-opportunities, speeches by Ministers - for example, the notorious "get on your bike" edict of
Norman Tebbit when Secretary of State for Employment. The main responses that can redress the imbalance for individuals focus on social emancipation and social re-organisation and may result in changes in family units and childcare arrangements that have effects on housing and other social services.

Underqualification of the Workforce

The condition in which low qualification levels, either of quality, type or quantity, in the active workforce, combined with a high supply of workplaces gives rise to skill shortages and recruitment shortfalls (see Chapter 8 for discussion of UK skill shortages in 1988-89). Underqualification may combine with features of distribution imbalance brought about by economic change and sectoral reconstruction in the labour market. Imbalance may also stem from a decline in the numbers of young entrants to the labour market due to a reduced birthrate two decades previously. This situation currently exists in most western European countries. The Federal Republic of Germany gave the following justification for comprehensive intermediate training schemes to a House of Lords...
Select Committee in terms of the relationship between qualification levels and economic well-being.

"As the economic and technical development goes on more occupationally qualified and less unqualified or semi-qualified people are needed in the production, services and administrative sectors. It would imply the renunciation of economic potential, the acceptance of future unemployment and associated social problems as well as the non-fulfilment of the educational mandate if not all school leavers were given full vocational qualifications after compulsory schooling." (HMSO, 1990b: 17)

Employers may seek to enhance internal training schemes and to encourage education / business links designed to raise the qualification levels of recruits (and to maintain sufficient numbers wishing to enter a particular industry). Employer involvement in educational activities can cover a wide range of activities and sponsorship in many forms from governorships of schools and colleges to formal contracts to employ school leavers. Sponsorship specifically aimed at raising (or maintaining) qualification levels, generally supports individuals by apprenticeships or 'sandwich' course arrangements which link periods of education with periods of work experience. (See Chapter 4 for discussion of the influence of employers on the curriculum.)
Government options to counteract underqualification in the workforce include measures to raise levels of qualifications in school leavers and to increase provision of VET for young adults, older workers and the unemployed. Such measures may be designed for 'stock' - a pool of qualified workers for medium and long term labour market requirements - or may be short-term measures designed to plug immediate skill shortages. The former are likely to be organised outside employment, the latter more likely to be provided by employers. (I saw a rare example of a Government scheme for unemployed people filling an immediate skill shortage in the Medway towns (Kent) in 1987 following the identification of a local need by the educational guidance service. The Adult Education Centre and FE college ran intensive basic education and building skills courses funded by MSC under the Wider Opportunities Programme (WOP) for unemployed adults. Advertising the courses produced 100 applicants for the first 10 places and offers of employment for successful trainees from more than a dozen local employers. Sadly, after running 10 courses, WOP was abandoned by the MSC and replaced by ET which did not fund such training.)
Underutilization of Skills

An imbalance in the labour market occurs in the condition of underutilization described by Geurts et al. (1986) when the level of workplace skills required is lower than the qualification level of the workforce. This may be manifest as a problem for particular client groups, for example, many women are underemployed because of complex interactions between wage rates, family commitments and employment practices. Underutilisation may also occur as a result of social changes in the aspirations of young people brought about by increased education and leisure. Surplus skills in the economy may lead to increased unemployment and discontent among the highly educated (Banks, 1976:37). A secondary effect of the decline in the labour market in the early 1980s was the disinclination of many graduates to accept routine or uncreative work and to prefer casual, seasonal and secondary labour market occupations. This was also used as a strategy to prolong their participation in higher level education while maintaining some income support as educational grants lost relative value. The situation then arises which combines the features of absorption and underutilisation. The Government may
respond by reducing the number of places in post-compulsory education (on the basis of over-supply or a declining cohort) while at the same time seeking to raise age-participation rates (as a response to increased technology and labour market restructuring). Fiscal responses include replacing grants with loans, reducing the level of education grants in real terms and cutting social security entitlements for students. The Government may also seek to create a demand for higher level skills by sponsoring high-tech and new technology industries.

Employers may respond to under-utilization of the workforce with staff development programmes to encourage wider job-satisfaction or non-work interests. The EDAP (employee development and assistance programme) scheme run by Ford Motor Company offering adult education is an example. Or employers may seek to humanise work processes or re-organise work structures to increase worker satisfaction levels, encourage retention and reduce alienation. If these strategies are unsuccessful, individuals tend to use external mobility as a means to achieve full utilization of
their skills.

Using VET to Redress Labour Market Imbalance

The disequilibrium states in employment supply and labour market demand experienced through the 1980s and early 1990s have presented opportunities for interventions by individuals, employers and Government to mitigate personal, industrial and political distress. The most significant impact on states of imbalance between supply and demand for labour can be brought about by Government intervention. An interventionist stance is demanded politically and socially in the major scenarios of inadequate absorption of labour, underutilisation of the workforce and skills shortage. Interventions typically take the form of intermediate training, work-orientation programmes, informational systems and updating / retraining schemes. The Government uses other regulatory devices such as raising the school leaving age, conscription, 'guest worker schemes', measures to reduce hours of work/length of working life, and job creation (Rees and Atkinson, 1982:5). The Government exercises the dominant role in restructuring education / training systems by
legislation and regulation of the curriculum, duration of schooling, structure and size of institutions and financial arrangements. The Government may also intervene in the labour market using such measures as business regulation and manipulation of money supply to maintain the economy. There are many explanations for problems - and many proposed solutions - in maintaining the economy encompassing economic, social and political factors:

"These range from economic explanations - the failure of investment policies (Pollard, 1984), the inability to maintain world trading shares in manufactures (Singh, 1977), the erosion of the industrial base through the expansion of the public sector (Bacon and Eltis, 1978), the dominance of finance capital (Longstreth, 1979); through social causes - an inappropriate educational system (Musgrave, 1967), an anti-entrepreneurial, anti-business culture (Nairn, 1982), the nature of British trade-unionism (Kilpatrick and Lawson, 1980); to political factors, such as the absence of coherent and lasting industrial policies (Smith, 1984), or the vagaries of adversarial politics (Chandler, 1984)." (Judge and Dickson 1987:1)

Judge and Dickson claim that such monocausal explanations are insufficient of themselves to describe the massive realignment of the labour market since the post-1979 recession. They argue that a combination of the dominance of financial capital, primacy of exchange rates policy and expansion of

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multi-national companies has been the major cause of British manufacturing decline. These features have resulted in lop-sided restructuring in which de-nationalisation has been accompanied by the imperatives of multi-national trading (Judge and Dickson, 1987: 31). When the condition of under-qualification of the workforce combines with major occupational shifts from goods-producing to service industries (and localised skill redundancy) as is happening in all advanced economies, the required changes in VET structure and curriculum are particularly difficult to implement. Ettore Gelpi describes the difficulties inherent in co-ordination of VET and the labour market in this way:

"The problems posed for education by the different kinds of mobility and by the need to create jobs are numerous. Among such problems are: the relation between general education and more specialised vocational preparation; the relation between and integration of job creation at the local level and that of the national and international economy; the protection and strengthening of industrial employment or the bold planning for and development of non-industrial employment especially the service sector."

( Gelpi 1985:55)

Thus the measures to restore equilibrium may become confused with measures to realign the education / training system to changed labour market requirements.
brought about by new technology or international economic shifts. Government VET responses to labour market changes include: enhancing the technical and vocational curricula in schools; establishing new forms of organisation (such as city technology colleges); direct involvement of employers in education / training provision; and new forms of training (such as work-based learning and open learning systems). Interventions in the labour market designed to realign employment and education / training systems include: education / business partnership schemes; employer education associations, task groups, training committees; national training awards; training consultancy; self-study materials and open learning systems; enterprise / self-employment training. Over the past decade, the Government has initiated schemes in all these categories - some aimed at more than one function - designed to combat structural and frictional changes in the supply and demand for labour. Government initiatives - mainly in force between 1981 and 1991 - are discussed in groupings following the Geurts et al. (1986) typography of disequilibrium: absorption, distribution, underqualification, under-utilisation described
earlier. To these I have added a fifth group of initiatives focussed on achieving an internal market for education / training or on closer alignment of the labour market with training. The discussion concentrates on the impact of these initiatives on the interface between the education / training system and the labour market. To avoid repetition of descriptions of schemes, the schemes are mainly identified by their date of inception; a Glossary of Government Schemes at the end of the thesis describes the main features of each.

Over-supply and Intermediate Training

The discussion in the previous chapter of the antecedents of education / training systems and their attendant values, organisation and outputs, demonstrates that a divergent education / training system has limited potential to adjust its outputs in relation to the labour market because such a system is premised on the separation of education and work. The preparatory education system based on non-specific curricula is largely unrelated to occupational knowledge and skills. In times of surplus supply of labour the preparatory system cannot militate against future unemployment or under-utilisation. Rather the
effect of surplus labour market supply is to increase the competition for both work and for extended education. If the availability of places in further and higher education has limited expansion tolerances, the response of the system will be to increase the level of qualification required for entry to, or participation in, further and higher education. Alongside the meritocratic features of the qualifications hierarchy designed to be exclusive rather than inclusive, other barriers must be maintained to preserve the traditional constituency of participation. Barriers such as academic selection ensure that any alternative structures for non-academic achievers are limited in scope because resources are targeted on those expected to be the highest achievers within the academic-value system. Even where an alternative achievement system is in place (such as the attempt to provide technical schools) it may be difficult because of the dominance of academic education in the education-value system, to see the alternative as anything other than a remedial system. Previous discussion of the effects of the academic orientation of schools shows that, although around 80 per cent of children fail to
achieve the qualification level set for entry to HE, alternative qualification routes have a marginal impact. Thus the preparatory education system self-regulates its outputs and cannot be a vehicle for redressing imbalance in the supply and demand for labour.

Measures in a preparatory education system designed to restrict access to further and higher education may come into conflict with economic objectives designed to increase skills or general education levels in the population. Other measures designed to introduce internal 'trading' into provision of further and higher education introduce further tensions. An example of this may be seen in the introduction by the Government of bidding for resources based on student numbers (fuelling the drive for wider recruitment) caught in a pincer movement with the wish to maintain standards of teaching ratios and successful academic outcomes (which would tend to limit expansion) and the political imperative of raising skills. Recent increases in GCSE examination success rates have been interpreted (in England) in terms of fears that higher pass rates may be at the expense of lower standards of
qualification. In Wales, perhaps because of the higher esteem in which education is generally held, increased pass rates were hailed as proof of the success of the more pragmatic elements of curriculum reform such as continuous assessment and multi-media course work. Faced with conflicting policy objectives, the Government may seek to establish alternative systems, organisation and curricula outside the existing system. This has a number of attractions. Firstly new curricula and financial frameworks can be introduced without risking large-scale disruption in the existing system. Secondly new perceptions can be introduced through the mechanism of the Government choosing willing 'trading partners'. This mode of introducing change was particularly exploited in the 1980s. Government departments set up criteria for new funding driven by New Right ideas, and structured the objectives and outcomes to ensure that these criteria were met as a condition of resourcing. In some schemes, notably TVEI (1983), I suspect that what Harland (1985) calls 'categorical funding' proselytised sceptics in the education system and did much to encourage the enthusiasm and protectionism demonstrated by its exponents. Harland
(1985) describes the main elements of categorical funding model as: a) develop a policy (usually through pilot projects); b) offer generous funds to attract those who can deliver innovation; c) invite voluntary co-operation and commitment in exchange for a share of the resources; and d) ensure acceptance of resources is equated with acceptance of the policy and an ability to deliver. (An alternative view would be that educationalists subverted the New Right ideas espousing functionalism and mechanistic outcomes to liberalise teaching practices based around individual learning for students.) However the saliency of various influences is judged, the preparatory model system, either in its purest form of complete separation of academic and vocational curricula or in the mixture of academic examination structure combined with vocational elements such as work-experience, is not a responsive structure for adjusting to labour market imbalances. It is necessary to provide alternative education/training systems to mediate surplus and shortages in supply and demand. In promoting youth and employment training schemes - (YT 1983), (ET 1988), and their predecessors and variants - the Government introduced an intermediate training
system deliberately designed to break the mould of the British preparatory VET system on offer from FE colleges.

The Geurts et al. (1986) typography of labour market imbalance points to extensive use of intermediate training systems (the term is used here to denote work-related training after school-leaving age and either before or between entry to employment) by Governments (and individuals) to overcome disequilibrium in the supply of young workers and demand in the labour market. In conditions where the problem is over-supply or underutilisation of labour, an intermediate training system can absorb surplus labour so that demand for labour balances the available workers outside intermediate training. In conditions of skills shortages arising from inappropriate distribution of labour, or under-supply of qualified workers, a supply of skilled workers may be expected to be provided from intermediate training systems. The differences in purpose and outcomes of the two states is crucial to an understanding of the function of intermediate training in the labour market. When intermediate training is designed for 'stock' (for medium term labour market requirements),
or to absorb surplus workers, those workers must stay outside the employment market for the scheme to achieve labour market equilibrium. The intermediate system must contain the surplus workers, without seepage to the labour market, for as long as demand for labour is weak. The intermediate training schemes set up to absorb excess labour in the early 1980s, were presented as measures that would help young people to enter, and unemployed adults back into, the labour market. The contradictions between the equilibrium functions of schemes and their stated socio-political aims have led to inherent tensions between functional and presentational outcomes. These tensions have continued to influence the strength of political support for the measures and have produced conflict over curricula and performance measures. Some commentators claim that these tensions may traumatise individuals and institutions caught up in the schemes (see Gleeson (1989); Finn (1982). These commentators claim that the tension of training people for work in conditions of acute shortage of skilled employment induces a paradox that cannot be resolved without job creation measures. It is further argued that in the absence of job creation measures - or natural buoyancy

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in the labour market - intermediate training schemes become little more than structured de-skilling and socialised under-achievement. A weaker critique of unemployment schemes would argue that even inadequate schemes have the potential for improvement and offer some support to unemployed people that is better than nothing. In the second state of under-supply of suitable workers, where intermediate training functions to meet skill shortages, schemes must operate on short timescales and encompass direct accelerated entry into the labour market if they are to meet their objectives successfully. An example of this is the work of Kay, Fonda and Hayes (1992). In periods of serious labour market imbalance, the Government will have little option but to create, or expand, intermediate training systems. This was of course the main response of the UK Government throughout the 1980s and early 1990s.

Youth Training

From the publication of the 1981 Consultation Paper: A New Training Initiative: an Agenda for Action (MSC 1981) the Government was committed to three objectives: developing skill training; equipping young people for work; and widening opportunities for
adults. Most political stock and financial resource have been put into the second NTI objective through a range of youth and employment training schemes. By 1983,

"The rising numbers of unemployed young people, exacerbated by the 'bulge' in the birth rate reaching school-leaving age, together with the failure of the Youth Opportunities Programme, put great pressure on the MSC to introduce YTS as a matter of urgency. In the first year, some 300,000 young people received training under the scheme and MSC expenditure on YTS (with YOP) amounted to 600 million in 1983/84."

(Kenney and Reid, 1990: 299)

Before the start of the 1980s youth unemployment crisis, the main UK Government initiatives centred on intermediate training to provide skilled, mainly male, craft apprentices. The early signs of over-supply of school-leavers at the end of the 1970s led to small-scale schemes such as YOP (1979) designed to raise general levels of education and to relieve problems of over-supply of workers. Curiously, although the first objective of NTI was "to develop skill training including apprenticeships", the abolition of Industrial Training Boards (in the same Act (1981) that paved the way for youth and adult training) led to apprenticeships and other forms of industry-specific training being dismantled in favour
of general youth training programmes. A casualty of the collapse of 'training for stock' policies was the network of skill centres which were established during the Second World War for rehabilitation of disabled people and accelerated vocational training for craft and semi-skilled occupations (Kenney and Reid 1990:111) which had been expanded by the MSC in the 1970s. The skill centres supported TOPS (1972) courses offering full-time craft training for employed or unemployed adults. By 1983 the MSC could no longer justify the cost per trainee of these courses (which included accommodation allowances) and substituted part-time courses for greater numbers of people. Work-experience and work-orientation schemes were introduced as structural unemployment rapidly increased the number of redundant adults. Thus the primary policies for post-16 VET between 1981 and 1988 focused on alternative intermediate training systems to absorb the labour market surplus of youth outside the education system and adults displaced by structural changes in manufacturing and heavy industry. At the same time, the Government pursued objectives designed to diversify FE curricula and structures and more generally to diversify the
monolithic public sector provision for post-school qualifications outside the higher education system.

The main features of the intermediate training model adopted by the Government since 1981 comprise: careers guidance and placement; contractual framework between agents, employers and trainees (who may also be employees); alternating and combined work-related training and work-experience; induction training, core transferable skills training; training leading to vocational qualifications; continuous assessment and final accreditation; training allowances (and all other expenses) paid via the agent; and local delivery outside education / training institutions.

The new training schemes have spawned a gamut of initiatives in support of radical interventions aimed at dealing with absorption and under-utilisation problems. Support schemes include research to identify core skills prompted by the urgent need to provide a general youth training programme that could be easily administered and replicated across the country in a short timescale (see Chapter 5 for discussion of core
skills). Considerable effort has been expended on identifying 'portable skills' which would be utilised within an 'occupational training family' (see Hayes, et al., 1983) on this approach and Annett and Sparrow (1985) for a critique). The search for a transferable core skills curriculum that could be delivered by non-professional trainers outside education / training institutions has encouraged the establishment of a system of national vocational qualifications (NCVQ 1987) and extensive efforts to define and implement competency-based curricula (see Chapter 6 for discussion of the problems of this approach). The new schemes attempted to make the links between labour market destinations and training explicit through the use of individual action plans and concentrated assessment on evaluation of the outcomes of the action plan using records of achievement as an alternative/ or an adjunct, to examination certificates. This approach demanded scrutiny of the process and practice of 'negotiated achievement' and itself spawned a wide range of action-research projects. The Training Agency team running 48 pilot projects under the banner of Youth Development Projects (YDP 1989) confessed to the twin
aims of co-operation and expediency in this way:

"A common thread which links all the projects chosen is the aim to break down barriers, build partnerships and individualise provision...

A second but equally important common thread is the need for the project to produce early replicable results. We want to see a good return on our investment in the form of innovative and effective practices which can be widely adopted by all those involved in the field of education and training."

(Training Agency, UPDATE June/July 1990c No.36:8)

The alternative organisation of the intermediate system outside local authority sponsored FE led to the establishment of a super-structure of managing agents, counsellors and liaison workers to recruit trainees and to organise training and work-experience. By 1988 there were around 3300 contracted managing agents alone, training around half a million youngsters a year. The (largely) unqualified trainers (often from the ranks of adult unemployed craftsmen) recruited by managing agents to design and deliver training, also generated a super-structure of approved training centres delivering new qualifications for trainers. Open learning packs were developed to assist the new system to become operational in a very short space of time. (MSC, and later the Training Agency, designated civil servants in regional offices to co-ordinate dissemination of the vast range of open learning
materials being produced for schemes on the ground. This had the rather mystifying result for those new to training of being somewhat more difficult to use than 'chalk and talk' which was at least familiar to the under-educated youngsters on schemes.) A new training industry of private, self-taught trainers developed their own training ethos and (to a limited extent) professional associations. All of this activity - much of it generating new jobs - arose from the Government's determined attempts to align the education / training system to the changing (and to a large extent unpredictable) labour market requirements using an approach that largely bypassed the existing education / training system.

The analysis of YTS - later called YT - (see Chapter 7) indicates that the number of young people in employment correlated with general employment levels rather than any effects of youth training schemes. YTS has not reduced skill shortages although companies facing skill shortages are more likely to recruit trainees to fill vacancies. A survey by Deakin and Pratten (1987) showed almost 50 per cent of YTS trainees being trained for skills which were not in
short supply, and others recruited into companies with shortages in advanced and specialist skills not applicable to YTS, or for skills previously covered by apprenticeships who would probably have been recruited without YTS. 92 per cent of a sample of 236 employers gave negative replies when asked if they had noticed any general increase in the supply of skilled or experienced workers which could be attributed to YTS apart from the effects of their own programme (reported in Kenney and Reid 1990:322).

I conclude from these findings that the youth training schemes have been successful in containing unemployed youth away from the labour market. For those who gained employment (usually when they were over 18 years of age and no longer 'youth') the close links with employers while on the scheme had enhanced the possibilities of being offered a job at the end of training. Youth training schemes have changed the pattern of recruitment for young workers. Employers are now more likely to recruit young workers by a process of induction, work-related training and work experience leading to selection for employment, whether they are part of the structure of national youth training or have developed their own training.
scheme. The crucial change is that employers are now more likely to make a commitment to vocational training for more youngsters than they need to employ and will select employees only after extended observation of their performance. This exposure of potential employees also exposes the demands of the job and employer's practices to the recruit. Presumably this extended period of familiarisation leads to mutually suitable employment - or at least, even in a very tight youth labour market when any job/or any recruit might prevail - leads to more informed employment choices. Youth training has also probably encouraged a culture of induction training and supervised work placements for new entrants to the labour market. Youth training has not significantly raised skill levels, or provided young workers with skills known to be in short supply, nor has it created a 'qualifications culture' where young people strive to achieve certification as a prerequisite to good employment.

Employment Training
The Government's approach to adult unemployment (and implementation of NTI objective 3) differs radically
from its approach to youth unemployment. The Government's role is

"primarily to act as a catalyst in promoting changes of attitude, and approaches to adult training and education by working in collaboration with employers and the major providers of adult training and education; ... The Commission's role as a direct provider of training is marginal." (Kenney and Reid, 1990: 302)

Two main programmes: the Job Training Programme (JTP 1984) providing training for skills known to be in demand, and the Wider Opportunities Training Programme (WOTP 1984) providing basic skills for unemployed adults, were the main vehicles for Government intervention through most of the 1980s. The model adopted here was: pump-priming for new learning systems (such as Open Tech and Open College); local organisers (usually already employed by the local authority) to co-ordinate work-experience and scheme paperwork (as in the Community Programme (CP 1983); and limited direct training in specified vocational areas (as in the Training Opportunities scheme (TOPS 1972). The Job Training Programme offered grants to employers for key skills training but it suffered from employers' reluctance or inability to assume the training role, and compounded by painstaking bureaucracy, never achieved a reasonable take-up rate.
The Community Programme was widely used by voluntary and public organisations as a labour force for building and construction work in the community, offering work-orientation and manual occupation without certificated training or commensurate wages.

Many innovative programmes of basic skills training and work-orientation developed under the Wider Opportunities Training Programme (WOTP 1984) managed by MSC local offices and often run by local authority Adult Education, Youth or FE services. Courses such as Joblink (1984) offered a menu of up to 30 hours a week of literacy / numeracy, vocational guidance, and modules in any skill that was thought useful in the local labour market such as art and design, building trades and office skills. Tutor-organisers secured places on mainstream college courses often by combining resources from several Government departments. In particular, the Department of Health and Social Security (DHSS) rule allowing unemployed adults to study for up to 21 hours classroom time a week and continue to receive benefit, was used. Although the main condition of benefit was being 'available for work' while studying, the arrangements effectively provided a means of financing FHE study.
whilst being unemployed. Coupled with discretionary fees subsidised by local authorities to people in receipt of unemployment benefit (and often their spouses as well), the system provided support for people who were not eligible for student grants. These programmes frequently had employment and further training destination rates for up to 75 per cent of trainees (Blamire / NKAES, 1989). The Wider Opportunities Programme to some extent complemented Replan (1984), a Department of Education (DES) initiative to develop flexible responses by FE colleges to the new constituency of adult unemployed, aimed at the 20 per cent of unemployed people with academic qualifications. Secondary activities such as educational guidance, flexible college entry systems, retraining for lecturers in managing adults learning, and information technology courses for adults, were spinoffs from these programmes. An agenda dedicated to 'empowering' unemployed adults through new curricula, co-operative teaching styles and institutional flexibility emerged (see Watts, 1983). Much of this training could be categorised as re-skilling as a bridge to re-employment, remedial education in basic literacy and numeracy, and 'second-chance' access to
FHE. In these terms, many of these programmes were successful.

In 1988 all MSC programmes for unemployed adults were absorbed into the Employment Training scheme (ET 1988) which was launched with a target of providing training for up to 600,000 adults a year. The White Paper which launched ET - Training for Employment (HMSO, 1988a, Cmd. 316) cited evidence in support of the initiative: 40 per cent of adults out of work for more than a year were unskilled or semiskilled and 25 per cent had literacy and numeracy problems; half of those out of work for more than 6 months had no qualifications; 20 per cent of the long term unemployed had at least one GCE 'A' level. The continuing lack of upturn in demand for labour, and the diversity of characteristics of the unemployed, somewhat perversely led the Government to conclude that a single, comprehensive, adult scheme was needed. Employment Training was a 'react to real demand' strategy and a break with previous proactive, long term, human resource planning approaches to national skills shortages. Markall (1982) for example, discusses the evident distress of
politicians in 1976 at setting up a job creation scheme as a temporary 'counter cyclical measure' to alleviate unemployment. The strategy behind ET demonstrated a rejection of job creation in favour of limited pump-priming of training for local labour markets. It also placed responsibility for training the workforce primarily on employers and was the first major initiative to distance the Government from responsibility for re-skilling the workforce.

The characteristics of the new scheme were intended to be based on: local labour market intelligence systems; flexible training structure; and minimal constraints on access to training and retraining (Kenney and Reid, 1990:298). The features of the scheme were to be: a voluntary programme of work experience and up to 12 months high-quality training; individual assessment and personalised training plan; special attention to the needs of groups disadvantaged in the labour market; training allowances and expenses (not wages) with contributions from employers; and managed by independent agents. A dual structure of training agents responsible for assessment, structured training plans and induction, and managing agents responsible
for training, work-experience and accreditation was designed to ensure that assessment and control of training remained with private agents. Tensions between the two executive arms of this arrangement - and the constraints of funding - did little to promote the integration and cohesion that ET was set up to achieve.

Despite projected spending on ET of over £800 million in 1992-93, the scheme has not achieved high quality jobs for unemployed adults or well qualified workers for the labour market - even discounting the recessionary labour market in the early 1990s. Over half of ET entrants do not train or complete the scheme and return to unemployment having used up their training entitlement under the present rules. Around 60 per cent are unemployed 3 months after leaving and less than 30 per cent gain any kind of qualification through the scheme (Hansard 28 November 1991, cols: 615-642). These statistics make clear that ET fails to contain the surplus workforce since many are returning to the pool of surplus labour when the labour market is still weak. It is also clear that ET fails to train two-thirds of participants either for 'stock' or
for current skill shortages. This is wasteful, expensive and counter-productive to generating a training culture in the workforce.

Work-Orientation Programmes
A number of primarily work-orientation programmes have been developed on a smaller-scale alongside the major youth and employment training schemes. It should be noted that the British Government was able to tap European Community funds for its measures to alleviate unemployment and throughout the 1980s and early 1990s the Employment Department's training budget (for YT, ET and Employment Service schemes) has been a major beneficiary of European funding. Against this, other initiatives, such as Replan (1984) run by the Department of Education were small fry. Replan targeted both inequality in access to jobs and the education and training deficits of unemployed individuals. Under Replan, development workers appointed through local education authorities channelled funds to courses and support schemes in Adult and Further Education colleges. Although in practice many Replan workers were committed to equality of opportunity, Replan administrators were
careful to keep the public presentation on economic values:

"The best training programme will not succeed unless potential workers are in a state of readiness to undertake it. They must be motivated towards the prospect of a different or better life. This has been a central function of REPLAN and employers' needs and individual aspirations will need to coincide if training for jobs is to be cost-effective."

(NIACE REPLAN News, Issue 2 Summer 1990)

The Replan focus on confidence in learning for individuals based on higher levels of general education and specific labour market skills, contrasted with the main Employment Department work-orientation scheme, Restart (1986). Restart offered one-week courses in writing a Curriculum Vitae and job-seeking skills from a 'menu' of options presented to unemployed claimants by Job Centre counsellors at regular intervals during claimants' periods of unemployment. Many such claimants lacked adequate literacy and numeracy skills and these were addressed through additional courses. Many Restart participants felt under threat of withdrawal of benefit if they failed to attend the courses and many tutors found the one-week course content impossible to structure constructively for such disparate groups. Designed as orientation towards active job-seeking, Restart
failed to provide a bridge to employment and encouraged cynicism among the unemployed about the Government's training intentions.

Job Clubs (1985) introduced first into Job Centres and aimed at people out of work for less than six months, offered a more extensive system of support for job-seekers and have had far higher success rates in placing people in employment and in maintaining confidence and employment skills during periods of unemployment. Around 21,000 people were attached to a Job Club in 1992-93; of these 49 per cent went into employment (Hansard 7 July 1993 cols: 197 - 198). Job Clubs have been extended, under contract, to other venues and sponsoring organisations. The methodology is to provide materials, and facilities such as telephones, for intensive job search and require continuous speculative approaches to employers as part of the 'contract' between the club and unemployed member. By 1989 when Job Clubs had expanded to a nationwide network with relatively generous funding, an employment department survey found that attendance increased an individual's chance of finding a full-time job by about 50 per cent (Hansard 1 December 1992
The department has not conducted later surveys which suggests that performance has declined. Employment Action (1993) which combines job-seeking support with labour market search skills is a recent addition to the stable of work-orientation programmes which serve in part to redress absorption problems (and to remove people from the unemployment count), partly to redistribute the local workforce, and partly to restock local labour markets. There is some containment of surplus labour outside the labour market but the schemes function as a national framework designed to maintain employability for individuals and plug employment gaps. It is important to note that such work-orientation schemes by their structure and outcomes primarily support re-entry to the labour market at the same level of individual skill and experience as at the point of being ejected from the labour market. These schemes do not address changes in occupational skills within the labour market and do not assist in achieving coherence between education/training and the labour market.

Under-Qualification: Technical and Vocational Initiatives

I have shown how implementation of the New Training
Initiative from 1981 onwards led to the development of a range of schemes outside mainstream school and college provision. The Government's education / training reforms did not however neglect the mainstream entirely. Chapter 7 described the Government's flagship programme for introducing vocationalism into the school curriculum, TVEI (the Technical Vocational Education Initiative). Some have argued that the curriculum objectives of TVEI could hardly fail given its generous funding (Dale 1985:52). Dale's subsequent assessment (1990) was that TVEI had made most impact on the relationships between schools, local authorities and central Government (Dale, 1990:3). TVEI's contribution to remedying underqualification of the workforce is impossible to assess in the timespan of this study. If TVEI has achieved its stated aims to any substantive degree, then it will have enriched many student's experience of education between 14-18 years of age, have stimulated an informed interest in technology, and bridged some of the chasms between education/training delivery and occupational contexts.
Training Credits

The Training Credits scheme (1990) is a direct intervention into the pattern of part-time participation in Further Education designed to increase the numbers of young people in employment with structured training. Built around concepts of an entitlement to 'buy' FE courses in a 'market' and to acquire qualifications as 'credits', the scheme was introduced in 10 areas in 1990 by selected Training and Enterprise Councils. The scheme issues vouchers for part-time training to school leavers which have a monetary face value and can be used for course fees provided the school leaver is sponsored by an employer. An HMI report (1992) on the first implementation phase during 1990-91 and 1991-92 reported mixed success. The rate of take-up of training credits was considerably below target and the scheme had little impact on the level of training offered by large employers (but probably encouraged provision of training by smaller firms). Colleges reported difficulties with the funding arrangements which pay when students achieve NVQs and require the college to carry the costs up to that point. The HMI found the provision of careers education and guidance...
(although improved by additional funding) was patchy (Department For Education 1992). The short life and selected application of Training Credits to date and the recessionary effects of the early 1990s on the climate of employer-sponsored training, makes assessment of the scheme premature. This will be an interesting development to watch when its administrative difficulties are ironed out and an uptake in the economy encourages employers to participate in greater numbers. The scheme is interesting not least because it exemplifies the concept of education as a commodity traded between discriminating consumers and market-driven suppliers and having an explicit monetary value.

Information Systems

One of the secondary strategies open to the Government to encourage redistribution of labour and to redress underqualification in the workforce, is provision of information about training and job opportunities. The function of vocational education / training information systems is to stimulate individuals to undertake training and to enable them to make appropriate choices about qualifications, modes of

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study and providers of courses. This to some extent overlaps with marketing and promotion of provision, and to a limited extent serves to inform providers about the amount of training on offer in the area. Some attempts have been made - notably by the Business Technical Education Council (BTEC) and the National Council for Vocational Qualifications (NCVQ) to inform and publicise vocational qualifications to employers. The Open University maintains online access to a database of advanced courses (ECCTIS) which provides a limited educational counselling service. The most important Government initiative aimed at providing a national system of information on Further Education opportunities designed for potential students as primary users was Training Access Points (TAP 1985). TAP offered computer hardware supported by nationally developed software, to enable local colleges to input course data through a local network of co-ordinators. The computers were designed to be used by the public and sited in libraries, Job Centres and some town centre shopping malls. The drawback to the system in terms of targeted use leading to increased take-up of courses was the absence of educational or career counselling. It is more difficult to attract non-
traditional FE students who are unfamiliar with study and FE institutions without a counselling and support interface between the information and individuals who might be prepared to access it. The MSC found that TAPs were expensive to develop because the software requirements were complex. MSC unsuccessfully sought other sponsors - public and private - and considered selling both rights to advertise courses on the system and rights to use. Both approaches encountered resistance from employers, training providers and individuals who proved unwilling to pay for information about educational opportunities. It may be that consumerism was a misplaced target in this instance. TAP does not tap consumer instincts precisely because it is not providing a service in response to demand and for which a market has been created. On the other hand, informational systems do have an important role in open enrolment systems and in facilitating consumer choice when the consumer has already entered the market and is ready to maximise their investment in education/training. Such information is commonly provided by course literature mediated by college staff or educational and vocational counselling services.
Vocational Guidance

Even if the Training Access Points concept was limited by its design as a stand-alone informational system without mediation, vocational guidance has not been neglected. The growing complexity of education/training routes, opportunities and qualifications, and the proliferation of job categories has demanded a concommitant expansion of vocational and educational guidance. In spite of this expansion, the amount of vocational guidance available to school leavers remains limited (Kenney and Reid, 1990:219); the amount of educational and vocational guidance for adults (outside employment training schemes) is almost non-existent. The paucity of advice systems reflects inadequate resourcing rather than Government disinterest or inactivity in the past decade. Careers advice and counselling has been considerably enhanced for 14 - 18 year olds as part of TVEI (1983), the introduction of NCVQ profiling and records of achievement (1989). Funding to colleges to provide local advice centres has been allocated by the Department of Education under Educational Support Grants (ESG) and by the Training Agency as part of Work-Related Further Education (WRFE (1989) projects.

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Initiatives to provide vocational guidance have been part of Youth and Employment Training; Restart (1986), Job Club (1985) and Employment Action (1993) work-orientation programmes; and a major strategy of the Training Credits (1990) programme to increase vocational education / training participation rates. In the 12 months to September 1992, the Employment Service conducted 8,170,691 interviews giving

"structured and coherent information ... about, and access to, the employment and training opportunities that are available"

(Hansard 26 October 1992 col:497)

This is not quite such a rosy picture of information and advice services as might appear since over half of the interviews were with people making new claims to benefit and I suspect that eligibility for benefit would figure largely in the interviews. In parallel with the TAP initiative funded by the Employment Department, the Department for Education has funded a national action-consultancy through the National Institute for Adult Continuing Education (NIACE) to pump-prime educational guidance services for adults (EGSAs). All of these initiatives built on, or complemented the national careers advice services set up under the Employment and Training Act 1973 and
Employment Service advisers located in Job Centres. A report by the Policy Studies Institute and the National Institute for Careers Education and Counselling (NICEC) commissioned by the Employment Department makes bold claims for the economic value of careers guidance. The report claims that improved careers guidance at all levels of the workforce could save £350 million a year on saved unemployment benefits for 18 - 29 year olds; reduce occupational mismatch between skills of the unemployed and available jobs, saving £1 billion a year; remotivate discouraged unemployed people to find a job, saving at least £1 billion a year; and help women returners, extend Compacts deals between schools and employers, and encourage unqualified adults to gain national vocational qualifications (PSI/NICEC, 1992). Even discounting the partisanship of NICEC, whose members' jobs would benefit from expansion of careers guidance, the report seems optimistic indeed. However, scepticism about the savings quoted, and doubt that the features of a recessionary labour market which inhibit job creation can be overcome on such a scale, should not discredit the potential value of substantially improved careers information and
counselling in the workforce. From 1992 funding for local authority careers services has come under TECs; from 1993-94 the services will be put out to tender under Government plans to privatise provision. It remains to be seen whether the change in structure will lead to an expansion or a contraction in provision and whether the quality and scope of careers advice improves under the new arrangements.

Labour Market Intelligence
As well as the provision of information and advice about education / training opportunities, the Government has attempted to assist coherence between vocational education / training and occupational skills by the provision of labour market information systems. The Employment Department has implemented an information systems policy since 1983, focused on Training Agency local offices (since 1990, this has been part of the remit of Training and Enterprise Councils (TECs) (see Appendix 1 for a description of LMI). Part of the system developed CALLMI (Computer Assisted Local Labour Market Information System) - a database of employers' responses to skill shortage/potential recruitment surveys and additional area or
sectorial surveys to provide more detailed labour market information to inform provision of intermediate training. Under the NAFE (1984) programme of planning 25 per cent of non-advanced FE provision in colleges, the Government developed a classification of Training Occupational Categories (TOC) in which most college courses were grouped into occupationall-related categories. WRFE (work-related further education) which replaced NAFE in 1989 promoted extensive efforts to gear FE courses to local labour market information.

The NAFE / WRFE initiative represents an isolated attempt in the 1980s by the Government to synchronise labour market intelligence with education /training provision. Ministerial changes at the Department of Education (DES) in the late 1980s reversed the Department's declining role in the management of FE with the enactment of the Education Reform Act (1988) which gave colleges independent local financial management and increased central Government control. The Education Reform Act instituted a planning process (modelled on WRFE) whereby colleges were resourced on the basis of expected student numbers. With the switch in control back to the DES, WRFE (which had
never been politically attractive) lost ground within the Employment Department. WRFE as a mechanism for aligning training provision to labour market requirements has the potential to remedy local under-utilisation of skills and under-qualification of the workforce. However, the transfer of Employment Department functions to TECs has fragmented the provision of labour market intelligence to smaller geographical areas and has diminished the pivotal role of the Department in co-ordinating education/training provision across a concentrated and diversified labour market. The Case Study in Chapter 3 which examines the WRFE programme in London in 1990, shows the scheme to be effective but limited.

Job Creation

The Government has undertaken one job creation initiative of any significance in the period between 1981 and 1991: the Enterprise Allowance Scheme (EAS 1983). This scheme provided a weekly allowance (£40) for a year to unemployed people who have an idea for starting their own business. Participants were required to show evidence of access to £1000 capital and their self-starter business idea was subject to scrutiny by local panels of bank manager, chamber of
commerce representative etc. The Enterprise Allowance Scheme supported around 100,000 people a year at a cost on average of £2500 for each fledgling enterprise (Hansard 19 May 1992 col:136). By 1992-93 when the scheme was replaced by the Business Start-up Scheme, EAS only supported 41,000 people (Hansard 19 October 1993 col:208). New businesses started under the enterprise allowance scheme have not proved to be a significant motor to the economy. Most never grow to a size that creates employment other than for the person who started the enterprise. Other schemes with 'enterprise' in their title such as enterprise programmes within higher education institutions have been

"designed to encourage students to be self-reliant, enterprising, and aware of economic issues and to equip them to be effective in the world of work" (Kenney and Reid 1990:330)

This is not a job creation scheme but vocationalism of the curriculum designed to elevate industrial and commercial applications and value systems within academic institutions and teaching.

Work-Based Learning

A further way in which VET may be used to redress
imbalance in supply and demand in the labour market, particularly imbalance in the supply and demand for skills and qualification in the employed workforce, is through work-based learning schemes. The Government has not used work-based learning in any major schemes aimed at updating the workforce. The closest example of work-based learning is 'sandwich courses' which combine higher education with an extended period of work-experience. Many schemes used short periods of work-experience to show students the environment and conditions of work. Youth training schemes use employer placements to familiarise trainees with working practices, rather than as a way of directly using work to structure learning experiences. This is not the same as work-based learning. The Government eschews schemes to train and update the workforce, preferring to leave this to the market and employers. In a Parliamentary reply to the question:

"what steps is [the Government] taking to encourage better skills training?"

The Minister for Employment replied:

"The Government's strategy is to encourage effective investment in skills by employers and individuals, by stimulating a strong market in training, by encouraging standard setting and by offering training to young people and long term
unemployed people. Britain's workforce is becoming more skilled. Over 2.5 million more people in the workforce now have a qualification than five years ago."

(Hansard 13 July 1993 col:461)

I have shown in Chapter 8 that the workforce is becoming more qualified through the process of older unqualified workers leaving the workforce - either through retirement or redundancy, - and younger qualified people entering the labour market. The Hansard answer quoted above refers to "the workforce" and I assume that Employment Department officials did not use the term loosely. This means that the answer refers to the total working population and not just to those in employment. This does not therefore mean that qualifications and skills in the employed workforce are increasing.

One model referred to briefly in Chapter 9 in the discussion of the divergence between education / training systems and the labour market was 'the learning-effects of work' (Onna, Feijen and Kraayvanger, 1990). This mainly features in dual education / training systems, such as in Germany, where periods in work and in VET are rotated within a framework which recognises global goals for the 'learning effects' in both systems. Each element
contributes to the next stage of development of qualification (Geurts, Hövels and Onna, 1986). The major structural features of this model are the separation of employment and tuition, the articulation of global goals covering both employment and learning and activities designed to utilise previous experience and to project forward the outcomes of the activity to the next level of qualification. The model allows flexibility of timing in the rotation of learning and work since the learning needs are not immediate or short-term. It also allows a defence of social interests in which life-roles can be accommodated within the overall framework. Examples of rotation systems include career-enhancement training (either in-company or external), PEL (paid educational leave) and some adult education structures. The curricula features of adult education enable rotation work/learning to be motivated by employment interests, further/higher education and leisure/life role interests. The main problems are the availability and flexibility of appropriate opportunities for retraining and the social and financial costs incurred in unsupported participation. The most proactive measures use work as a resource for learning.
(Kraayvanger and Onna 1989).

Although this is not intended to be a stage model, the reciprocal mode is the most complex and demands the most of its players (Onna et al., 1990). In this mode, the critical criteria for VET innovation are reciprocal support based on VET innovations that contribute to economic, social and cultural development; satisfy target groups; and thirdly, improve the educational offer. In this model, innovation creates interfaces between school and work, flexible relations between training and work, and takes account of labour market regionalisation and tripartite politics (Onna et al., 1990). This framework is proactive and includes practical applications designed to bridge VET and labour market systems.

I have not found any UK Government schemes based on a unified framework encompassing the education/training system and the labour market. However, it is useful to briefly consider this structure and to evaluate its usefulness for training and updating the workforce.
Workplace Learning

Marsick and Watkins (1990) have developed a social model of workplace learning which gives a key role to informal and incidental learning. Much of this draws on reflective learning and learning in action theories from John Dewey to Argyris and Schon (Marsick and Watkins, 1990:17). Drawing on a range of studies concerned with workplace learning covering such diverse subjects as change programmes for Swedish managers in 1987-88; training of educational field workers in Nepal, the Philippines and Taiwan, 1977 - 1979; formative experiences of professional adult educators in Europe from 1980; changing the work practices of adult children of alcoholics through groupwork at Harvard University; a descriptive study of incidental learning in higher education administrators from 1975-1979; and interviews with human resource developers 1987; Marsick and Watkins describe an innovative alternative to conventional training models. In this model of 'informal and incidental' learning in the workplace:

"...people learn in the workplace through interactions with others in their daily work environments when the need to learn is greatest."
(Marsick and Watkins 1990:4)
Human resource theories are the basis from which Marsick develops her argument that informal and incidental learning has the best chance of meeting training needs in the workforce. Informal learning is structured from workplace experiences that are not experienced in a training context and often take place in non-routine conditions i.e when routine responses fail. Informal learning derives from the social experience of work and its interactions with mentors, coaches, network contacts and performance planning for novel situations. Incidental learning shares these characteristics but with the added distinction that learning is unintentional and a byproduct of another activity. Incidental learning occurs through reflection on errors; the actions of colleagues; and absorption of organisational culture (Marsick 1990:6-9). Thus much of the essential behaviour which is crucial to a worker's strategic success in the organisation is learnt through informal and incidental learning. This is particularly true in bureaucratic organisations with strong hierarchies and low dependence on formal training structures. In such organisations, work competence depends more heavily on operating according to cultural norms than on task-
related outcomes. In other words, how something is done is rated more highly than what is done. This is evident in the civil and military services and in many service industries. The key point here is that organisational culture and tacit norms which are an essential element of work competence, are acquired informally and incidentally and are rarely addressed through formal training. The scale of training required in the workforce is so great that every means of skill acquisition - formal, informal, incidental - must be used to upgrade qualification to the required level (see Chapter 8 for discussion of skill insufficiency in the labour market).

This learning requires new skills in workbased trainers and those at the interface between classroom learning and workplace practice. Marsick and Watkins (1990) highlight the tensions between educators and industrial managers and trainers and the need to develop workers laterally and constructively use non-routine activities to build up skill acquisition and workplace qualifications. An educational adviser to the Ford Motor Company adult education programme found that these ideas interested industrial trainers
(Southee 1991:187) so we may see more widespread application and development of informal and incidental learning techniques in future work-based schemes. Marsick and Watkins start from the common social dimension of learning and work to develop arguments for recognition and development of these phenomena.

"Workplace learning involves a social contract among individuals who work together to achieve higher-order organizational goals. The degree of mutuality and conscious control in goal-setting varies among people and organizations. None the less, individuals learn and work in social units where interactions are not typically subject to design and control by trainers."

(Marsick and Watkins, 1990:35)

In the past white collar workers were generally trained away from the workplace and machine operatives were trained at the workplace. Such training was often organised through the role structure with untrained workers starting in passive ancillary roles, progressing to supervised practice and graduating to unsupervised work. White collar workers on the other hand arrived with qualifications derived from general or vocational education and training and, possibly after some induction into routines and networks, were deemed to be work competent. However, changes in technology and exponential change and complexity in work practices now demand that employees at all levels
continue to train and update their skills. In this context workplace and workbased learning have become central to debates about skill shortages and increased qualifications in the labour force. Integration of informal and incidental learning in workforce development strategies may particularly benefit women and minorities (Marsick and Watkins 1990:242). Indeed my experience in the workforce indicates that this type of learning is already used by women returning to the labour market as a survival technique. In the absence of sufficient training and inappropriate learning techniques used in the training on offer, women use networks and networking skills to overcome their ignorance of work requirements and to learn about organisational norms and power lines. Qualification could be dramatically improved and economically delivered if such techniques were recognised and sponsored by organisations. Such strategies would also enhance social learning styles and validate the techniques used by women at all levels in the workforce. If we accept the argument that a viable post-industrial economy cannot neglect continuous skill acquisition, then Marsick and Watkins' recipe is persuasive:
"Among technical and professional workers, critical reflection on challenging work experiences could be facilitated by developing peer self-help groups. By strategically and proactively supporting informal and incidental learning, the training function can extend its impact while also increasing the learner's effectiveness." (Marsick and Watkins 1990:242)

These ideas could also contribute to the development of applications based on competency-based learning (discussed in Chapter 6). Informal and incidental learning strategies are perhaps difficult to conceptualise in terms of formal training programmes because it may seem axiomatic to non-formal learning that it occurs outside formal techniques, nevertheless the issue may be more tautological than curricular. What is needed perhaps is a move away from technical and systems-based approaches to training and recognition of the primary role of socialisation in acquisition of work competence. This is not a plea for more 'social and life skills' training - which, in the British youth training curriculum at least, has meant social training divorced from work skills. Such training has focused almost exclusively on attitudinal learning for young workers; coping skills in enforced unemployment; and basic education programmes which include health topics and personal hygiene. Rather, I
am recommending work-based training strategies which incorporate social structures, recognise workbase power relations and use networking and peer group techniques at the core of the training programme. In formal training which is outside the work context, such techniques may operate in the margins of the formal programme or may undermine formal skill acquisition when it is practised at the workplace. The studies of informal and incidental learning in the workplace indicate that examination of such strategies would be profitable.

Summary

This discussion of informal workbased learning, which has strayed beyond the UK Government schemes of the last decade, concludes my exploration of the major ways in which VET is used by the state, individuals and employers to redress imbalances in the supply of labour - both in levels of skills and in the number in the workforce - and economic demands in the labour market. The first two chapters in Part 4 examined the evidence for the level of vocational knowledge and skills at the prevocational and employment levels. The evidence found in the study is that workforce qualification levels are poor - both in comparison

10.67
with expert opinion of the levels required, and in contrast with other European labour forces.

The study has found that Government training schemes such as YT and ET are effective in containing surplus labour outside the labour market in periods of oversupply. The schemes have not been effective either in meeting specific skill shortages or in raising general levels of qualification. Although the schemes have contributed to a change in employers' recruitment practices, mainly through increasing the likelihood of training and induction for young entrants to the labour market, the schemes have not engendered a training culture. Other schemes have had individually beneficial effects but the overall success quotient in terms of VET / labour market equilibrium is determined by the level of economic buoyancy. In other words, I conclude that the national training programme has not significantly raised levels of qualification in the workforce, has not addressed specific skill shortages, has not affected the competitiveness of the UK economy and has not encouraged the emergence of 'a qualified society'. Moreover, nothing at all has been done to foster a national training strategy for those in work.

10.68
The predominant structure of a preparatory education/training system means that responsibility for a crucial aspect of economic viability is delegated to a single element of the social structure (education) and gives rise to tensions between the state, education, employment and individuals. Government policy is directed at control over the outputs of education (through the curriculum, finance, structural legislation); transfer of policy and delivery to employers (TECs, intermediate systems); and redistribution of resources away from community goals towards individuals and employers through TECs, vouchers, and training enhancements. This encourages structures premised on learning as a preparation for work, the externalisation of work-related learning, and the reification of work-based learning schemes. The system perpetuates the separation of academic, vocational and general curricula without an overarching vision or strategy. Although the competency-based qualifications now being systematised through NCVQ are to some extent a counter-movement intended to make work-based learning concrete (see Chapter 6 for discussion of competency-based VET), the
epistemological and practical problems with this approach loom large.

Transformation of the labour force depends heavily on the competence of managers, a fully developed system of general education, functionally orientated educational institutions and enormous investment in technical and managerial education. It also requires the lowering of arbitrary non-educational barriers to entry into the managerial hierarchy as well as vertical and horizontal mobility within the managerial structure (Kerr et.al 1960:159). Thus the post-industrial development of a diversified labour market requires concomitant changes in education and training. Economic influences on the education system may be subtle:

"It may be, therefore, that it is in the transmission of appropriate values rather than particular skills that the educational system is drawn into relationship with the economy."

(Banks,1976:40)

This account shows that the main Government training initiatives designed to promote an equilibrium between the education/training system and the labour market had matured into a pattern of provision centred on:

10.70
1) containing unemployed youths outside the labour market (by guaranteeing a youth training place to all 16-17 year olds not in full-time education or a job);

2) maintaining availability for work (by guaranteeing a place on Employment Training to 18-24 year olds unemployed for 6-12 months and some places for 18-49 year olds out of work for over 2 years);

3) supporting job search (through the Employment Action programme and Job Clubs);

4) promoting vocational qualification for school leavers (through the Technical Vocational Education Initiative and the Training Credits scheme).

(Hansard 12 November 1992 col:903)

The pattern of provision is designed to provide "skills training, temporary work and job preparation" (Hansard 12 November 1992 col:903)

Since the early 1990s persistent reports from voluntary training organisations and from Training and Enterprise Councils claimed that the Government's intermediate training strategy was being hampered by lack of ministerial commitment and funding. It has been claimed that Youth and Employment Training guarantees were not being met because of insufficient funding to provide for rising numbers of unemployed adults and the difficulty of providing work experience places when businesses are in recession. Added to the problems of quantity, the persistent problem of poor
quality, particularly of Employment Training schemes, continues. In the year to March 1991 for example, only 48 per cent of ET trainees completed the programme. Of these only 42 per cent obtained a qualification or credit towards a qualification and only a third of participants were in any kind of work three months after leaving the scheme (Hansard 27 January 1992 col:436). These problems exemplify the weaknesses in a training strategy which is premised on voluntary co-operation from employers and funded outside the socio-economic framework of educational provision. Because the Government's major programmes are primarily schemes for containment of surplus labour outside the labour market and separate from mainstream education/training provision they are expensive in cash terms and poor in economic pay off particularly when the labour market is recessionary.

The future lies in pluralistic industrialism where education becomes a leading industry encouraging commitment and consensual processes dominated by professionally trained and selected managers with the result that:
"Education, occupation, occupational organisation will all be drawn together to structure the lifeline and economic interests of many if not most employees"

(Kerr et al., 1960: 294)

Successful management of the variables of the labour market is hampered by a lack of diagnosis of the structural features of the problem which stems from two dominant approaches. The first is concerned with the labour market solely as an economic entity governed by capitalist values which relies on market forces to correct imbalances. In this model education and training systems can be seen as the provision of social welfare (largely the containment and socialisation of the young). This view, linked with political aims to restrict welfare expenditure, clashes uncomfortably with any policy designed to expand education and training to provide higher level qualifications in the workforce. The second area of conflicting diagnosis is the appropriate curriculum for work-related education and training. Different approaches to the problems of matching the workforce to capital give rise to different education and training philosophies, structures and constructions of curricula. The indirect approach puts emphasis on initial education as preparation for work and
therefore must be capable of adaptation and provide all foundation skills. The direct approach would see the labour market equilibrium solved only through combinations of education and work as diverse as the multiplicity of work.
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET

AN ECONOMIC CURRICULUM MODEL

PART FIVE

PULLING THE THREADS TOGETHER
The final section draws the threads of the thesis, antithesis and synthesis of the research together to test the concepts and claims of the economic curriculum model against the evidence presented in the Case Study and the research reported in earlier chapters. Chapter 12 revisits the philosophical and theoretical positions of the economic curriculum model and proposes a revised economic ecology for the interface between education/training and the labour market. The final chapter looks back over the process and product of the research and reflects on its outcomes, achievements and shortcomings.

Context of the Research
Before drawing together the results and conclusions of the Case Study and the arguments from earlier chapters, it will be useful to recapitulate some of the themes, both to put the empirical elements of the thesis design into context and to restate the issues. Table 8 summarises the main elements affecting labour market supply and demand.
### Table 8  Labour Market Supply and Demand Factors

**Supply Factors:**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>size of population of working age population distribution age, gender, culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>technical and linguistic socio-normative skills transferability of skills flexibility of certification</td>
</tr>
<tr>
<td>VET</td>
<td>policy and structure research and development</td>
</tr>
</tbody>
</table>

**Demand Factors:**

<table>
<thead>
<tr>
<th>Economic</th>
<th>money supply competition investment trade volumes product life-cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>automation structural replacement of labour availability of plant and materials legislative requirements</td>
</tr>
<tr>
<td>Organisation</td>
<td>division of labour stratification enterprise structure level of wages and rewards substitution levels labour mediation systems</td>
</tr>
</tbody>
</table>

Earlier chapters have explored the pressures on the labour market during the 1980s and early 1990s as
fluctuations in supply and demand affected social policy and determined Government interventions in education and training. The demographic supply features are described in Chapter 9; qualification levels are examined throughout Part 4 - Education / Training and the Workforce; VET policy and structure in this context includes vocationalism in schools and post-16 education and training systems described in Part 3 - Curriculum Frameworks - and Part 2 - the London Case Study. The economic and technical demand features are outside the scope of the thesis; the organisational issues are examined in Chapters 9 and 10 and the London Case Study (Chapter 3).


Major post-industrial restructuring of the labour market occurred as a result of the decline of employment in heavy industries; the increase in employment in service industries followed by contraction in administration and financial services sectors; and a second wave of decline in manufacturing and the power supply industries. Employment and the economy responded to the recession - boom - recession pattern of trade in the domestic market from 1979 to 1981.
1993 and to contraction and protectionism in our major export markets, with increased use of technology and dispersed production. Demand-side pressures were matched by supply-side fluctuations caused by a peak in the numbers of school leavers in 1980-82 following the birthrate boom of 1964 and a diminishing number of young entrants to the labour market throughout the 1980s as below-average birthrates in the late 1960s to early 1970s fed through. The results were high unemployment, particularly in the early 1980s among those aged 16 to 24, and increased take-up of premature retirement schemes among older workers. Structural changes in the labour market also produced skill shortages and redundancy of skilled workers alongside increasing levels of unemployment. The economic boom from 1987 to 1990 fuelled an expansion of the working population through an increase in part-time jobs and women returning to the labour market, mainly in the service industries. Estimates using labour market accounts analysis (Green and Owen 1991) show an overall interaction between demographic features, workforce participation rates and economic changes. Between 1981 and 1984 Green and Owen calculate that the UK labour market showed net job loss.
shortfalls of around 2 per cent and, between 1984 and 1987, net job surpluses of around 1 per cent. This was followed from 1990 onwards by a recession which saw unemployment rising above the peak of the previous recession (see Chapter 9).

Throughout most of the 1980s localised skill shortages occurred alongside high unemployment and a shortage of training placements. This feature is seen in the Case Study. The Case Study (see Chapter 3) analyses the effects of planning training provision in the light of labour market intelligence (LMI) through the Government's Work-Related Further Education initiative. WRFE is a particularly pertinent framework for empirical corroboration of the ideas in this thesis because the programme is unique among Government policies between 1981-1991 in seeking to structure provision in Further Education and Adult Education colleges in terms of labour market interactions. The Case Study shows that by the third year of the programme, and with the advent of Training and Enterprise Councils (TECs), some considerable effort was being made to recognise that training is an important feature in structuring the labour market.
Poor levels of qualifications in the workforce stem from inadequacies at all levels in the British education and training system (see Chapters 7 and 8), failures in Government intermediate training programmes and inadequacies in the labour market qualifications structure (see Chapter 8). Although the number of young people with qualifications at GCE and university level is rising and school and FE staying-on rates are increasing, our major competitors are also producing increasing numbers of qualified workers and most of these countries start from a higher qualifications base. Chapter 7 summarised the major defects of the school and FE systems as: insufficient numbers of qualified young people with relevant qualifications; failure to qualify more than a third of school leavers to intermediate level; and failure to train a significant proportion of young entrants to the labour market. The academic education system has been shown to be an inadequate preparation for working life in critical Government reports, and yet GCE 'A' levels are praised by the Government as the
"gold standard" of our initial education system. The concentration on academic results leaves many young people unenthusiastic about further training beyond the school-leaving age. Chapter 8 quoted ample evidence of low UK levels of training at craft and supervisory levels. Recent analysis of craft-level training for construction, electrical and electronic engineering, motor vehicle and travel and tourism industries in France, Germany, Italy and the Netherlands (FEU 1992) confirms this. The FEU study contrasted the narrow specialism favoured in British vocational qualifications with the broad educational base of qualifications in other countries. The report emphasised that even in France where vocational training has many of the problems of low status and poor staying-on rates found in Britain, trainees were more motivated and had higher qualifications. These failures combine to deny the majority of labour market entrants a good general education, a sound grounding in science, mathematics and technology and inadequate vocational training. At higher education levels, graduates are narrowly selected and concentrated in professional occupations compared to our competitor countries where access to advanced
education is open to a wider proportion of the population and labour markets demand advanced qualifications in managers and other non-professionals. Moreover low skill levels in workers and inadequate investment in training by the Government and employers combine to demotivate workers who do not demand or take up occupational training and this spiral reinforces a low-skill equilibrium in the workforce.

During the period under review, there was massive restructuring in education and training as a result of Government interventions in intermediate training, increasing employer influence on VET funding and policy and the severing of the structural relationship between LEAs and colleges. The Government was driven to intervene by the political necessity to respond to public concern about high unemployment rates in the early 1980s and by pressure from industrialists to remedy skill shortages in the late 1980s. The Government also responded to radical restructuring of the labour market. Earlier arguments have shown that each of these imperatives required different reactions within different timescales and that some of the resulting initiatives became confused and counter-
productive. The over-riding feature of Government interventions in VET since 1981, has been policies driven by a strong attachment to market forces ideology manifest as Monetarism espoused to Economic Individualism.

The monopoly of state-funded VET has been challenged by the introduction of alternative structures for schools and for delivery of intermediate training schemes. Control by local Government has been weakened and replaced by management at the level of the institution. Financial control has moved from LEAs to Government agencies and funding regimes for institutions and individuals have changed to reflect 'outputs' of the system, replacing historical grants and subsidies. The influence of employers on VET has coalesced with the delegation of Government functions for policy, funding and delivery of Youth and Employment Training, Training Credits, WRFE and TVEI to TECs. These changes reinforce the notion that VET issues sit squarely alongside business support and enterprise schemes and are for employers to resolve. There are unresolved issues here about accountability, probity and efficiency. More than one commentator
talks of the 'folly of failed businessmen promoted by failed politicians' (Baxter, 1993) and questions the capacity and calibre of employers running TECs. Above all, there are unproven assumptions that employers are the best judges of training requirements for individual enterprises, sectoral interests and the economy as a whole.

Attempts by the Government to overcome vocational deficiencies in the education and training system and structural changes in the labour market through the introduction of new intermediate training schemes, have met with limited success (see Chapter 10). The main Youth Training and Employment Training schemes have expended substantial resources on low-level training and achieved low retention rates. Trainees who complete Youth Training achieve relatively few qualifications - and at low levels. Less than half of Employment Training trainees complete their training, even fewer gain qualifications, and very few translate training into workforce skills. The schemes have not increased the employability of trainees or prevented loss of employment when compared to the effects for non-trainees. These and other Government schemes have
not dented the level of skill shortages when the economy was buoyant or helped to maintain the workforce when the economy was in recession. Youth Training encouraged the involvement of employers in Government-sponsored intermediate training and paved the way for Training and Enterprise Councils to assume the functions of Government for policy, funding and delivery of VET. This has encouraged employers to use training schemes as selection, recruitment and induction mechanisms for entrants to the labour force, and given prospective employees a foretaste of employers' practices. However, these developments have been expensively gained and at the greater cost of failing to upgrade the workforce. The overall effect of youth and employment training schemes is the containment of surplus labour outside the labour market and re-entry (when this occurs) at the same levels of skills and experience. The programmes explicitly do not address retraining for occupational and technological changes nor attempt to align the requirements of VET and the labour market.

The training capacity of those in work is not encouraging either. At least a third of the labour
force have no qualifications and two-thirds are unlikely to receive any form of training. Against this background, the Government has disbanded Industrial Training Boards (ITBs), removed employer training levies and privatised its network of Skill Centres (and these are now in Receivership). The welter of Education/Business Partnership schemes which replaced these systems have been directed at reinforcing links in the supply chain and have failed to address the upgrading of skills for the majority of the workforce. Unstructured employer responses to skill shortages are inadequate. The climate for innovation, research and development is poor in the UK and devoid of Government vision or initiative. The Government has singularly failed to promote Adult Education and training throughout the workforce. On the contrary, work-related provision through Adult Education Institutes is being squeezed by the transfer of funding from local authorities to the Funding Councils (FEFC). In future the FEFC will only fund literacy and numeracy, access to further and higher education and certain examination courses. This resourcing structure ignores the vocational opportunities for adults in courses designated as
'non-vocational' and the way that adults use 'leisure' courses as a stepping stone to certificated courses and re-entry to the labour market.

Chapter 8 described studies which show that an under-qualified workforce is uncompetitive because workers are less likely to deal with breakdowns and keep production moving, are less likely to innovate and make production processes more efficient, and are less likely to manage the parallel running of prototype and current products which is a feature of German and Japanese workforces. I suspect that this last characteristic - the inability to sustain innovation and market share through adaptation to new technologies - may be the most damning. Post-industrial markets are moving away from cheap mass-produced goods towards short-production, high quality goods. This demands that companies with products that are, or aspire to be, market leaders must continually innovate to make their own products obsolescent before their competitors introduce cheaper or more technically advanced versions. The pressures of international competitiveness and post-industrial
structural changes in the labour market demand adaptive skills in the workforce. This means that the workforce must be trained to optimum levels of competence. New recruits from the education and training system must match the highest levels of skill in the workers they are replacing. Overall the education and training system, in conjunction with employers and the Government, must nurture advances in science, technology, management and the professions capable of achieving the leading edge in design, production and distribution processes based on sound vocational education and training. Failure to upgrade skills, or to provide structured retraining opportunities across the whole workforce, produces a labour market that is fatally uncompetitive. I have found no evidence to the contrary.

ISSUES

State of Effective Demand

The Case Study explored the concept of curriculum synchronisation with the labour market (highlighted in Chapter 1). In my early model, the curriculum is seen as a commodity in transforming labour market supply to meet demand and as the regulator between the supply of
qualifications and the demand for skills. In this sense the WRFE curriculum is the mechanism to achieve a perfect state of effective demand. The emphasis put by the market forces model on education and training outputs and economic relevance has raised the profile of VET and its centrality to economic competitiveness and wealth creation. The model has features that are - somewhat paradoxically - centralist and consumerist. Esland (1989) describes centralism as a factor of the "blight of vocationalism" because it

"allows central government to intervene, under the guise of restoring economic vigour, it drives out localism and favours detailed control of education by government agencies"

(Esland, 1989: 37)

The paradox of centralism within a doctrine of minimalist regulation raises questions about the effectiveness of either a centrally planned curriculum (see Chapter 5 for discussion of the centralist elements in core skills and the national curriculum), or a curriculum of natural selection - that is a curriculum that arises from the demands of consumers. WRFE was a Government initiative predicated on the efficacy of central planning mechanisms operated locally. Was this an example of the centripetal forces of modern conservatism or a sensible approach
to the complexity of post-industrial curriculum planning?

Natural Selection or Central Planning?
Chapter 5 examined the development of a curriculum based on core skills as part of the Government's search for an economic curriculum model. In the early 1980s when the Government responded to accelerating youth unemployment by introducing a large-scale generalist Youth Training scheme, the core skills curriculum was seen to embody flexibility and the transferability of skills. It was hoped that core skills would become the conceptual and practical bridge between the supply of young entrants to the labour market and the regulation of the demand for qualification and skills. Opponents of the core skills approach resented the corporatist incursion into liberal-egalitarian education and distrusted the outcomes of standardisation and vocationalism. A core skills curriculum was seen as instrumentalist, utilitarian and rationalist. It was feared that the development of centralist curriculum planning would reduce the role of education to that of the transmission of knowledge rather than a tool for
growth and development (Kelly 1986). I concluded in Chapter 5 that the centralising elements of the core skills approach had resulted in a model that was remedial, regressive and prevocational despite its professed aim of producing equilibrium between labour market supply and demand.

The competence-based curriculum on the other hand, has attractive features in terms of coherence between VET and the labour market. Qualifications built around basic skills and applied occupational competencies would seem to offer an ideal prescription for the problem of curriculum planning for a labour market in a state of rapid change in terms of the structure of employment and the content of jobs. The competency-model demonstrates the development from defining VET as a commodity (a good capable of being exchanged or sold) to a process of productivity (the capacity to satisfy wants or create utilities). This is an important shift from the simple exchange of an individually owned asset to a set of production relationships between VET and employment driven by the economy. Competence-based curricula are over-ridingly concerned with outcomes - inputs (the curriculum)
become subsumed into impact assessment. The demise of curriculum concerns is total because they are ignored in the competence-based model espoused by NCVQ. Future national vocational qualifications (NVQs) are to be premised on structures and programmes derived from employers' identification of occupational competencies, validated and certificated by observed assessment. It is easy to criticise this framework on epistemological, philosophical and practical grounds. I conclude that the competence-based approach currently being developed must resolve the epistemological issues and serious theoretical and practical shortcomings around assessment and impact evaluation issues before the model can be a viable vehicle to address workforce qualifications (see Chapter 6). However, the problems in the competence-based approach should be seen against the failures of the school academic curriculum to provide an adequate preparation for working life for the majority of school leavers who enter the labour market with GCSE qualifications (or none), and the lacklustre impact of traditional FE. The positive and proactive elements of a competence-based curriculum of equality of access to certification and
the valuing of practical skills could be an important element in a post-industrial economy which prospers more on its wits than on its land-based resources. A competence-based curriculum potentially demonstrates Economy, Efficiency and Effectiveness - the key characteristics of the economic curriculum model. Economy can be demonstrated because the curriculum should not contain any elements superfluous to labour market requirements. The model should demonstrate Efficiency because the curriculum makes optimum use of resources, and overall, the model demonstrates Effectiveness because market forces ensure that the demands of the economy, labour market and individuals are satisfied.

Acceptance of the key role of economic independence in any viable VET curriculum model may encourage the seductive conclusion that the curriculum must be determined by natural selection. A curriculum of natural selection may give consumers power to bring about desirable changes in the delivery and content of the post-16 VET curriculum. On the simplistic maxim of 'he who pays the piper, calls the tune' it would only require the curriculum to be entirely subject to the
market forces of consumers' choices, to achieve coherence with economic goals. However, it could also be argued that a centrally prescribed curriculum does not preclude economic independence any more than a non-vocational curriculum can be said to be entirely unrelated to working life since social skills and general knowledge are fundamental to occupational competence. I have suggested that the apparent dichotomy between liberal-socialist curriculum principles and corporatist vocationalism lies in the forces of transition to a post-industrial economy. The market-forces model of the VET curriculum may be simply too unsophisticated to be effective in a complex post-industrial economy. A curriculum of central planning may be essential to accommodate the complexity of the pressures on supply and demand in the labour market. The internalisation of economic pressures on the post-16 curriculum may prove to have holistic effects in giving power to consumers to determine the selection and delivery of the curriculum. This can only come about however if the curriculum can deliver economic independence and, for this to be achieved, some central elements may be inevitable. The WRFE programme demonstrates the use
of labour market intelligence built into a planning framework as the centralising mechanism to determine curriculum planning. The Case Study (Part 2) shows how the processes of curriculum planning based on labour market intelligence - at least at regional and sub-regional level - can lead to coherence between VET and the labour market. The mix of local and central Government control, linked to objective and subjective information systems, targeted on overall economic objectives, appears to lead to some important advantages that would not be obtained from curriculum planning under the market-forces model.

Private or Public Goods?
At the heart of this debate are polarised views about the purpose of education/training systems. From the liberal-welfare perspective education can be characterised as a 'private good' provided by the state to enhance the quality of life of its citizens and promote higher order sensibilities. The opposing view from the 'New Right' is that education should be primarily a 'public good' provided to motor the economy and corporate profits. Esland (1986) and many others have pointed out that human resource theories
of management (Schultz 1970) enabled these opposing views to share common ground. Human resource management emphasis on the personal development of the worker as an aid to productivity attempted to replicate model family social structures in work organisations and practices. Much of this remains in organisations today. However human resource development theory of itself does not increase the correspondence between personal and vocational development or lessen the tensions between the humanist and mechanist viewpoints. The focus of the debate has shifted to the structure and organisation of education / training systems but the issues fundamentally remain unchanged. The Government since 1979 has used a market forces ideology to vocationalise the curriculum of schools, to create an internal market for education / training, and to place employers in control of VET policy and delivery (see Chapter 2). Responsibility for VET has passed from passive voluntarism where central and local Government and individuals co-operated in a loose triad of interests, to the economic individualism of semi-private agency control by Training and Enterprise Councils (TECs). Within the new hegemony of TECs, VET
resources are dedicated to the promotion of economic well-being through vocationalism. The Government's only major schemes for training the workforce that are other than containment of the unemployed, Training Credits and Investors in People, are strikingly designed to subvert individual choice for the good of the organisation (or the good of employers some might say). The Case Study supported the assumption that an economic model based on Economy, Efficiency and Effectiveness has relevance to a curriculum that allows individuals - and local planners - some freedom to determine the organisation and delivery of VET.

Lessons from the Research
Previous chapters have shown that the Government's major training programme interventions (Youth and Employment Training) are unsuccessful in increasing the level of skills in the workforce and in promoting a training culture. In terms of the economic model the concentration of resources on containment of unemployed people outside the labour market rather than the promotion of economic growth is uneconomic, inefficient and ineffective. The average costs per filled place per annum of £2,700 for YT and £6,100 for
ET, at 1992 prices, (Hansard 3 February 1992 col:34) indicate that substantial resources could be deployed in job creation and the expansion of workforce skills. Current containment programmes are inefficient for the economy as a whole because resources could be more successfully targeted at higher skills training for those in employment, and occupational skills for those wishing to enter the labour market. The strategy is ineffective because it fails to co-ordinate public sector provision of VET with employers' training to upskill the workforce and encourage a competitive, flexible economy. It is on this last point that the Case Study contributes some interesting findings. I have acknowledged the unreliability of my data and the limitations of the data collection and analysis, and yet it is impossible to overlook the success of WRFE planning in incorporating labour market information into the uncertainties of planning demand-led provision. The LEA officials involved in WRFE in London demonstrated remarkable tenacity in developing and using sources of labour market intelligence - itself a complex science - and involving local decision makers, consumers and tax-payers in meaningful consultation about WRFE provision. All
this was achieved with minimal resources in local authorities, colleges and the Training Agency. I estimate that an average of one and half full-time equivalent staff were engaged on WRFE planning per authority plus a team of 10 people managing the Training Agency WRFE programme for Greater London. This amounts to around 1 per cent of the total resources in London devoted to planning and managing YT, ET, TVEI, Employment Services programmes, TECs and their ancillary training programmes. I am left wondering at the impact on labour market and VET coherence that could be achieved with even a modest increase in resources and influence.

A striking finding of this research is the correspondence between the state of the economy and VET. There is a strong two-way interaction between demand for goods and services translated into employment opportunities and the purpose and utilisation of education / training. The buoyancy or otherwise of the economy is the central determinant that fuels the demand for training, the investment by employers in training, the motivation to train and the use made of qualifications by individuals. These
elements are all locked into the economic cycle. This seems equally true whether the economy is booming or recessionary, although the impact on VET is markedly related to the level of activity in the economy.

The effect of a boom economy - at least in the current pattern - is to increase demand in the labour market for skilled and unskilled workers and simultaneously to increase the proportion of the workforce seeking employment. VET systems are pressed to respond rapidly by adapting the curriculum to new processes, products and services and to establish direct links between employers, trainers and trainees. Buoyancy in the labour market gives rise to pressures for integration of core occupational skills with employer-specific requirements, and pressures to select trainees with appropriate foundation skills, knowledge and experience. In the casual and transitory labour force, an expanding economy may also have the opposite effect of lessening demand for qualifications and increasing part-time, unstructured work in the rush to accommodate increased economic activity.

A recessionary labour market encourages the education
training system to be self-critical and to seek curriculum changes that remedy the disequilibrium between an oversupply of workers and an under-demand of jobs or qualifications. In a recessionary economy, the VET system can be orientated to training for 'stock', although such training is unlikely to be supported by the private sector. In a recession, employers have the choice of contracting the workforce (and losing skilled workers and training placements) or diversifying the workforce to develop new processes and skills. The second option is rarely taken in the UK because the financial infrastructure does not enable companies to ride out reductions in cash flow. In Chapter 8 I contrasted the inability of UK businesses to invest in new product design in a recession, with the support available to German companies and evidence that British managers devote time to managing cash flow that their Japanese counterparts devote to managing production processes. These differences in coping strategies in an economic downturn, produce radically different effects on VET and the labour market, both during the recession and the following recovery.
The effects of expansion and contraction may be concurrent within the same labour market and show the effects of both skill shortages and unemployment. Economic changes will induce the Government to introduce policies designed to correct imbalances in supply and demand and these may become confused with structural changes in the labour market. In all these processes the timescales of the proposed solutions to disequilibrium may not synchronise with the timescales of the economic movements giving rise to disequilibrium. This implies completely different planning and delivery processes at different points in the economic cycle. The processes of utilising labour market information alongside employers' medium term personnel planning need to be matched to longer training and qualification timescales. I suggest that the work-experience and induction elements of the curriculum are less important in this process and the employer's influence on the curriculum is less direct.

In times of labour market contraction, more emphasis can be put on occupational planning and career and aptitude assessment for individuals. This needs to happen within a context in which employers understand and recognise appropriate qualification levels and the
labour market is credential. Wages for trainees in employment need to be subject to downward pressure to provide headroom for increases linked to qualifications. Similarly, wages for trainees outside employment need to rise from current levels of YT and ET allowances in order to reflect the importance and usefulness of training for stock to the wider economy. Instead of 'workfare' policies in which those claiming unemployment and other benefits are expected to 'work' for benefit - an unrealistic policy when the labour market is contracting- should be replaced by payments for qualifications. Unemployed trainees would have a financial inducement to complete training programmes thereby avoiding the retention problems on current schemes, and have positive motivation to qualify. The effect of such credentialist policies would surely be an increase in status for VET - which would be voluntary, high quality and stringently assessed - and would introduce a proper element of consumerism into the relationship between the trainee and the trainer and between the employer/sponsor (who could be the Government) and the provider of VET.

The other main message that I draw from this investigation is that the vitality and relevance of
the education / training system depends crucially on planned expansion in the quality and quantity of opportunities in the labour market. The problem is how to ensure expansion against increased automation and replacement of labour by advanced technology, against ecological imperatives for self-sustaining economies and against the recessionary decline evident in the transition from an industrial society. One way in which this might be addressed is through the introduction and development of what I shall term "omni-proficeres" throughout the workforce both in and outside employment. This idea is developed in Chapter 12.

Essential Elements of the Economic Curriculum Model

I conclude from the findings of the Case Study and the arguments from earlier chapters that an Economic Curriculum model should focus on transferring value between the labour market and the education / training system. This should be a reciprocal process whereby both systems interact on each other within the overall framework of ensuring economic independence. I would strongly argue that the central distinguishing feature
of an Economic Curriculum model should be the characteristic of Economic Independence. A self-evident rationale for VET is its contribution to a vibrant economy, a competitive labour market and a good standard of living for the workforce. This can be linked to the central distinction between curricula based on an andragogical or a pedagogical approach (Knowles (Ed) 1985). In many senses, adulthood is characterised by financial and fiscal independence and this must underpin concepts of adult autonomy, choice and freedom. A key role of the VET curriculum therefore, must be provision for Economic Independence. In this context unless a core skills, or a competence-based approach, or intermediate training systems, or employer-led training organisations, demonstrate a contribution to both wealth creation and wealth distribution, they fail to be relevant to a successful economic curriculum model. The planning, content and delivery of VET should be fundamentally concerned with a self-sustaining economy, a competitive workforce and the mechanisms for adults to achieve economic independence. This is not necessarily a prescription for exclusive vocationalism, nor does Economic Independence imply
the isolation and absence of community implicit in Economic Individualism. The concept of Economic Independence is broader and less self-centred than the concept of Economic Individualism. In placing Value-Transference at the heart of the model I am seeking to include Economy, Efficiency and Effectiveness as crucial elements of curriculum planning and delivery that has a reciprocal influence on social and economic life. I suggest that the sum of these need not be a mechanistic curriculum bounded by inputs and outputs, but one in which the learning transaction is directly valued in terms of well-being in the community and economic independence for the individual. The curriculum, the education / training system and the labour market should interact together through planning mechanisms which focus on the interpretation of labour market intelligence in a post-industrial economy. In this way the economic curriculum model could transcend the limitations of Monetarism and be based on autonomy rather than dependence. The next chapter looks at ways in which these elements might come together in a model based on the sum of Economy, Efficiency and Effectiveness in a concept of Value Transference. The product of the
curriculum in this development of the model would be equity. Such concepts could be applied to those in and out of paid work, and would blur the current distinctions between 'employed', 'unemployed', and 'retired.'

The structures needed to deliver such tripartite curriculum strategies are barely visible. The roles and responsibilities of all the players - clients, education/training managers, employers, sponsors - need to be identified and integrated. From the evidence of the Case Study it would seem that the LEA role in VET planning could be crucial in mediating these processes at local level, but only if the LEA has a meaningful role. The role of the LEA as education/training manager has all but disappeared under recent and planned legislation. The Government intends to encourage all schools to opt-out of LEA control by 1995 and has already removed FHE institutions from LEA control. This only leaves the LEA a role as a sponsor of VET for its own workforce. This role is weakened by the loss of control of schools and colleges and is limited by the financial capacity of local authorities to invest in training as
an employer. It would seem that the LEA's role as facilitator of planning is doomed. It remains to be seen whether TECs - the other most likely facilitators at the interface between VET and the labour market - have the vision, capacity, and power to act in this way.
VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: AN ECONOMIC CURRICULUM MODEL

PART FIVE PULLING THE THREADS TOGETHER

CHAPTER TWELVE: ECONOMIC MODELS REVISITED

This final chapter of the main thesis restates the economic curriculum models examined and developed in the research and builds on the insights gained from the theoretical and empirical aspects of the study. The chapter concludes with a revised model of Value-Transference based on concepts of Economic Independence, Equity and Ecological Economic Balance and a suggested structure for developing the workforce based on work-based learning strategies.

Earlier Economic Models

In its insistence on 'market forces' policies for education / training and the labour market, the Thatcher Government (1979 - 1990) rejected the role of Government as the primary provider of VET and as the limitless banker of public sector provision, and fuelled a fierce political debate about the role, functions and outputs of schools and colleges. The dramatic changes taking place in the labour market from the start of the Middle East oil crisis in 1976 created the climate for a radical appraisal of these
issues together with a far-reaching agenda for restructuring the education/training system. The continuous period in office of the Conservative Government from 1979, backed by a strong ideological stance based on Monetarism, allowed 'market forces' policies to develop in every sector of public provision. These policies changed its structures, organisation, funding and curriculum. The changes moved beyond criticism of welfare-liberal politics to espouse vocationalism as the fulcrum and engine of wealth creation and economic competitiveness. The prime objective was to disengage the Government from the role of provider and, in so doing, to create and sustain an 'enterprise' culture. Industrial policy, personal taxation and fiscal measures (such as the 'poll tax') reinforced the drive for economic individualism. The underlying theoretical position was derived from classical economics, updated by Martin Friedman's theory of Monetarism. This held that in a market culture where the Government's role was restricted to minimalist regulation, individuals would act from innate drives to maximise their own well-being. VET would become the regulator of the supply of entrants and qualifications to the labour
market and its success in motivating enterprising workers would complete the 'virtuous circle' of a self-sustaining economy. From this position the Government derived three interdependent models governing policy: Monetarist, Centralist and Consumerist.

The main features of these models are summed up as Economic Individualism. In this model it is individuals who should direct the curriculum offer (that is, the content, scheduling, delivery, certification and assessment) through the exercise of purchasing power and consumer choice. 'Individuals' may be parents, students or employers. The essential premise is that the aggregate wishes of 'customers' should determine the viability of the structure. The system should be geared to fund the structure on the basis of aggregate individual choices through the operation of an internal market. Alternative organisational structures are encouraged to weaken the state-sector monopoly and to diversify the model of provision. The resulting competition for resources should drive down the 'price' at which individual organisations will provide VET and ensure that optimum
value-for-money prevails. The operation of pricing mechanisms are crucial to the switch of power (resources) from producers to consumers. The Government set up a range of agencies and non-departmental public bodies to manage the procedures and regulation of the 'market' and to preserve the 'New Right' doctrine of the state divesting itself of direct provision of public services.

The market-forces model seeks to create the conditions of an economic market in education/training systems in which account must be taken of client preferences and demands, the relations of competitive production between providers of education/training, and operating conditions which include quantification of the 'outputs' of the enterprise. Paradoxically some of the monetarist elements designed to empower VET consumers and instil Economic Individualism, have relied on Centralist structures for implementation. This may be seen as a temporary phase while Economic Individualism takes hold, or as a parallel movement to weaken the role of locally-elected LEAs who operate from opposing political doctrines. It probably has elements of both positions. In the 1990s the
Government is seeking to shed its burgeoning bureaucracy created by market-forces policies during the 1980s which created jobs for civil servants (for example, managing Grant Maintained Schools and City Technology Colleges, the Funding Councils, TECs, SEAC, NCC and NCVQ, and the legislative programme) by separating and divesting itself of the executive functions of the Civil Service through its 'Next Steps' programme. It has already moved the Employment Service to Agency status and divested most of its training remit to TECs and the Funding Councils.

I would argue that the Government's insistence on Vocationalism in the curricula of schools and FHE and Centralist curriculum measures such as the National Curriculum and the National Vocational Qualifications (NVQ) structure, should be seen as adjuncts to, and devices to secure Economic Individualism, rather than 'a priori' policies. By this I mean that once the accepted purpose of education / training is to serve the labour market, Vocationalism of curricula and employers' influence and control of VET, become means rather than ends in the design.
Economy; Efficiency; Effectiveness

From an analysis of these policies in Part 1 of the thesis, I presented the primary features of an economic model for post-16 education and training as: Economy (value for money), Efficiency (maximum output from minimum input) and Effectiveness (value-added by the transaction). Elements of Economy cover all the financial aspects of the policy. These include the affordable cost of private and public investment in post-16 provision; the opportunity cost of participation; actual costs; rate of return on investment; economics of research and development and profits. All these aspects can be given a monetary value for individuals, for employers and for the economy. Much of the critical comment on the VET system in the 1980s included assertions 'that the country could not afford not to train to the level of our competitors'. This model goes wider than simple value-for-money, but, for individuals, the affordability quotient starts at the level of actual costs against disposable income. Issues about Economy start of the level of "can I afford it?" - and in Economic Curriculum models the question is asked by individuals, organisations and the state. Their
answers will determine whether or not VET transactions proceed.

The simplistic position of the Market-Forces model that consumer demand will ensure supply at an economical price, has not been supported in this research. Policies such as those to diversify the structure of schools for example, have been introduced in a contracting state of supply with a surplus capacity of school places. Alternative structures such as Grant Maintained Schools and City Technology Colleges do not demonstrate an Economic use of Government resources. Most of the competence-based curriculum structures are expensive to implement with an unproven Economic return. The Economy aspects of the Market-Forces model where they can be quantified are at best uneven and, at worst, not proven.

The second domain — **Efficiency** — covers features which include higher order price-mechanisms; consumer choices; resource management and competition for market share. These aspects centre on achieving maximum outputs from the minimum level of resource possible and cover a more sophisticated level of
interactions between supply - demand - price. I argued in Chapter 2 that the devolution of 'spending power' in public services through funding based on numbers of clients, means that movements of price-mechanisms and consumer interests have a crucial part to play in marketing VET and the economic viability of institutions. VET providers are increasingly forced by 'market' policies to use cost-price surpluses to finance innovation including innovations in the curriculum designed to maintain or enhance 'market share'. Features of the content, design and delivery of the curriculum, and alternative uses for income, may all be influential in the judgements made by 'consumers' about participation in VET. In this way the interaction of price with consumer preferences results in actual demand which in turn forces an evaluation of opportunity-costs on both the consumer and the provider. In this sense the 'consumer' may be individuals, employers, or the Government. With an internal market operating on producers, the producer may also be a sub-contractor to the sponsoring agency and in some sense, also the 'consumer'. Efficiency features operate both to drive down resource input to the minimum level at which the activity can be
sustained, and to maximise the outputs from that level of resource. This is the level of curriculum management which is vitally concerned with quality issues, marketing and the attractiveness of 'the product'. It shows strongly in the tensions between private and public costs. The provider must both attract students and ensure that they are successful since the outcomes will be judged in terms of retention levels, qualifications and employment destinations. Efficiency may operate here in opposing directions: there may be pressures to restrict intake to students who are expected to succeed on these criteria thereby enhancing success rates and driving up the attractiveness of the provision. On the other hand, Efficiency may dictate that higher numbers of students use the resources provided to drive down unit costs. Ultimately these conflicts have to be resolved in value judgements about the Utility of the educational experience which have salience at the level of the individual, the producer, the labour market and the economy.

The third level in the hierarchy of Economic Curriculum models is that of **Effectiveness** as defined
by the value that has been added by the VET transaction. The features of Effectiveness extend all the previous features of cost-benefits of the exchange, the value attributed to the outcomes and its utility as an investment or marketable commodity, to a further level of sophistication. I have previously argued (Chapter 11) that the fundamental purpose of the VET curriculum should be the promotion of Economic Independence. This can only be evaluated in terms of economic Effectiveness. The VET curriculum is the primary motor for the state, for employers and for individuals to correct imbalances in the distribution of qualifications in the workforce and the distribution and quality of demand in the labour market. Corrective measures taken at the level of the individual, the enterprise and the Government for each discrete disequilibrium in supply and demand for labour may counteract each other. Nevertheless, the role of the Government is to promote measures which ensure that the total Utility of VET makes a positive contribution to the economy. This research has shown the existing education / training system produces a negative Effectiveness on competitiveness of current levels of education and training in the workforce.
Plenty of evidence also shows a positive Effectiveness in the workforce capability of some of our major trading competitors (see Chapters 6 and 7).

Economic Utility

In an Economic Curriculum model, motivational aspects are translated into considerations of purchasing, storage and investment. The eventual 'utility' of participation in VET is expected to determine the consumer's view about whether the learning project is undertaken as a capital asset (that is, it will yield a return in the future) or for consumption (immediate use). I argued in Chapter 2 that prospective students realise that VET providers are unable to respond to demands for individual teaching opportunities and therefore they seek to meet 'consumable learning' requirements from friends, books, television etc. However individual choices and decisions are formulated, the price-mechanisms in the exchange will feature strongly. The Government has a role in maintaining the stability of expectations of consumers, for example, confidence in the examination system, in the availability of places for those who achieve the entry requirements for FHE and in funding.
structures for organisations supplying VET which secure at least medium-term viability. Without this the VET market, or sectors of it, could collapse from lack of consumer confidence and infrastructure support.

Towards a Post-Industrial Curriculum Model

Earlier Chapters have described the background and impact of failures in the British VET system and shown that many features can be ascribed to the struggle to accommodate a post-industrial economy. The movement from a land and physical capital-based economy and the maturation of industrialisation are processes affecting most major economies. These forces produce cataclysmic change in the structure of organisations, the use of technology and advanced communications, and production values. These all affect the structure and organisation of labour and the content of employment. Many of the changes I have described as due to the transition to a post-industrial economy (some commentators have called this de-industrialisation) became inextricably linked to the political ideology of the British Government from 1979 onwards. Kerr's analysis of industrialisation (1960) pointed out that
the process affects the structure of society and all its institutions (see Chapter 9). If this holds true for post-industrial changes, it is unsurprising that the period is characterised by upheavals in social, political and economic structures, assumptions and values. The factors that influence assimilation of these changes include the level of technology, natural resources, education and training systems, level of population and financial resources (Kerr et al. 1960:98-101). To these can be added tensions about the degree of state control and private enterprise, Consumerism and Economic Individualism.

British education / training policy since 1944 has fluctuated between Keynesian ideals of public ownership and social welfare spending on public services designed to promote a more equal society - without upsetting existing power brokers too much - and Monetarism with its tenets of Economic Individualism and Market-Forces policies. In the post-industrial scenario, it may be that neither of these polarities in economic theories sufficiently address the impact of advanced automation and ecological imperatives.

"The sheer complexity of economic life forces the
It is already possible to see the effects of transnational companies' search for minimal labour costs on national economies. These, and many other effects of global trading, are largely outside the control of national Governments. Technology is already replacing jobs through use of a few highly trained workers controlling production processes by computer. Keegan (1993) points out that some of the world's largest trading corporations (such as the computer software giant Microsoft) employ very few workers and the trend is growing. The successful employers of the 21st century will not necessarily be the source of job creation or maintain a local labour force.

Value-Transference

Previous chapters show the existing relationships between VET and the labour market to be largely inadequate for a post-industrial economy. I propose that the key element of a successful relationship would be Value-Transference - that is the interaction between the outcomes of VET and the outcomes of the
economy should demonstrate reciprocal transfer of values based on the assumption that economic independence is the basis for both systems. The emphasis should lie in developing the workforce so that those in paid employment and those out of employment have sustainable economic autonomy. The vision is of a population able to support its members through all economic phases. The motor for wealth creation is primarily the workforce in paid employment, but other systems such as voluntary skill-exchanges and community support roles should be developed as culturally viable alternatives to paid employment. The post-industrial economy is characterised by global enterprises with small workforces, high productivity and significant contributions to GNP. Therefore a return to a pattern of employers with large local labour forces is unlikely and Value-Transference initiatives are essential to maximise the contribution of the whole workforce, both inside and outside paid employment.

Husén (1986) advocates a 'learning society' in which recurrent education and lifelong learning are the most adaptive systems for the demands of post-industrial
labour markets. In this model, good general initial education - learning to learn, skills with people, communications (including foreign languages), mathematics and categorisation skills - are the foundation for lifelong education and training. For the child the paramount goal of education should be to instil:

"a flexibility of mind: the readiness to accept change and appreciation of the need to learn more - above all, to relearn much of what has already been learnt" (Husén, 1986: 140)

In the labour market, increased technology and expansion of service occupations will increase the qualifications hierarchy. Workers in these occupations will be required to be well educated and regularly trained and retrained. They will require:

"... high-level trainability, which is made up not only of the ability to learn complicated and abstract technical procedures but also of decision-making skills, initiative and the ability to deal with complex organisations inside and outside the job world. Such skills which can be applied on a wide - and, in our rapidly changing society, unforeseen - repertoire of situations and tasks, constitute the coping power that is required of highly qualified manpower in our society." (Husén, 1986: 168)

It is not yet clear whether these features will extend below the upper strata of the labour market. It is possible that, as VET levels in the workforce generally rise, the qualification levels of lower
level occupations will also rise.

Gelpi expresses the issue of correspondence between education and the economy in terms of the structure of the labour market:

"The problems posed for education by the different mobility and by the need to create jobs are numerous. Among such problems are: the relation between general education and more specialised vocational preparation; the relation between and integration of job creation at the local level and that of the national and international economy; the protection and strengthening of industrial employment or the bold planning for and development of non-industrial employment especially the service sector." (Gelpi, 1985: 55)

A recent paper by the Presidency of the Commission of the European Communities (June 1993) entitled: Entering the 21st Century: Orientations for Economic Renewal in Europe, gives the priorities for education systems as:

- learning how to keep on learning throughout our lives; combining knowledge with know-how;

- developing each individual's creativity and initiative;

- establishing the right of each individual to lifelong training.

(Commission of the European Communities, SN 180/93 page 24).

A report by the World Bank (reported in The Guardian 8
July 1991) spotlights the spectacular annual growth rates of economies such as Korea and attributes this success to: investment in people through education and training, fostering competition alongside interventions which give protection to infant-industries, integration in the world economy and macro-economic stability. All these trends point in the direction of universal entitlement to adult education within a credentialist society.

An Ecological Model

Ecological concerns are already influencing the acceptability of products by consumers and Governments. A delegate from Zaire in West Africa on a trade mission to the UK said recently in a radio interview that his Government was only interested in working with foreign companies who would take responsibility for the protection of the environment through self-sustaining technologies (BBC Radio 3, 27 March 1993). These trends will surely prove irresistible.

My analysis attempts to develop an Economic Curriculum model based on naturalistic assumptions derived from
The historical context, which offers an alternative 'Ecological' model. This model could provide a more effective basis for policy than the polarities of welfare-liberalism espoused by educationalists and social commentators at the start of the period and Economic Individualism espoused by the Thatcher/Major Governments in the 1980s and 1990s. The Ecological Model may also help to bridge the divide in economics between the control espoused by Monetarists and the more open risk structure favoured by Keynesians. Whereas the Monetarist theory is premised on monetary values for all social transactions, I propose that the Ecological Model should be premised on Resources. I suggest that the primary aim of a successful post-industrial structure for education/training systems must be to enhance the transfer of value from education/training to adult life. Such a model would recognise the primary importance of economic factors in the lives of adults. I want to move the debate on from consideration of 'inputs' and 'outputs' towards consideration of the transmission of values which include concepts of Economic Independence and Ecological Balance.
Economic Independence is a definitive characteristic of adulthood and applies to all sections of the workforce, whether in paid employment or not, and whether actually in a state of economic independence or not. Whatever their choices, aspirations, capabilities or opportunities, it is an undeniably adult state - as opposed to child state - to be capable of economic independence. Therefore, this would seem to be an inescapable criterion of the VET curriculum. Economic Independence in this model means providing acceptable employment for the active workforce and support for those unable to be active in the labour market at a level which recognises the social obligations of adults. The concept extends the Economic features of the model to take account of all resources - including those expended on social care, maintenance of the environment and civic duties - in addition to monetary elements. In this model, credentialism may be more crucial to the successful integration of values between the labour market and education/training than seeking a match between the social structures of VET institutions and organisations in the labour market.

Ecological Balance means a state of equilibrium
between the economic macro-level (the economy), the micro-level (the labour market) and individuals which is self-sustaining and non-exploitive. I suggest that the criteria which should underpin VET policy in a post-industrial society should relate to an equilibrium which maintains prosperity but not at a huge cost to the environment, not through unsustainable technologies, and not through dehumanising work-practices. If this framework operated for the labour market, the VET curriculum could reflect its aims of sustainable wealth creation and distribution. A successful economic structure should be able to support all the workforce both in and out of work, either by their individual efforts or by sufficient wealth creation to support those not active in the labour market. An Ecological Model would embody elements designed to maintain the natural environment at an optimum state. This means that economic policies must embrace transport, urban, rural and social policy alongside education and training and labour market support. An economic policy in these terms would seek to ensure that the well-being of the state, the economy and the individual is encouraged.
Structures

A successful, self-sustaining organisation of the labour market would provide the education/training system with a pivotal role in the maintenance of equilibrium between supply and demand in the labour market, the support of economic competitiveness, and the conditions for individual economic independence. The correspondence between planning VET for a successful labour market would be based on using labour market intelligence (LMI) at each level of the labour market in a consultative process which included consumers, taxpayers, employers and Government agencies. The VET/labour market structure for entrants to the workforce would be either full-time VET including workbased-learning strategies, or workplace activities combined with part-time VET. The only practical difference between the two patterns would be the amount of classroom-based VET in an individual's programme. This would be determined by the required theoretical or research elements. The essential structure would be a seamless interchange between VET systems and labour market organisations. This structure would replace intermediate training schemes and absorb the 'unemployed' category of the
workforce. LMI would be widely available to prospective learners outside paid employment to enable them to take into account occupational competencies, employment prospects and career development. Similarly, VET information would be widely available to workers and would contribute to individual career planning and organisational training plans.

Developing the Workforce in Paid Employment

The economic perspective claims that flexibility enables workers to achieve work satisfaction and economic self-sufficiency and that this is justification enough for education/training systems to be fundamentally premised on the labour market. I argued in Chapter 8 that, by comparing output and productivity between workforces with differing levels of qualifications, the justification for upgrading workforce skills is apparent. On the grounds that pressures on the labour market are international, unpredictable and novel, a competitive labour market can only respond with a well-trained (and continually training) workforce.

The workforce in paid employment of around 25 million

12.23
people far outnumbers those unemployed (around 3 million) and those on training schemes (around 1 million). The skill and qualifications of those in work therefore have an immeasurably larger impact on the workforce's capacity to sustain innovation and competitiveness. For social and political reasons the Government's vocational interventions in the education / training system between 1981 and 1991 have concentrated almost exclusively on people outside the labour market (see Chapter 10). Effective organisation of the labour market must include structural retraining and updating focussed on increasing productivity in a self-sustaining economy. The structure for this is likely to mirror adult education structures in Europe - and UK employment and training practices must at least keep in step with minimum standards in Europe or the current decline cannot be arrested. The dominant strategy should encompass recurrent education and lifelong learning - in part to replace the system of continuous youth education - as the most adaptive system suited to post-industrial labour markets. Husén points out that a better educated workforce will demand more participatory work organisations and be less docile (Husén 1986:166).
Adult education (used here to denote those over 19 years of age studying in FE colleges and Adult Education Centres, undergraduates over 21 years and post-graduates over 25 years of age) in 1990-91 comprised 2.56 million people in FE and AECs (Hansard, 21 October 1991 col:362) and 274,800 HE students (Hansard, 30 June 1992 col.453). These figures show a larger volume of learning projects undertaken by individuals in their own time and (frequently) at their own expense than the total number of people in intermediate training schemes. While these figures include retired people, they substantially relate to those in work, unemployed people and others wishing to enter the labour market not defined as actively seeking work. These resources must be harnessed to the strategy for a competitive workforce.

Intermediate training systems of prevocational training for school leavers and vocational retraining for adults may have a transitional role in the preparation of those needing intensive basic skills training and in maintaining familiarisation with work patterns (provided that some of the training is work-based). However, the current pattern of measures is
too insignificant in volume, and requires extended timescales, to be the main vehicle for redressing skill shortages in the current labour market. These must be addressed by direct measures which update and retrain the existing workforce through the primary employment market which uses a high level of qualified workers. Primary sector employers must lead an organisational training culture to ensure a well-motivated, appropriately qualified workforce. Small firms are often unable to provide for their own training requirements so, if they are to avoid marginalisation, particularly when the internal labour market is weak, small firms must have training support from larger firms. Core organisations must be supported to operate management strategies for training as a non-productive function of the enterprise. This would encourage an internal and external market for qualifications and mobility and transferability within the workforce. Core organisations should operate medium to long-term training strategies and maintain reward/incentive systems as an integral feature of the productivity/qualification ratio. In other words, it is essential to recruitment and retention of
appropriately qualified workers that the core organisations maintain their position as major institutions in the market for labour. The secondary market for labour is less dependent on high level qualification and strongly features reward systems as an outcome of productivity and operates selective training strategies linked to productive functions. An understanding of these strategies is crucial to the success of interventions designed to promote a universal entitlement to training with employment. In the strategy I am proposing, the major VET institutions would concentrate on relationships with primary market employers to provide 'capital' education / training programmes. Individuals would invest in such programmes for economic reasons, that is, acquisition of qualifications would be rewarded with pay increments. This would apply to employees and non-employees. Those outside paid employment would be paid for acquiring qualifications - perhaps on a 50 per cent while studying and 50 per cent on achievement basis - at a level sufficient for maintenance of themselves and their dependents.

Work-Based Training

The strategy and structure I am proposing for a post-
industrial VET curriculum must maximise the potential of work-based training. Government interventions should be devised to encourage employers to structure a variety of training experiences across the horizontal and vertical divisions of labour which currently confine the breadth of training available in the workplace. Onna, Feijen and Kraayvanger (1990) suggest that re-integration does not occur spontaneously and requires conditions in which employers perceive the cost-benefit of a learning provision. The availability of work-based experience and training depends on economic buoyancy. In periods of contraction of the labour market, the number of workplaces is reduced and the cost of supervision is more likely to be counted as an overhead not an investment. The Government could devise support to mitigate these effects in recessionary periods.

Learning Potential of the Workplace

The Economic Curriculum model must feature the dynamic interaction between the objective and subjective features that enhance the learning climate of work. Objective influences include the introduction and
presence of technology, reorganisation of labour practices and the effects of socialisation with colleagues and employee organisations. The conditions conducive to learning include an appropriate match of qualification and level of work; opportunities for breadth and depth learning, especially new learning, in interaction with others; and opportunities for formal and informal participation in management tasks (problem-solving, decision-making, supervision, mediation) etc. Subjective conditions which enhance the learning potential of the workplace include

a) receptivity to learning: disposition, motivation;

b) positive experiences and utilization of previous learning; and

c) sufficiently differentiated coping strategies to give appropriate responses to internal and external learning opportunities.

(Onna, Feijen and Kraayvanger, 1990)

A VET system designed to support occupational competence would involve the participation of the whole workforce. The whole workforce, in and out of employment, should have an entitlement and expectation, that VET will be a regular activity of adult life. The Economic Curriculum model aims for
the majority of the workforce to possess at least an adequate level of general knowledge and core skills, strategies for 'learning to learn', basic social occupational competencies and the expectation of lifelong learning. The culture change that this entails could be assisted by a wide interpretation (and accreditation) of practical skills - however acquired. Qualifications acquired through training structures based on informal and incidental workplace learning (Marsick and Watkins 1990) would provide an accreditation structure for activities which at present are marginalised. Similarly, innovative training piloted by the National Federation of Women's Institutes and the Royal Society of Arts in the context of voluntary work, in accrediting skills which have not previously been certificated could diversify the cultural expectations about the target group for work-based training. Such programmes are likely to be relatively low cost when compared to national employment training schemes because individual and organisational resources are already present and can be harnessed and channelled into the labour market and economic development. Such structures for adult training could be Economic in terms of the Economic
Curriculum model described in earlier chapters. More work needs to be done to prove its Efficiency and Effectiveness, but my experience of inservice adult tutor training suggests that training which takes place in its work context and is structured by the participants, is more effective and durable than separate, formally structured training. On a criterion of Equity, ecological qualification (ecological is used here to denote holistic training strategies incorporating formal, informal and incidental techniques) would benefit women and minority groups who currently do not have equal access to qualification opportunities. On the issue of value-added to the economy I support Watkin's view:

"Whether one adopts the American continuous learning model and decides to change the worker, or the Swedish model and seeks to change the work, rapid changes in technology will drive a massive retraining effort." (Marsick and Watkins, 1990:242)

This entails creating organisations where learning is a conscious component of daily work activities. It is crucial to combine workplace experiences with mechanisms for reflection and dissemination of insights and novel routines. It is arguable whether this process should permeate the total organisation or be concentrated on key personnel. Perhaps too much
Effort has been expended on 'total quality management' and other management practices such as paternal social rewards (annual staff dinners, outings etc.). In manufacturing industries the key variable for productivity is labour costs and even substantial investment in training is unlikely to drive this up. Arguably, increased training drives down costs by reducing waste and mistakes. Ford, for example, in the 1990s have systematically reduced the number of workers required to produce each vehicle to reach the productivity level of their Japanese competitors. It seems to me just as misleading to attempt any increase in skill acquisition without clear objectives both for the level of skills and future employment needs. It is painfully obvious that it is wasteful in effort and conducive to increased alienation of workers to induce higher levels of skills in workers whose jobs will become redundant through technology or changes in the market. While I have argued that ecological qualification should be workbased, that is not to say that the social ecology of training should be ignored in formal training. Incorporating 'learning to learn' into formal programmes would raise awareness of learning as an integral part of work practice and
increase training reflectivity in participants. Marsick and Watkins tackle the problem I have labelled the social ecology of training through action learning (1990:245). Action learning builds learning modules around experience modules using

"a project (experience), seminars in which participants reflect on both content (the problem) and process (learning skills), and back-home experience...The principles of Action Learning can be used in many different formats. They are: (1) that learning be built around experience through a combination of action and reflection; (2) that learning is developmental, and therefore, takes place over time and involves the whole person (and in organizations, the entire system); (3) that people can learn from one another by working together on real problems in collaborative work teams; (4) that personal, implicit assumptions and beliefs must be examined as critically as "objective" reality encountered; (5) that learning is best facilitated by an outside process consultant who can raise difficult issues and ensure that the learning group will get the most out of their experience" (Marsick and Watkins 1990:245)

A Concept of Omni-Proficeres

In Chapter 12 I raised the concept of "omni-proficeres" as an alternative to training for containment outside the labour market which enforces a low-skills equilibrium. The concept derives from evidence (see Chapter 8) that trained workers enhance productivity and competitiveness by producing higher quality goods, coping with simultaneous running of
existing production and prototypes, dealing with process breakdowns without interruption to output, and contributing creatively to improved efficiency. The term "omni-proficeres" describes persons who are skillful in their field and skilled in training and developing their staff in the workplace. The concept is that the workforce should be expanded by every worker with any management responsibilities becoming adept as an omni-proficere. Just as management skills have come to be seen as axiomatic to the successful operation of most tasks and, cumulatively, to the success of the organisation, I propose that the skill of omni-proficeres should become as universal and as embedded as 'being a manager' in post-industrial enterprises. This is not a prescription for simply increasing the number of workplace trainers. On the contrary, omni-proficeres throughout the organisation would replace the discrete training role. Nor is it a recipe for increasing labour costs. The essential justification and performance measure for omni-proficeres is maintenance, or improvement, in productivity. Because every worker would have access to someone skillful in the tasks, experienced in the norms and culture of the organisation and skilled in
facilitation and support, inefficiency caused by untrained workers could be eliminated. The crucial attributes and benefits of the omni-proficere concept embedded in organisations would be that excess and waste from production, marketing or delivery failures would be eliminated. Products, services and processes would be 'right first time' and 'just in time'.

Husén points out that the structure of employment and its relationships to education and training, both at the macro-level of the economy and for the individual, are not immutable:

"We should not take the existing structure of the jobs or the job market as a whole for granted. We know, by ample statistics, that the entire market, from manufacturing to service, is changing. We are, though, perhaps not aware of what could happen at the micro-level to the particular job, when the incumbent becomes more educated. There is evidently an interaction between the job structure and the competence of the job holder, so that the job could be restructured in order to fit more closely the qualities and capabilities of the graduate who takes it...

It is by no means divinely ordained that education should provide the basis for employment. The world of work may have to be adapted to the capabilities, needs and aspirations of people. This interaction between education and work is strengthened by the fact that exit points from education do not necessarily correspond with entry points into employment, nor to careers that embrace the remaining active life."

(Husén, 1986:166)
The concept of Omni-proficeres could incorporate the alternative training model suggested by Marsick and Watkins (1990) in which work-based incidental and informal learning is incorporated and validated within organisations.

"Informal and incidental learning often take place under non-routine conditions, that is, when the procedures and responses that people normally use fail. In such cases, people may become aware of many tacit, hidden, taken-for-granted assumptions" (Marsick and Watkins 1990:6)

The theoretical basis for the omni-proficeres concept reflects the position of Mezirow (1977) in (Reedy and Woodhead, 1980) and Marsick (1987) and Marsick and Watkins (1990) on theories of workplace learning. These theories recognise that workplace learning may be instrumental- that is, task-orientated problem solving; dialogic - creation of consensual norms; or self-reflective - the way people understand themselves

"While it is possible to learn in any of these three domains separately, in the workplace, learners often set out to solve a task-related, instrumental problem and end up encountering both organizational norms and self-perceptions, which may involve norms carried over from family, church, and ethnic background."
(Marsick and Watkins 1990:53)

This is not a return to social-welfare policies for the workforce. The model is firmly located within an
economic framework which takes account of the social relations of work and non-work. It attempts to overcome

"public policy... dominated by a work/achievement ethic that is obstructing our society's capacity to benefit from real human creativity and energy"
(Field 1990:53)

My economic model aims to offer alternatives to the industrialisation models of existing structures. This necessarily involves fantasy and lateral thinking as a means of circumventing existing patterns. The model is intended to be a starting point for a new departure and an answer to

"[The real problem remains] of national and individual poverty of aspiration. This is produced by a system that fails young people, and by the separateness between 'education' and 'life', as well as still in many minds between 'industry' and that which is cultivated and civilised."
(Duke 1991:233)

The concept could also ease some of the assessment and curriculum issues around competence-based VET in that competence acquisition could be part of the preparation of omni-proficeres and not the end point of occupational competence. Chapter 6 illustrated the problems of the competence-based curriculum that concentrates solely on observable behaviours in known contexts and the problems of the:
"discrepancy between what professionals say they do and what they do because they plan to experience certain things (action experiments) but they meet unexpected events which influence their thinking and change the way they frame the situation" (Marsick and Watkins 1990:122-3)

In this way the social conditions of work and its novel situational contexts which have so far bedevilled the attempts to isolate occupational competencies, could be absorbed. The omni-proficere would be a conduit for recognition of the Value-Transference of informal and incidental learning built around occupational competences. The problems of the separation of learning and work of updating and maintaining work familiarisation while acquiring skills would be avoided. A new organisational structure should extend to public organisations such as educational institutions, libraries and job centres. In this way, education advisers and VET providers would develop parallel expertise in the skills of omni-proficeres and incorporate the same production values. The process would be reciprocal with employers exposed to VET values exemplified in educational institutions. I can only sketch these at this point since these ideas are at the end of my research not at the beginning, but I suggest that VET
values might include reflection-in-action, problem-framing (Schon, 1983), the longer timescales of pure research, qualifications as capital resources for individuals, organisations and communities and the validation of situational knowledge (Eraut 1988).

Conclusions

The hypothesis developed at the start of this enquiry stated that:

an economic curriculum model for post-16 VET based on concepts of Economy, Efficiency and Effectiveness would improve coherence and Value-Transference between post-16 VET and the labour market.

This research has attempted to assess the salient features of the interface between the education / training system and the labour market and the main Government interventions designed to improve coherence in terms of this hypothesis. The enquiry has inevitably been limited and incomplete and has raised questions which I have not been able to answer within the research framework. These limitations will be explored in Chapter 13 - Reflections and Epilogue. I conclude that the evidence does support the hypothesis in general terms. However, the monetarist model is flawed and the VET interventions of the 1980s
and 1990s have failed to address the problems of an inadequately structured education / training system and an out-moded, inflexible labour market.

In the course of my research, the Economic Model has been redefined and broadened. It can now be stated as:

the economic model for vocational education / training and the labour market should be based on concepts of Economy, Efficiency, Effectiveness and Equity and ensure reciprocal Value-transference between VET and the workforce in a framework of Ecological Balance.

The features of Economy, Efficiency and Effectiveness are pertinent to an Economic Curriculum Model for VET in the transition to a post-industrial labour market, only if the model includes Equity and Value-transference. Without these concepts, the mechanistic limitations of the monetary values of the Market Forces model will become overwhelmed by social inequity and ennui. The model must be reciprocal: that is, the values of the education / training system should influence the structure and conditions of the labour market as well as the education / training system recognising the value of vocationalism. In the redefined, reciprocal model Economic Individualism is replaced by Economic Independence which takes social
resources into account as well as monetary values. The revised model is framed within a concept of Ecological Balance which recognises that the labour market should operate through self-sustaining technologies which do not exploit the natural environment, nor the social fabric. Economic Independence should operate for the whole workforce, not just the workforce in paid employment, recognising community and voluntary labour in a restructured labour market. Labour market restructuring would include flexible use of working and leisure time. The labour market would recognise tasks undertaken in social settings such as elder care and alternatives to state social and health care. I am proposing that the grant-aided voluntary and charitable sector should be expanded and recognised as legitimate alternatives to employment with a commercial enterprise, and as alternatives to private providers. Finally, I suggest that the workforce in employment should be expanded by skilled workers taking on the role of Omni-proficere. They would train and support other workers so that high levels of quality, creativity and innovation were maintained in the design and delivery of products and services. The role of Omni-
proficere would become as familiar an adjunct to occupational tasks as 'management' has become in the last 20 years. The combination of a highly trained workforce and sustainable technologies would increase productivity and competitiveness to enable the workforce outside paid employment to be sustained in Economic Independence. The level of support would not be as high as for those in paid employment, but the variety of structures in the labour market would provide choices in employment and leisure. The concept of the unpaid workforce supporting those in work would reverse the 'benefit dependency' culture which currently beggars many Western economies. The Government's role would be to ensure provision of support services such as transport networks, child and elder care arrangements and vocational education and training at all levels outside the workplace, in the community, at work and in educational settings.
"What is offered here is an approximation to reality, an account derived from the experiences of a single researcher, with all the problems of selection, chance and bias that entails" (Ball, 1981: xviii)

EVALUATION OF THE RESEARCH

This final postscript to the research looks back over the enterprise and seeks to identify its strengths and weaknesses and lessons to be drawn from the whole, rather than the sum, of its parts. The section concludes with thoughts on what avenues are open for further study.

Context

The research is now dated. This is particularly evident in the Case Study Report (Chapter 3) written in 1990-91. For example, unemployment in London since 1990 has risen to 6 percentage points above the UK average, and by 230 per cent in West London as a result of contraction in the aerospace industries (Corporation of London Research 1993). Assumptions of a continuing economic boom permeated the planning...
expectations; it is only with hindsight that we know that in 1990 the economy was already in decline and heading for deep recession. Other parts of the research and discussion have been overtaken by events. GCE 'A' level results have improved markedly since 1988 to nearly 20 per cent of candidates now gaining qualifications for higher education. Policy-makers are seriously considering how vocational qualifications can have parity of esteem with academic qualifications; a broader academic curriculum is mooted. Training and Enterprise Councils have acquired experience in managing VET and some innovative practices, particularly for adult training and retraining, are beginning to replace the discredited youth and employment training schemes. Many of the ideas that emerged during the research now seem familiar and unremarkable. Political ideology has been tempered since Margaret Thatcher lost power in 1990; educationalists have accepted standardisation of the school curriculum; education and training would now seem incomplete without vocationalism at all levels in the education and training system; privatisation of public services is seen to have some benefits; economic policies no longer strive for
untrammelled growth; concern for the environment pervades mainstream commerce; the labour market has become adjusted to high unemployment levels; many employers accept the economic case for a trained workforce...

So is there nothing more to say? Well, yes. The UK still lacks a credible structure for vocational preparation of entrants to the labour market. The purpose and organisation of VET within the cycle of expansion and contraction in the economy does not inform VET policies. The vocational qualifications structure continues to confuse individuals and employers; the place of knowledge and creativity in competence-based training and assessment is unresolved. There is still no national framework for the training, retraining and updating of the workforce in employment. The voluntary and private VET enterprises of individuals are not maximised by state recognition and integration into a comprehensive system of adult education and training. Government VET policies fail to co-ordinate labour market intelligence at any level with the objectives and resources for education and training. Market forces
policies are an inadequate basis for the structure and delivery of VET. No vision of a competitive economy served by a well-trained workforce in a well-qualified society has yet been articulated by the Government ... 

The issues and events that have changed or become commonplace, can in part be attributed to the passage of time. The inbuilt obsolescence of all research, the natural pendulum of thesis and antithesis, the familiarity that comes with the trading currency of ideas. However, in evaluating the research in this post-script, I shall suggest something more fundamental than normal processes can be derived from this study. There is a 'fractal quantity' about this attempt to describe the interface between VET, the labour market and Government policies - that is, it is impossible to measure decisively, it increases indefinitely the more closely you examine it (Mabey, 1993: 14). Of course, this is because the education and training system centres on the indeterminate qualities of learning and changed behaviour, and because the labour market is amorphous and in constant flux. It is also because of the curious relationships between policy-making and the
real world.

Insights

One of the most unexpected and interesting issues to emerge in this research is the relationship between research and policy. It is evident that much of policy-making is not driven by research. My experience of advising Ministers on policy issues is that research is more likely to be commissioned to find out how to implement policy than to delineate policy itself. In the formulation of policy civil servants assemble information and statistics to describe a problem or set of issues to be addressed. They rarely set the agenda and always frame the policy advice taking account of the terms in which the issue is raised by Ministers. Thus policy may be underwritten by research, research does not under-write policy-making. Husén (1986) quotes Richard Crossland (when Minister of Education) making much the same point:

"[Using research to determine policy] implied that research can tell you what your objectives ought to be. But it can't. Our belief in comprehensive [education] re-organisation was a product of fundamental value judgements about equity and equal opportunity and social division as well as about education. Research can help you achieve
your objectives ... But research cannot tell you whether you should go comprehensive or not - that's a basic value judgement." (Husén, 1986: 194-5)

This raises serious issues about the nature of policy-making in a research vacuum. The market forces model that underpinned much of the Conservative Government's policies from 1979 to 1990, self-evidently derived from strongly-held value judgements - the mainspring of policy-making described by Crossland. And it was just this strong ideological construction that produced strong opposition from those holding opposing political views, even though, at times, some opponents desired change and supported some of the new directions. As Lawton (1992) points out, it is hard not to support the aims of enterprise, individual autonomy and the breaking of old monopolies. It is:

"difficult to be against 'choice' in principle, puts one in the category of 'knowing better'" (Lawton, 1992: 83)

But in the search for cogent opposing views and evidence to back heartfelt antagonism to such policies, the anti-marketeer looks for factual empirical data to present a rational opposing case. This may be fallacious. What may be required is a strong opposing ideology. This is the "poverty of aspiration" for an alternative system that does not
fail young people, does not separate 'education' and 'life', 'industry' and "that which is cultivated and civilised" (Duke, 1991: 233-235). This research has illustrated the epistemological trap of seeking knowledge to refute a philosophy, of compiling results to invalidate beginnings, of exposing the dynamic of a socio-economic environment to confront an absolute idea.

The problem is that researchers trained on objective rationalism take care to hide their ideology, their subjective experience, their felt commitments. They are likely to eschew 'symbolic interactionism' (Payne 1990b: 78) which accepts the "particularity of individual experience and interpersonal relationships" in favour of scientific rigour - which may be spurious in addressing social issues (Payne, 1990b: 79). Payne believes that what people actually say in interactions with each other can be interpreted as a symbol of reality that is constructed and reconstructed into meaning by the actors for whom it has most meaning (1990b: 80-83):

"Thus far from qualitative methods being a source of bias and scientific inexactitude, they allow a more complete picture of the social world than would otherwise be obtained" (Payne, 1990b: 84)
Qualitative methods can take account of social and political factors which would be difficult - if not impossible - to include in quantitative research. However, this cannot be a prescription for the lone researcher to ignore the currency of ideas in an academic community. The isolated worker, above all, needs access to valid points of reference. The process of discussion and dissemination of ideas in which

"lasting and substantial contributions to the discipline are sifted from the ephemeral and irrelevant" (Husén, 1986:188)

is vital. Such reference points must somehow be combined with the work of the researcher which is

"by definition anti-bureaucratic, i.e. informal, innovative and unguided by timetables" (Husén, 1986:10)

The researcher is required to go beyond "a short-sighted scrutiny of documents" (Schon, 1986:177) to unloose the restraints of technical rationality and to experiment within a reflective frame.

"The dilemma of rigor or relevance may be dissolved if we can develop an epistemology of practice which places technical problem solving within a broader context of reflective enquiry, shows how reflection-in-action may be rigorous in its own right, and links the art of practice in uncertainty and uniqueness to the scientist's art of research." (Schon 1983:69)
It is not enough to bring experience to bear on the unique elements of the reconstructed (reframed) case:

"the adequacy and utility of his new view must be discovered in action" Schon (1983:141).

Such discovery means combining exploratory, 'move-testing', hypothesis testing research into a transactional framework in which every activity affects every other. One framework for this which Schon beautifully illustrates is in operating in 'virtual worlds'. Schon's example is the architecture lecturer who draws out answers to reflective questions which guides his student to fresh insights about her design problem. The lecturer literally draws over the student's design to illustrate a different approach. He does not draw his solution, rather he uses his own sketching to reframe the problem. In order to do this the lecturer draws on his wide understanding of different approaches to the underlying problem but leads the student through a process of problem setting rather than solving the problem as she framed it. The drawing creates a 'virtual world' where problems can be played with, where real world distractions can be avoided and solutions can be implemented without any unfortunate consequences. Virtual world activity must be deliberate. Although the experimenting context
combines empiricism with serendipity it is not undertaken inadvertently; this is not the incidental learning described by Marsick and Watkins (1990) which is a by-product of formal or informal learning.

"The enquirer must impose an order of his own, jumping rather than falling into his transaction with the situation" Schon (1983:163)

The paradox is that in controlling the situation, the enquirer must also risk being further confused and of inviting more uncertainty. It is perhaps in the nature of higher order skills applications that the position of the practitioner is necessarily ambivalent and tenuous. These are features of enquiry which are open rather than closed, creative rather than technical, driven by means not ends, essentially universal and private. All this is impossible for the policy-maker.

This is then both the strength and the weakness of this research: strength that the interactions and outcomes of an ideology have been examined through another discipline, constructs and evidence - economics, and through the words of policy-makers; weakness that the conclusions are untenable in terms of policy-making - and therefore an abnegation of my declared aims.
The other side of this dilemma of policy-making in a research vacuum is the process of translating value judgements into policy employed by policy-makers. My experience indicates that, in seeking support for action based on value judgement, the policy-maker may consult statistics and seek the views of powerful interests. VET policy in the 1980s demonstrated a view of market forces that transposed the experience of entrepreneurs onto a set of social transactions. The policies for education and training were predicated on concepts of buying and selling - price-mechanisms, consumerism and promotion. The desired outcomes of these policies were therefore limited to the vision that education and training organisations (and their users) would make profits or go out of business. In fact, markets are composed of social interactions on which the economic exchanges depend. Markets provide the focus for the juxtaposition of private and public lives, home and community and an essential manifestation of human interdependence.

These confusions between the mechanistic and the human dimensions, the rational-empirical and the
ideological, in policy-making in a social and economic framework, are echoed in the research. In producing a 'snapshot' of policy-making and its attendant real-world interactions in the Case Study I constructed one of the building blocks of the Economic Model that points up the inter-dependence of VET and the labour market and the reciprocity in the model. This is fundamental to the model and also difficult to integrate with the rest of the research. In a curious way, the Case Study seems both historical and futuristic. Historical because it is fixed in time and place, futuristic because it gives a small, imperfect glimpse of a more rational framework for VET policies which the Government ignored almost before it became established. The strongest insight from the Case Study is that the Economic Model cannot only be a Curriculum Model, but must necessarily be interactive, and held in tension with, labour market intelligence. An Economic Curriculum Model embodying concepts of Economy, Efficiency and Effectiveness makes no sense without a framework of Economic Independence. Replacing the Market Forces concept of Economic Individualism with a concept of Economic Independence brings in a concept of Equity. A
diminishing pool of the workforce in employment must be supported by the workforce out of employment - rather than the other way round. In a post-industrial society, an Ecological Balance of self-sustaining technologies and environmental enhancement are increasingly axiomatic to economic prosperity. Value-transference between VET and the labour market through the value-added by education and training to the invention, production and utilisation of goods and services is more significant to the economy than whether it is based on manufacturing or 'intelligence' industries. The significant discovery is that of the curious relationship between the interactions of VET policy-making with the fluidity of the labour market and the virtual worlds of education and training.

Limitations

There are of course other weaknesses in the research: lack of specificity in the labour market analysis; insufficient examination of all Government VET policies, schemes and programmes; absence of the very latest statistics; failure to cover all the strands of vocational education and training. These may well be typical confessions of every lone researcher at the
end of such an enterprise, but they are limitations.

Personal Benchmarks
The Preface set out the frameworks in which I would approach the research and in which I would evaluate its outcomes. These frameworks were selected as relevant to the content of the study and to exemplify the economic model I would develop in the writing. Thus the enterprise was contextualised as eclectic, purposefully objective, educational and both derived from and contributing to, my experience and life-roles as adult educator, trainer, employee, employer and Government administrator. The competences I expected to utilise in the process of producing the thesis - planning, analysis, communication skills, networking, skills of 'inventing tomorrow'- were to be developed through and by the research. The standards of competence, I suggested in the Preface, would be determined - at least externally - by you the reader. At the outset I was concerned with external evaluation and with the credibility of developing an economic model of the VET curriculum which could be intimately substantiated by my own observable behaviours. The features of the economic model I was
interested in - Economy, Efficiency and Effectiveness - would be the yardstick for the production of the research. All this was present at the outset and has continued to form cornerstones to the work.

The processes of this thesis-development started with reframing the problem. The process Schon (1983) describes as 'problem setting' not problem solving that is the heart of professional action. This is akin to strategic management (itself a higher order skill) described by Johnson and Scholes (1988). Strategic management goes beyond operational control. That is, producing a thesis goes beyond reviewing the literature, conducting the research, collating material, solving problems presented by the results. Producing a thesis involves strategic analysis (understanding the strategic position of the research); strategic choice (formulation of possible courses of action, their evaluation and the choice between them); and strategy implementation (crossing power lines and long term outcomes). These processes are not linear, they overlap; are not discrete; nor orderly (Johnson and Scholes, 1988 :16). This amounts to the artistry of professional practice which goes
beyond technical rationality:

"...this artistry is evident in his selective management of large amounts of information, his ability to spin out long lines of invention and inference, and his capacity to hold several ways of looking at things at once without disrupting the flow of inquiry" (Schon 1983:130).

This is exactly what a postgraduate student is doing and what I hope to have achieved.

WHAT NEXT?

There are many unanswered questions from this research. The more important questions include: How can policy-making interact dynamically with research? What are the precise dimensions of the value of VET in an expanding economy and how can the timescales of vocational preparation be adjusted to the speed of labour market demand? How can training in a contracting labour market be transformed into higher level skills relevant to future labour market demand? In what ways, and with what effects, could labour market intelligence be used at a fundamental level to determine education and training resources? At what stage in the training of the workforce does the culture of a qualified-society become self-perpetuating?
I conclude that the central issue is the lack of vision of an alternative to profit or minimal spending as the measure of the Utility of VET. The Market Forces' model asserts the power of the market to determine social transactions and their price. It holds that the operation of price-mechanisms, of themselves, influence and control the fabric of society, individual choices, options and behaviours. This is, by definition, mechanistic and devoid of the possibilities of higher human consciousness and interactions rooted in aspirations to do better:

"this market approach to education is acclaimed as the most efficient and beneficial to society as a whole. But the paradox is that it seeks to implement the lower levels of learning and to reward the having of knowledge rather than being and the higher levels of learning and human development."

(Jarvis, 1992:154)

The final questions in this research are: can Britain feel, articulate, and enact a vision "to do better" to replace the profit motive for education and training? Can Government and state frame and implement a vision of a well-qualified society? Can society become wedded to a vision of education and training as the vehicle of self-enhancement and the means of experiencing risk, change, development, growth and a self-sustaining economy?
This section describes basic LMI techniques to enable the reader to understand the function and use of LMI in this research. It does not cover sophisticated intelligence systems developed by Government departments and employment research specialists, for example, 'labour market accounts analysis' described in Chapter 9. This technique plots the separate influences of demography, economic activity, employment, unemployment and net worker migration in each region, to produce a measure of job shortfall/job surplus (Green and Owen, 1991).

Labour Market Intelligence (LMI) has been defined by the Head of LMI Branch at the Department of Employment as:

"any piece of information about the labour market - especially the future - which has the potential to help those making decisions about vocational education and training."

(Eric Galvin, June 1989)

LMI is used by Government officials to complement information and ideas on social, economic and political issues, and to:
- provide planners with information on the size of demand (volumes);
- assist policy-makers to match resources to requirements; and
- assist VET providers with information on changing employment patterns, skill standards and shortages, and predicted participation rates.

Many agencies collect LMI including UK Government departments; the European Commission; local authorities; universities, polytechnics and colleges; Training and Enterprise Councils and local enterprise councils (TEC/LEC); development corporations and agencies; employers' organisations, chambers of trade and local employer networks (LEN); individual employers; and occupational training groups.

The proliferation of statistical publications, surveys and databases has been criticised on grounds of sampling error, delays in data processing, and confusion in definitions and timescales (Foley, 1990).
and these continue to be problematical for users of LMI. LMI is often regarded with caution, but used on the basis that any intelligence is better than none!

At the simplest level of LMI (the Demand - Supply Model) Demand is assessed by:

- official labour market statistics;
- CALLMI (Computer Assisted Local Labour Market Information System) which has a time-frame of the present to 18 months ahead;
- economic development surveys, which have a time-frame of 2 to 5 years; and
- skills research, which is futuristic.

- newspaper reports, local knowledge, anecdotal information (referred to as 'soft' intelligence)

Supply is assessed through information from

- demographic databases such as NOMIS;
- age participation rates for further and higher education;
- surveys of employees, self-employed, unemployed, new entrants and those seeking to return to work;
- skills audits.

The first three sources of supply information are historical or predictive based on previous trends; skills audits are generally specific to geographical or occupational sectors.

The Labour Market Perspectives Model uses statistical information coupled with survey techniques to assess employability levels in the workforce; immediate skill shortages; and longer-term skill demands.

Data Sources for Labour Demand:

Employees in employment
Census of Employment
Labour Force Survey

New Earnings Survey
Census of Population
Projections and forecasts
Vacancies notified to Jobcentres
National surveys of vacancies and recruitment
Local labour market studies

Data Sources for Labour Supply:

Current labour supply, by county, age and gender
(NOMIS)
Projected labour supply, by region, age and gender
Unofficial estimates for smaller areas
Local information on closures and redundancies
Unemployed claimants
Employment Services analysis (from Restart etc.)
New entrants: education and qualifications
Labour Force Survey
Census of Population

Data Sources on VET:

Education statistics
DfE Statistical Bulletins
Qualifications and examinations results
Age participation rates
Further Education Student Staff Ratios and Costs
Information on graduates
Employment Department surveys of YT and ET
Training Access Points databases of local VET courses
College Prospectus of courses
Newspaper reports of examination successes and prizes
The following extract is based on my summary of WRFE Plans 1990-93 produced for use by the Department of Employment: Training Agency in 1989-90 (Blamire, 1990).

The WRFE Plans have been further analysed on a points system of Training Agency mandatory requirements for WRFE grants and scored against locally agreed objectives. Summaries of the aggregate scores are given in Appendices 7 and 8.

The extract includes illustrative quotations from WRFE Plans. The sections are headed by relevant guidance from the Training Agency WRFE Handbook (1989).

ANALYSIS OF WRFE PLANS

Aims of WRFE Plans

"This provides an opportunity for an LEA to clarify and articulate its values, purposes and principles in managing work-related FE."

(Para.2.4 WRFE Guidance Handbook)

1.0 The strongest policies for post-16 VET described in LEA mission statements related to the quality, effectiveness and efficiency of the service. All the plans stated that resources should be used efficiently.

1.1 The Training Agency required that planning should be responsive to the needs of the labour market, so it was not surprising that plans emphasised that services should be related to the economy of the area. All plans stated that FE should be responsive or work-related, and most LEAs had explicit policies to increase the involvement of employers in the planning and evaluation of FE.

For example:

"To provide an efficient and effective education system of quality for all residents of the Borough which is responsive and provides for all the diversity of people's educational needs."

Barking and Dagenham
"Every member of the community will be entitled to receive appropriate education and training, according to their varying needs."

Newham

1.2 Partnerships with clients, staff, employers and citizens and a consultative approach to the provision of services were singled out by a significant number of LEAs as a major goal. Most emphasised that courses should be offered at a range of times and places and through a variety of ways including flexible open learning.

1.3 Most plans made strong commitments to the needs of clients. Some LEAs put the client at the centre of all that the authority was seeking to develop in its post-16 provision.

1.4 A third of LEA mission statements referred to the democratic nature of the learning process and almost all of those emphasised that client-centredness should lead to increased personal effectiveness. This was linked also to the requirement to deliver courses in ways which met clients' aspirations, abilities and personal circumstances.

1.5 A significant number of LEAs stated an entitlement to further education for all members of the community and linked this to assisting potential learners to identify their learning goals. Half of the LEAs made a commitment to providing advice and counselling. 60% of these LEAs also supported students with childcare facilities and financial assistance with fees. The number of London LEAs who actively supported adult learners was probably greater than these figures suggest, and a significant proportion considered these policies to be central to their aims.

For example:

"[We aim] to satisfy the learning needs, whether vocational, academic or personal-development, of all those aged over 16 ... to supply learning opportunities and related client services."

Croydon

1.6 Three-quarters of the plans gave an undertaking
to provide for all sectors of the community and to act positively to secure the adequate representation of all groups. Almost half of the plans had policies related to increasing access to education.

For example:

"This authority will continue to promote race and gender equality, equality for people with disabilities as well as those with special educational needs."

Harrow

1.7 60% of LEAs stated an entitlement of lifelong learning for all. This was reflected in a number of statements emphasising the continuous process of education and the importance of participation at all stages of life whether employed or not. A quarter of the plans stated that further education should contribute to the quality of life. There was a recognition that it should not be assumed that there were prescribed limits to an individual's capacity for personal and intellectual development.

For example:

"No limit should be assumed to an individual's capacity for personal and intellectual development in the belief that all are capable of developing their intellect, creativity, personal and social skills."

Waltham Forest

1.8 Most LEAs aimed to ensure continuity and coordination between FE and the school curriculum. The majority also wanted progression throughout the educational system. During the period from 1990 to 1993, several LEAs were intending to rationalise the curriculum between individual colleges, taking account of the provision in neighbouring areas. 60% of authorities aimed to raise the number and level of skills and qualifications gained in LEA institutions. Information technology, economic awareness and references to a European curriculum appeared in several plans.

For example:

"The post-16 education and training service will be wide-ranging, with a broad curriculum provided through
a clear co-ordinated system..." Richmond upon Thames

Consultation

"The plan should be drawn up following wide consultation within and outside the LEA."
(Para 2.6 WRFE Guidance Handbook)

2.0 All LEAs systematically consulted with a range of interest groups including providers of courses and employer groups. Some LEAs noted difficulties in engaging disparate groups and individuals in decision-making that could influence the planning. Nevertheless, meaningful consultation was attempted using some innovative approaches.

2.1 Ways of seeking public views on the local authority's strategy for post-16 VET included presentations at public meetings and sending abridged plans to a range of community groups. Documents were circulated within the local authority at several stages in the formulation of policy. At least two LEAs undertook extensive circulation of draft plans with a questionnaire inviting comments from a cross-section of the community. The use of networks and committees within the local authority was wide-spread.

2.2 Most plans were developed in close collaboration with the staff, governors and academic boards of colleges. College governing bodies were reconstituted in 1989-90 with employers allocated at least two-thirds of places. Most colleges also consulted local employers through extensive systems of course advisory groups for each occupational sector.

2.3 Informal feedback from staff contacts with employers had led to changes in the content and even the type of courses offered, for example, if leading employers in the area preferred one vocational qualification over another, or requested specific vocational elements, or foreign languages or numeracy support for trainees. Increasingly, college work-experience co-ordinators provided updating on employers' requirements. Many colleges had self-financing adult training (PICKUP) units which maintained a database of information on training
needs. This was linked to marketing and market research activities in the college and used to inform the drafting of the plan. Several LEAs included the college open learning co-ordinator and the central admissions officer in their planning groups.

2.4 Many LEA departments had been reformed to accommodate the changes in role and functions required by the Education Reform Act. Part of the reorganisation had been the establishment of a formal group with responsibility for further education planning. This group typically comprised senior representatives of the departments of the Council, providers of education and training and employers. Some planning groups also included representatives from schools, TVEI and Social Services departments.

For example, Hounslow Education had set up an LEA planning group which included the following representation:

* Hounslow Borough College- Vice Principal, PICKUP Manager, Director of Marketing Services
* Adult & Continuing Education - Principal Co-ordinator
* West London Institute of HE - Assistant Principal
* Marlborough Training Centre - Youth Employment Manager
* Open Learning - Project Manager (Open College)
* Equal Opportunities Support Unit Adviser
* Careers Service - Principal Adviser
* Chief Inspector
* Senior Inspector - Post 16
* Assistant Director of Education (FE)
* Assistant Education Officer (FE)
* Professional Assistant (FE)
* Employers - IBM, Hoechst (UK), Cox Associates

2.5 The pattern of involvement of elected members varied with some local authority committees closely involved at each stage of the drafting and some giving delegated powers to senior officials with the final plan being ratified in committee. 40% of LEAs had a formal consultative procedure through the Education Committee.
2.6 Half of all LEAs included representation from their economic development or planning departments in addition to the informal and formal exchange of information and advice. In some cases the WRFE plan built on economic research commissioned by the authority or contributed to other consultative and planning exercises. Education/Industry co-ordinators employed through DES and DTI grants were also consulted by several LEAs.

For example:

"The central themes of this Strategic Plan have been incorporated in the Council's "Hounslow Economic Strategy" (Training and Personnel Department) which has been widely circulated to organisations, business and industry."

Hounslow

2.7 Almost all the plans cited consultation with employers' groups such as the Local Employer Network, the Chamber of Commerce and enterprise agencies. As the Training and Enterprise Councils developed all LEAs intended to establish primary links. Many education officials were active in TEC networks and provided data and advice to influence TEC policies.

For example:

"The LEA... is seeking to take a pro-active interest in the final stages of TEC formation so as to be better placed to develop essential liaison on training and local economic activity."

Hounslow

2.8 The planning sub groups of the London and South East Regional Advisory Council (LASER) were important consultation fora for Local Authority officers and FE managers. The majority of LEAs consulted within these groups at several stages in the writing of the plan. Most LEAs also had additional meetings and exchanged documents with their immediate neighbours.

2.9 Plans were circulated to HMI and the DES by a third of the LEAs. Several others also invited comments from the Further Education Unit and the Further Education Staff College, some Awarding Bodies and Industrial Training Organisations.
2.10 Consultation took place with local authority unions, Trades Councils and the TUC in 40% of LEAs.

2.11 Consultation with groups representing sectors of the community, most notably the Community Relations Council, took place in half of the LEAs. LEAs acknowledged that it could be difficult to engage the community in a discussion of the priorities for further education - unless services were threatened when adults particularly would lobby for local provision. The shift in emphasis from a narrow concentration on work-related FE to all post-16 provision could help to generate more interest.

2.12 The views of students and of corporate clients were actively sought by only a few LEAs. Although some courses canvassed students' opinions about teaching and college facilities, LEAs were aware that feedback was rarely incorporated into course planning.

For example:

"...the LEA will encourage the FE providers to further develop their assessment of the employers and students' perceptions of courses."

Hounslow

2.13 LEAs expected to consider and take account of local labour market assessments and the training strategies of the local TECs in drawing up their WRFE Plans. At the time of preparing the 1990-93 Plans, only one TEC in London was operational (AZTEC), the other 8 TECs were at early stages of development. LEAs expected that reciprocal consultation on key issues leading to joint action would be a feature of the planning in the future.

2.14 After this first round of strategic planning, many LEAs hoped to improve the effectiveness of consultation and to increase the range of individuals and groups contributing to future plans. Some intended to develop formal mechanisms, using executive summaries of the plan and invitation conferences. Alternatively, a low key approach based on personal contacts through existing channels was thought as effective and credible. Most LEAs wished to maintain a partnership with staff, clients and rate-
payers in each phase of the planning cycle.

For example:

"The Authority is aware of the need to strengthen its consultation procedures in order to be more responsive to client needs and intends to introduce the following improvements in the next three years:-

- production of executive summaries
- a conference to which interested groups will be invited
- formal links with planning and economic development, community services and personnel will be strengthened
- links with local trainers such as TECs
- contacts with HE establishments will be developed"

Sutton was in favour of a less structured approach:

"A low key approach based on personal contacts, and using existing channels of communication with particular sectors of the community ...is likely to be more effective and credible than one based on publicity." Sutton

Most LEAs, in some part, subscribed to the main objectives outlined by Newham LEA:

"- the maintenance and updating of the list of partners in each annual phase of the planning cycle

- the methodical evaluation of the ...arrangements; and presentation of the evaluation to the partners

- to have in place for the 1993-96 Plan a fully-developed consultation process." Newham

Using Labour Market Intelligence

3.0 In providing labour market analysis, each LEA followed the format recommended in the Training Agency Guidance Handbook (1989). The Guidance encouraged a standard format for coverage of labour market issues but allowed scope for local interpretation. However
local evidence was seldom sufficiently strong on the key issues affecting training provision to yield specifically local proposals and measurable targets. Instead, mainstream views of current issues tended to be accepted at face value. These were variously used to fashion broad principles guiding each WRFE strategy. Most LEAs focused on two main elements: closer partnership with employers and more precise targeting of their training needs; and the potential of groups of individuals who under-performed or who were on the margin of the labour market, as well as those who were displaced by industrial change.

3.1 In formulating their strategic plans, LEAs used Employment Department LMI research and reports. These were used to establish a general framework of training priorities at national, regional and sub-regional level. Each level of reporting contained analysis of key labour market trends, derived from Departmental statistics. These covered: the effects of demographic, industrial and occupational changes on labour demand; and the availability of workers.

3.2 The use and interpretation of LMI required a high level of sophistication which was not always available to LEA staff involved in WRFE planning. The London WRFE team organised seminars led by Employment Department statisticians to assist understanding and use of LMI (see Appendix 1 for a brief outline of LMI).

3.3 For LEAs, the immediate labour market coincided with borough boundaries. Training Agency areas and nascent TECS on the other hand, covered sub-regional groupings of boroughs. There was thus a gap in formal definition of what constituted local.

3.4 In most parts of outer London, local authority planning departments and employment development units were active in providing labour market analysis on a borough basis, drawn from local statistics. Similarly the ILEA used extensive research and statistical data to inform their planning.

3.5 Local authority information was particularly useful in identifying potential developments with a major local impact. Surveys of skill needs at a local level were also used in a few areas to reinforce Departmental surveys. Many LEAs made use of
statistics and reports produced by the Local Authority-based London Research Centre. These were especially useful as an extensive source of demographic data and economic activity (i.e. labour supply) at borough level. Research by consultants and organisations such as the London Planning Advisory Committee, the London Chamber of Commerce and the South Bank Polytechnic, also contributed strongly to discussion of developments of strategic importance in London (for example, Docklands or trends in Central London).

3.6 The extensive background information available to LEAs was clearly influential in the recognition of shifts in employer demand and changes in the supply of workers. The appropriate response to these changes in terms of fine-tuning WRFE was more difficult to determine. In this area the LEAs own operational statistics and feedback mechanisms featured very strongly.

3.7 The declining population of school-leavers and the emergence of alternative groups of clients for WRFE was a major concern for all LEAs. Each plan focused on population trends, school-leaver destinations and projected student demand. This analysis was crucial in determining the extent of action needed to secure a stable client base. The main area of difficulty was lack of sufficient hard information about the potential take-up of training among new client groups, for example, people in the 25-44 age group, educationally disadvantaged groups or those with disabilities.

3.8 Information gathered by market research — primarily conducted by college marketing units — was a key area in deciding priorities for change. It was a pragmatic process addressing both changes in the expressed needs of the local business community and the developing aspirations of individual groups of students. It was also the means of communicating alterations in the content and availability of WRFE courses.

3.9 Formal links with employers, industrial liaison visits, involvement of local employers in college consultative committees, students' work-experience and course teams, were all facets of a general move to
profile the specifics of local labour demand. There was frequently a commitment to systematic collection of information through computerisation of employer databases.

3.10 Canvassing student needs received most emphasis in LEAs with inner-city characteristics. Here a particular aim was the identification of barriers to access and the needs of ethnic minority groups.

3.11 The extent to which the aspirations of students match the needs of industry remained a key consideration for WRFE planning. Monitoring of this aspect was patchy and a prime area for further market research.

Priorities for Action

4.1 The main priorities for action in London included increasing the range and numbers of students in FE, implementing competence-based assessment, improving learner support, improving marketing and better links with employers.

4.2 Increased participation in FE in overall numbers and in access to education for under-represented groups was a priority across London irrespective of the current participation rates.

4.3 The most frequently targeted groups were ethnic minorities, those with learning difficulties, the physically disabled and an increased number of adults, including women returners to the labour market, and unemployed people.

4.4 Strategies included vigorous marketing, additional basic education and language support, extra discretionary awards and developing staff confidence with non-traditional students.

4.5 One of the most progressive features of WRFE was the provision of guidance and counselling services as an integral part of the learning process. This was accepted as essential to recruitment, successful completion of courses and satisfactory outcomes for the student after the course. Independent information advice and educational counselling were available in the majority of LEAs. Some services were linked to a
central admissions unit which advised and enrolled students.

4.6 Careers services had an important role in offering vocational guidance to young people and adults as part of pre and post-course support for learners.

4.7 Assessment of previous learning and educational experience was being introduced in several LEAs with the aim of encouraging adults to recognise their learning potential. Strategies included individual action plans linked to records of achievement and personal counselling.

4.8 Childcare facilities were another important element of learner support for parents with young children. Colleges also adjusted course dates and times to attract parents of school-age children.

4.9 Competency-based courses introduced as National Vocational Qualifications (NVQ) were being developed in each curriculum area. Some sectors were frustrated by the lack of progress in full implementation and a number of courses carried both the previous and NVQ requirements. There was considerable progress in modularising courses and in introducing flexibility through use of Open Learning materials.

4.10 Strategies for improved marketing included market research, customer care and after-sales service. Most LEAs recognised that FE must actively promote its courses and teaching expertise.

4.11 The majority of LEAs prioritised formal links with industry and commerce. Developments included specialised units, education/business co-ordinators and a technology park to foster and expand current arrangements. Compacts linking school achievement with employment opportunities were underway in many parts of London.

4.12 Business partnerships included industrial experience and work-shadowing for students and staff; and employer-representation on course committees. Integration of work-experience for all full-time students on academic and vocational courses should be
in place by 1992 in most colleges.

4.13 Establishing close working relationships with TECs featured prominently in many plans, especially, but not exclusively, where the LEA planning covered youth and employment training.

4.14 The extension of TVEI to the whole 14 to 18 year old age group was underway in 15 LEAs. Colleges were part of consortia with schools and sixth-form centres delivering courses that included science and technology, modern languages and work-experience.

4.15 LEAs used TVEI to help teachers to be more aware of the needs of industry and to relate this to practical exercises in all subjects. Increased training for college staff in guidance and counselling and the use of individual action plans featured in LEA strategies for post-16 institutions.

Monitoring and Evaluation

"The examination of progress towards objectives is a joint activity carried out by the TA and LEA in partnership ... both qualitative and quantitative information will need to be examined."

(Para. 4.2 WRFE Guidance Handbook)

5.0 The Plans for 1990-93 all envisaged systematic monitoring of provision and the planning process. A formal annual review between the Training Agency Director for London and the Chief Education Officer, or their representatives would assess the progress towards objectives for each LEA.

5.1 All colleges in London had computerised management information systems developed with resources from the Training Agency, LEAs and the DES. All LEAs had systems for the collection of reliable and replicable data according to agreed definitions and time-frames, which would enable progress to be measured from year to year. Over the next two years, more information on the quality, effectiveness and efficiency of FE would become available to governors, education officers and government agencies.

5.2 The development and use of performance indicators in FE was gaining momentum. A range of core
performance indicators had been agreed with LEAs and colleges in London. Those selected for monitoring in 1991-92 are shown in Appendix 9. The comprehensive collection of data would provide baseline information against which targets would be agreed for 1992-93.

5.3 Targets were used as a measure by which actual performance could be compared with the desired minimum outcomes. They were unreliable for comparisons of one college with another, but provided indications for further analysis.

5.4 Different performance rates were set for different types of courses and for different modes of attendance. For example, the minimum target for students gaining qualifications ranged between 78% and 85%. Targets for students completing their courses compared to those who enrolled had different rates for full-time students (90%), part-time students (80%) and evening course students (65%) in one LEA. Another LEA varied the target retention rate for college and adult education students.

5.5 There were many reasons - some outside college control - why students failed to complete courses. All LEAs were careful to interpret data appropriately and to use targets as indicators alongside other information.

5.6 Quality control and quality assurance systems were a priority for 80% of LEAs. Course team evaluation, quality validation systems and total quality management were being introduced extensively.

5.7 Inspection and advisory roles had been separated in many LEAs following changes imposed by the Education Reform Act (1988). Advisers were increasingly used as curriculum consultants augmented by external expertise.

RESULTS

The next sections analyse VET provision in London in 1990. This analysis derives from the London LEA WRFE plans 1990-93 and from other sources. A list of sources used in the Case Study is given at the end of the thesis.
WRFE IN LONDON

Providers

6.0 33 Local Education Authorities (28% of the LEAs in England and Wales) were responsible for education and training provision in Greater London. The region offered 14% of the total provision for England and Wales.

6.1 Almost a third of the polytechnics, voluntary and direct grant colleges were in London. Further Education and Tertiary colleges accounted for one seventh of the national total, and a large number of Adult Education Centres and Institutes offered FE courses.

6.2 Recent developments included new tertiary centres in Croydon, the closure of the Merchant Navy College and the Tottenham and Haringey Colleges amalgamating to become the College of North East London. In April 1990, a new college in Tower Hamlets was formed with some parts of Hackney and City and East Colleges and would extend onto new sites in Poplar during the next two years. The boundaries of a number of Inner London Adult Education Institutes had been reformed following the abolition of the ILEA. In Kensington and Chelsea a new Adult College would offer work-related and leisure courses from 1990. All the London polytechnics intended to change their titles to 'University' in 1992 under new procedures governing designation.

6.3 Over 9,500 WRFE students were offered courses by the London Institute (University of London). All the Polytechnics in London catered for some students on non-advanced courses. More than half attended courses at the City of London and Central London Polytechnics. An unusually high proportion (7%) of London WRFE students studied at HE institutes and these institutions accommodated almost half (43%) of the FE students in polytechnics nationally. Over 50% attended evening classes. The main subjects studied were Social Studies, Education, Engineering and Technology.

A list of the colleges and other institutions
offering WRFE courses is given in Appendix 4.

Profile of WRFE Students

6.4 Adults outnumbered 16-18 year olds by more than three to one in Further Education courses. Just over half the students were female, with at least 10% more women than men in evening only courses. Men outnumbered women in day release courses confirming the trend for women to receive less employer-sponsored training.

6.5 WRFE students in London attended: 35% full-time, 36% part-time and 29% evening only courses.

6.6 London residents took 91% of the places on part-time day and evening courses. One quarter of all full-time and sandwich course students were attracted from outside the region.

6.7 Good international transport links and the high reputation of London colleges attracted large numbers of overseas students which accounted for 25% of the national total on Further Education courses.

Student Flows

6.8 85% of students on FE courses in colleges and polytechnics studied and lived in the Greater London area and 15% came from outside the region. These figures obscured the considerable cross-borough flows of students which, in some inner London colleges, were as high as one in four non-residents.

Volume of Provision

6.9 In 1990, precise figures for the volume of WRFE provision were not available. Implementation of computerised management information systems covering all aspects of provision were being developed. The figures presented in this report should therefore be regarded with caution.

6.10 The number of planned WRFE places agreed with the Training Agency for the academic year 1990/91 was A2.16
nearly 247,000 (152,000 in outer London and 95,000 in inner London boroughs).

6.11 The total number of FE places in London was estimated to be around 500,000. These included GCSE, GCE and other general education courses which were excluded from the contracted WRFE provision. In addition, most literacy, numeracy and English as a Second Language (ESOL) provision was excluded either because it was run by Adult Education Institutes or because it was not classified by the LEA as work-related.

Table A2:1

Distribution of WRFE Places by LEA 1990/91

<table>
<thead>
<tr>
<th>WRFE Planned Places</th>
<th>LEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>15,000 - 20,000</td>
<td>Harrow</td>
</tr>
<tr>
<td>10,000 - 15,000</td>
<td>Lewisham</td>
</tr>
<tr>
<td>8,000 - 10,000</td>
<td>Hounslow</td>
</tr>
<tr>
<td>5,000 - 8,000</td>
<td>Enfield</td>
</tr>
<tr>
<td></td>
<td>Croydon</td>
</tr>
<tr>
<td></td>
<td>Brent</td>
</tr>
<tr>
<td></td>
<td>Kingston</td>
</tr>
<tr>
<td></td>
<td>Bexley</td>
</tr>
<tr>
<td></td>
<td>Havering</td>
</tr>
<tr>
<td></td>
<td>Redbridge</td>
</tr>
<tr>
<td></td>
<td>Hillingdon</td>
</tr>
<tr>
<td></td>
<td>Haringey</td>
</tr>
<tr>
<td></td>
<td>Barking</td>
</tr>
<tr>
<td>2,000 - 5,000</td>
<td>Sutton</td>
</tr>
<tr>
<td>Less than 2,000</td>
<td>Camden</td>
</tr>
<tr>
<td></td>
<td>Richmond</td>
</tr>
</tbody>
</table>

*included the London Institute

Source: WRFE Plans 1990-93

Planned Changes in Volume

6.12 The majority of LEAs were planning to increase WRFE provision between 1990 and 1993. Most were expecting this to be achieved through greater efficiency in colleges teaching more students with current levels of resources. Most LEAs also planned...
to raise participation rates and to broaden the profile of students by better marketing, information and student support. An overall 3.3% increase was planned by 1993.

6.13 Short courses for industry, particularly in new technology, management training and scientific updating were a priority. Training for skills in short supply, including engineering, craft and technology; computer professionals; CAD/CAM; accountancy and administration were targeted. Two LEAs singled out assistance to small firms and enterprise training as a priority for 1990-93.

Participation Rates

6.14 Comparison of the numbers of 16 and 17 year olds in education and training between 1983-84 (the start of the WRNAFE planning agreement) and 1987-88 showed an increase in London of 3% for both age groups.

Table A2:2

Main Changes in Age Participation Rates 1983-1988

<table>
<thead>
<tr>
<th></th>
<th>London</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16 yr.</td>
<td>17 yr.</td>
</tr>
<tr>
<td>1983/84</td>
<td>61%</td>
<td>44%</td>
</tr>
<tr>
<td>1987/88</td>
<td>64%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: DES Statistical Bulletin 3/89

6.15 Nationally the participation of 16 year olds remained unchanged since 1983-84. In the same period, the rate for 17 year olds increased by 5%, largely due to the introduction of two-year YTS (see Appendix 2).

6.16 In 1988 London had more 17 year old full-time students than the national average. However, the proportion of part-time students was the lowest in the country, reflecting the tradition in London of jobs without training for young people.

6.17 Averaging of participation rates masked
considerable differences across the region and changes over time. Many students in London attended courses outside the local authority area in which they lived. In order to eliminate the effects of cross-boundary flows, all such students were reallocated to their home LEA - see Appendix 6.

6.18 Harrow, Brent and Barnet had among the highest retention rates in the country. Barking and Havering were among the lowest. When the participation in full and part time attendance was separated, Haringey had above the national average of 16 year olds in part time courses and significantly more than the Greater London average.

Student-Staff Ratios

6.0 London had a higher ratio of students to staff for each type of college, compared to the national average. Ratios for the whole college were calculated by dividing the number of full-time equivalent students by the number of FTE staff. This was a proxy measure for efficiency in organising the teaching and in recruiting students - see Appendix 5.

Table A2:3

Comparison of Student:Staff Ratios

<table>
<thead>
<tr>
<th>Type of College</th>
<th>London</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Colleges</td>
<td>10.73</td>
<td>10.40</td>
</tr>
<tr>
<td>Small Colleges</td>
<td>10.27</td>
<td>8.95</td>
</tr>
<tr>
<td>Tertiary Colleges</td>
<td>10.77</td>
<td>10.20</td>
</tr>
<tr>
<td>All Colleges</td>
<td>10.59</td>
<td>9.85</td>
</tr>
</tbody>
</table>

Source: DES Annual Monitoring Survey 1987/88

Unit Costs

7.1 London compared favourably with the rest of the country on the unit cost for a full-time student in 1988. The Annual Monitoring Survey (DES) of 25 London colleges, including 8 inner London colleges, showed a lower unit cost in three of the five categories. The
London Institute, colleges with HE courses and monotechnic colleges incurred higher costs associated with specialist facilities. All the figures were based on actual costs and made no allowance for the higher London Weighting on salaries.

Table A2: 4

Comparison of Unit Costs

<table>
<thead>
<tr>
<th></th>
<th>London</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large FHE Colleges</td>
<td>2791</td>
<td>2847</td>
</tr>
<tr>
<td>Large Colleges, some HE(11)</td>
<td>2441</td>
<td>2194</td>
</tr>
<tr>
<td>Large Colleges, no HE (3)</td>
<td>2033</td>
<td>2078</td>
</tr>
<tr>
<td>Small Colleges (2)</td>
<td>3198</td>
<td>2582</td>
</tr>
<tr>
<td>Tertiary Colleges (4)</td>
<td>1596</td>
<td>2083</td>
</tr>
<tr>
<td>All Colleges (25)</td>
<td>2412</td>
<td>2357</td>
</tr>
</tbody>
</table>

Source: DES Annual Monitoring Survey 1987/8

Unit of Resource

7.2 College budgets were calculated using a formula which computed the number of students by the target cost of the course. The total college budget was divided by the total weighted student numbers to give the Unit of Resource. This gave the average amount that the college would receive for each full-time student.

7.3 Premises and other costs varied considerably depending on the college site and area. Inner and Outer London Weighting also carried a differential staff cost. The range of Unit of Resource in 1990/91 ranged from a low average unit cost of £1711 to a high average unit cost of £2484 with the median at £2057.

LONDON LABOUR MARKET

8.0 Economic buoyancy in central London, the redevelopment of Docklands and some shift in growth
potential from West to East London were important features of the labour market in 1990. All LEA plans mentioned expansions relevant to their particular part of London and, in addition, anticipated favourable effects from the completion of the single European market (1993) and the opening of the Channel Tunnel (1994). LEAs acknowledged that conditions for potential growth could not be accommodated unless training provision reduced skill shortages and mismatches in the qualifications profile. As two-thirds of Londoners lived in outer London, LEAs there had a major role in shaping the future mix of skills in the capital.

8.1 Each outer London borough was part of a unified labour market, based either on the Heathrow travel-to-work area (West and South West London) or on the London travel-to-work area. People living in outer London responded to labour demand from three sources: the immediate local area, adjacent boroughs and counties, and central London. In assessing employer needs outer London LEAs took stock of developments from each of these labour market perspectives. In the long term, the overall coherence of WRFE provision was expected to reflect these overlapping features.

8.2 All outer London LEAs took account of the prevalence of commuting in London. The character of the sub-regional economies - generally equated with Training Agency areas - was fully appreciated. East and north London LEAs stressed the importance of central London as a recruitment ground for clerical workers resident in their areas. The specific needs of employers in different parts of the London labour market were rather more difficult to establish and little was attempted on this front, other than to emphasise general needs, for example, for computer literacy and associated skills.

8.3 On the labour supply side, outer London was, for the most part a net exporter of labour to central London, although here again west London was something of an exception. However the essentially residential character of most outer London boroughs meant that the VET client group was more predictable and more closely tied to particular locations than their eventual job destinations.
8.4 The population of young people was projected to continue to fall during the early 1990s but at a much slower pace than during the late 1980s. Most LEAs were confident that the client group for WRFE would remain reasonably stable, partly because of the increase in the numbers staying in education and gaining qualifications, and partly through a rise in enrolment of adult learners.

8.5 The approach to recruiting more adult students varied from one LEA to another, as did confidence about the numbers who would respond. It was recognised that different factors would influence the outcome, including the extent of employers' support and successful marketing of special provision for different client groups.

8.6 With unemployment at very low levels (June 1990) in most outer London boroughs, there was reluctance to specify VET participation levels in the future. The general point made was that people, particularly young adults, who lacked basic qualifications and whose experience of work was very narrow, needed training whether in work or unemployed. This could be a particular problem in outer London where local work was generally limited to low-level jobs in very small suburban labour markets.

8.7 Groups of disadvantaged individuals with special educational needs were targeted in LEA plans. Extra provision for disabled people was sometimes canvassed but there was uncertainty about the extent of demand. In contrast, recently settled immigrant communities needing English as a second language provision were identified.

8.8 The needs of established ethnic groups were also discussed in most plans. These were seen as an important FE client group because they were frequently very positive in seeking education and qualifications. However, the different needs of different ethnic groups needed more detailed analysis.

8.9 LEAs with low unemployment rates and a high demand for administrative, office and financial sector workers, frequently targeted women returners to the labour market as a group with special curriculum and marketing needs.

A2.22
APPENDIX 3

FURTHER EDUCATION PROVISION IN THE UK

Data on the educational and economic activity of young people and FE participation rates for 1987-88 were used to illustrate the national picture for 16-18 year olds and the take up of FE by all ages of students, and as a comparative base for the London material.

Choices of Young People

Table A3:5

Educational and Economic Activity by Age in England

See next page

Source: DES Statistical Bulletin 14/88

1 Table A3:5 shows the economic activity of young people aged 16, 17 and 18 years and the changes that occurred between 1978 and 1988. The most significant change was the expansion of YTS in 1982 and the introduction of the 2-year scheme in 1986 which resulted in a redistribution of 16 and 17 year olds from employment to youth training.

2 In 1988 around 62 % of 16 to 18 year olds participated in education or training in schools, further or higher education colleges, universities, adult education centres or YTS. This excluded those studying at private sector colleges or undergoing training with their employers. The Department of Employment New Entrant Survey for 1983-84 estimated that 6 % of the cohort were in training provided by their employers.

3 The proportion of young people aged 16 to 18 who stayed on in full-time education rose from 25 % in 1975 to 32 % in 1988. The proportion of women in full-time education in 1988 was 35 %, some 5 percentage points higher than for men.
4 The overall rate of participation of 17 year olds increased steadily from 43% in 1983-84 to 48% in 1987-88 with most of the increase due to a rise in the part time day participation rate. This increase was generally attributable to the introduction of the two year Youth Training Scheme in April 1986.

5 Over the same period the proportion of young people "in employment" fell from 72% to 43%. The category described as being "in employment" included a small number of people who are economically inactive for domestic, health or other reasons.

6 The unemployment rate for 18 year olds rose from 3% in 1975 to 20% in 1984 but fell back to 16% in 1987.

Profile of Students in Further Education

7 In 1988, 52% of FE students nationally education courses were aged 16-18. Of these, 46% were women. The balance shifted for students aged 19 and over of whom 53% were women.

Table A3:6

Mode of Attendance of Further Education Students in England (1987)

<table>
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<th>Age 16-18</th>
<th>FT</th>
<th>PTD</th>
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<td>46</td>
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Source: Education Statistics for the United Kingdom(HMSO)1989

8 Qualifications studied on Further Education courses were awarded by the GCSE boards (30%), City and Guilds (27%) and BTEC (23%).
Chart 1: Educational and economic activity of 16 year olds in England
(Source: DES statistical bulletin. HIRF)

Chart 2: Educational and economic activity of 17 year olds in England

Chart 3: Educational and economic activity of 18 year olds in England
London WRFE Places by TOC (Training and Occupational Classification) 1990/93

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<tr>
<td>A</td>
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<tr>
<td>B</td>
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<td>C</td>
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<td>K</td>
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246,800

(A small number of places for Security occupations (TOC T) are not shown)
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Note
Allocations are based on the SSA (Standard Spending Assessment) for homebase of students.
## APPENDIX 4 - WRFE Providers

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A4.3
Tower Hamlets  Tower Hamlets  L C Furniture
Waltham Forest  Waltham Forest  South West London
Wandsworth  Westminster  Central London
Westminster  South Thames  LCFashion

Key - HEC  Higher Education Corporation
AC/ACE  Adult Continuing/Education
LC  London College of...

A4.4
### 1987/88 Annual Monitoring Survey London Colleges

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Total London Colleges: 26,461

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<td>G LONDON</td>
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</table>

**SOURCE:** DES Sample Survey CODE BOOK R630 TABLE 19B
### APPENDIX 6

**LEA Age Participation Rates 1987/88 Compared to 1983/84**

<table>
<thead>
<tr>
<th>% 16 year olds</th>
<th>% 17 year olds</th>
</tr>
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<tbody>
<tr>
<td>76+</td>
<td>Harrow (76)</td>
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</tr>
<tr>
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<td>Barnet (74)</td>
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<tr>
<td></td>
<td>Haringey (66)</td>
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<tr>
<td></td>
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</tr>
<tr>
<td>66-70</td>
<td>Kingston (72)</td>
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<td></td>
<td>Hounslow (67)</td>
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<td>Merton (66)</td>
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<td>61-65</td>
<td>Enfield (61)</td>
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<td>Bromley (64)</td>
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<td></td>
<td>Redbridge (64)</td>
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<td></td>
<td>Richmond (67)</td>
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<tr>
<td></td>
<td>Hillingdon (59)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>56-60</td>
<td>Croydon (59)</td>
</tr>
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<td>Newham (55)</td>
</tr>
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<td>Bexley (59)</td>
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<td>Waltham Forest (58)</td>
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<tr>
<td>51-55</td>
<td>Havering (55)</td>
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**Source:** DES Statistical Bulletin 3/89
Comparison of Basic Criteria Achievement
by LEA Plan: 1988-92

Appendix T
<table>
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<th>Indicator</th>
<th>Barking</th>
<th>Basset</th>
<th>Brent</th>
<th>Bournemouth</th>
<th>Eastleigh</th>
<th>Ealing</th>
<th>Harlington</th>
<th>Harrow</th>
<th>Havering</th>
<th>Hillingdon</th>
<th>Kingston</th>
<th>Merton</th>
<th>Newham</th>
<th>Redbridge</th>
<th>Richmond</th>
<th>Sutton</th>
<th>Waltham</th>
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<tr>
<td>\textbf{STUDENT: STAFF RATIO (WHOLE COLLEGE)}</td>
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\textbf{KEY:}  
✓ Will monitor  
* Target set
## EMPLOYMENT SECTORS OF NATIONAL IMPORTANCE IN LONDON

<table>
<thead>
<tr>
<th>MANUFACTURING</th>
<th>Number of London Jobs</th>
<th>% Share of Employees Nationally</th>
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<tbody>
<tr>
<td>Printing &amp; Publishing of Books</td>
<td>4,800</td>
<td>33</td>
</tr>
<tr>
<td>Printing &amp; Publishing of Newspapers</td>
<td>22,800</td>
<td>28</td>
</tr>
<tr>
<td>Printing &amp; Publishing of Periodicals</td>
<td>9,800</td>
<td>53</td>
</tr>
<tr>
<td>Other Printing</td>
<td>52,400</td>
<td>23</td>
</tr>
<tr>
<td>Printing Inks</td>
<td>1,300</td>
<td>24</td>
</tr>
<tr>
<td>Photographic Materials</td>
<td>3,600</td>
<td>40</td>
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<tr>
<td>Photographic/Cinematographic Processing</td>
<td>4,300</td>
<td>28</td>
</tr>
<tr>
<td>Lamps &amp; Electrical Lighting Equipment</td>
<td>5,400</td>
<td>28</td>
</tr>
<tr>
<td>Jewellery &amp; Coins</td>
<td>3,000</td>
<td>24</td>
</tr>
<tr>
<td>Female Tailored Outwear</td>
<td>5,600</td>
<td>26</td>
</tr>
</tbody>
</table>

## SERVICES

### Wholesale

| Textile/Clothing                                           | 12,500 | 31 |
| Pharmaceuticals                                            | 7,200   | 24 |
| Commission Agents                                         | 15,700  | 49 |

### Retail

| Clothing                                                  | 38,000  | 23 |
| Office Supplies                                           | 12,100  | 23 |

### Hotels & Catering

| Restaurants & Cafes                                       | 47,600  | 24 |

## TRANSPORT & COMMUNICATION

| Buses & Underground                                       | 40,900  | 26 |
| Air Transport                                             | 26,100  | 49 |
| Air Transport Supporting Services                         | 18,900  | 54 |
| Miscellaneous Transport Services & Storage                | 50,300  | 30 |
| Telecommunications                                        | 70,200  | 31 |
**BANKING & INSURANCE**

<table>
<thead>
<tr>
<th>Service</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking</td>
<td>163,500</td>
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<tr>
<td>Other Financial Institutions</td>
<td>34,500</td>
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<tr>
<td>Insurance</td>
<td>54,900</td>
</tr>
<tr>
<td>Activities Auxiliary to Banking</td>
<td>33,700</td>
</tr>
<tr>
<td>Activities Auxiliary to Insurance</td>
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**BUSINESS SERVICES**

<table>
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<tr>
<td>Estate Agents</td>
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</tr>
<tr>
<td>Legal Services</td>
<td>47,300</td>
</tr>
<tr>
<td>Accountancy</td>
<td>45,500</td>
</tr>
<tr>
<td>Professional/Technical Services</td>
<td>64,600</td>
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<tr>
<td>Advertising</td>
<td>23,500</td>
</tr>
<tr>
<td>Computer Services</td>
<td>30,900</td>
</tr>
<tr>
<td>Other Business Services*</td>
<td>134,000</td>
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<tr>
<td>Real Estate</td>
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* Including Management Consultancy & PR

**PUBLIC ADMINISTRATION**

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<tr>
<td>National Government</td>
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**RECREATIONAL & CULTURAL SERVICES**

<table>
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<tr>
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<th>Employees</th>
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</thead>
<tbody>
<tr>
<td>Film Production &amp; Distribution</td>
<td>10,500</td>
</tr>
<tr>
<td>Radio &amp; TV</td>
<td>39,400</td>
</tr>
<tr>
<td>Authors &amp; Artists</td>
<td>4,800</td>
</tr>
<tr>
<td>Libraries, Museums, Galleries</td>
<td>15,400</td>
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**OTHER INDUSTRIES**

<table>
<thead>
<tr>
<th>Service</th>
<th>Employees</th>
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<tbody>
<tr>
<td>Cleaning Services</td>
<td>72,600</td>
</tr>
<tr>
<td>Prof. Associations and Institutes</td>
<td>19,900</td>
</tr>
<tr>
<td>Religious Organisations</td>
<td>7,300</td>
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GRAND TOTAL 1,495,200 Employees
EMPLOYEES IN EMPLOYMENT

CONTRAST BETWEEN CENTRAL LONDON AND ITS SURROUNDING AREAS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Central London Statistical Area</th>
<th>Rest of London</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Employees</td>
<td>% Share of Activity</td>
</tr>
<tr>
<td></td>
<td>in London</td>
<td>in London</td>
</tr>
<tr>
<td>Accountancy</td>
<td>32,900</td>
<td>72</td>
</tr>
<tr>
<td>Advertising</td>
<td>17,300</td>
<td>73</td>
</tr>
<tr>
<td>Banking &amp; Finance</td>
<td>138,000</td>
<td>70</td>
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<tr>
<td>Insurance</td>
<td>34,100</td>
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<tr>
<td>Banking &amp; Insurance:</td>
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<tr>
<td>Auxiliary Activities</td>
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<td>Commission Agents</td>
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<td>Legal Services</td>
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<tr>
<td>Other Business Services</td>
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<tr>
<td>Hotels &amp; Catering</td>
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<td>Media Services &amp; Entertainment</td>
<td>48,300</td>
<td>41</td>
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<td>National Government</td>
<td>68,700</td>
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<tr>
<td>Professional &amp; Technical Services</td>
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<td>55</td>
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<tr>
<td>Professional Associations &amp; Institutes</td>
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<tr>
<td>Printing &amp; Publishing</td>
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<tr>
<td>Religious Organisations</td>
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<td>Utilities:</td>
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<tr>
<td>Energy &amp; Water Supply</td>
<td>21,500</td>
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<tr>
<td>Sub-Total</td>
<td>754,600</td>
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<tr>
<td>Engineering &amp; Vehicles</td>
<td>16,900</td>
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<td>Chemicals, Pharmaceuticals</td>
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<tr>
<td>Footwear &amp; Clothing</td>
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<td>Other Manufacturing</td>
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<td>Construction</td>
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<td>Charitable &amp; Community Services</td>
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<td>Personal Services</td>
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<td>Research &amp; Development</td>
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<td>Retail Distribution</td>
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<td>Transport &amp; Communication</td>
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<tr>
<td>Sub-Total</td>
<td>461,400</td>
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</table>

GRAND TOTAL:
ALL ACTIVITIES  1,215,650  35  2,289,800  65

Totals may not sum because of rounding

Source: Census of Employment, 1987
STANDARDS FOR QUALITY IN PLANNING WORK-RELATED FURTHER EDUCATION

Introduction

This aide-memoire provides questions to assist employment department: Training Agency and Local Education Authority (LEA) negotiators to focus on elements of good practice to be incorporated in work-related further education (WRFE) plans for London.

Negotiation of plans between the LEA and the employment department will take as its starting point the local conditions and issues that the education authority wishes to address. These will be set against the agenda of the employment department and focus on the optimum progress that could be achieved. This aide-memoire is not a checklist to be worked through from beginning to end but is intended as a list of starting points for negotiators.

The most important element in achieving standards for quality in planning is to have a framework for action towards desired goals that is systematically achieved. The employment department would expect a partnership to be maintained through which the planning objectives of the partners can be achieved.

SECTION A: ESTABLISHING A PLANNING FRAMEWORK

1. Who should plan?
   * designated LEA staff concerned with quality in post-16 provision
   * planning group drawn from LEA, local authority and college
   * liaison with Advisers and Her Majesty's Inspectors
   * liaison with higher education corporations

2. What is the scope of the plan?
   * all post-16 provision including schools?
   * all except schools and showing how the planning for full-time school students has been taken into account?
   * the institutions named in the Scheme of Delegation?
   * everything the LEA funds including non-advanced courses in polytechnics and higher education colleges?

3. How are the sources of intelligence co-ordinated and analysed?
   * labour market information
   * local economic information: development schemes
   * training and enterprise councils and employer groups
   * information from housing, social services, enterprise development units etc.
   * careers service and demographic data
   * Adviser's reports
   * college senior management and Governors
   * college management information statistics
   * course reviews and research in the college
   * marketing section intelligence
   * planning by Polytechnics and Colleges Funding Council
   * neighbouring LEAs
4. How is coherence with other LEA planning to be achieved?
- Technical Vocational Education Initiative
- LEA training grants scheme
- European Social Fund projects
- Education Support Grant projects

5. What is the planning cycle?
- Presentation to Elected Members
- LEA budgetary timetables
- college plans and reports
- feedback from monitoring
- liaison with Training Agency
- meet financial year deadline with adequate time for negotiation

6. How will effective consultation be achieved?
- circulation of drafts
- executive summaries to relevant groups/individuals
- meetings of officers with training and enterprise councils
- and Regional Advisory Council
- and London chief education officers group
- feedback to inform the next plan

SECTION: B STRATEGIC PLANNING

The Education Reform Act (1988) places a strategic role on LEAs for the planning of further education provision (and relevant higher education). The plan will provide clear guidance to the institutions (or courses) funded by the LEA on the targets that the funding is expected to achieve. The strategy will have clear goals, targets for implementation with timescales and measures of performance.

1. Mission Statement
Are the LEA values, purposes and principles in managing FE set out?
- quality issues
- cost-effectiveness
- student-centred
- present and future labour market needs
- employment-related
- covers the whole community
- states the entitlement of individuals, groups and employers
- flexible access and delivery
- personal effectiveness and enterprise
- pastoral care and educational guidance
- transition to HE
- partnerships with industry

2. Have local conditions been reflected?
- ethnic groups
- skill shortages
- centres of excellence
- special needs

A12.2
3. How fully is it likely to be owned by local employers and the local community?
   * consistency with previous planning aims
   * commitment of LEA to wide, effective consultation

Key Elements in the Strategy
4. How clear are the strategic objectives for client groups?
   * 16-19 year olds
   * adults
   * employed
   * unemployed
   * ethnic minorities
   * students with special educational needs
   * women returning to education and employment
   * disabled people

5. Can broad expectations of provision for some of the clients be given?
   * access courses
   * admissions policies
   * marketing
   * outreach
   * full-cost courses
   * work-based learning

6. Are the broad expectations of enrolled students given for each TOC(FE) grouping?
   * 3 year intakes
   * expected increase/decline
   * related to current actual enrolment data

7. How will the LEA use the range of maintained and PCFC colleges to deliver the provision?
   * cost-effectiveness
   * avoiding duplication
   * co-ordination of curriculum planning and marketing

8. How is the character of the provision expressed?
   * competency in specific occupations
   * increased learner-autonomy
   * curriculum breadth and balance
   * encouraging enterprise and personal effectiveness
   * educational guidance
   * work experience and work-based learning
   * equal opportunities
   * industry links

9. How does the LEA ensure that the objectives are realistic and relevant?
   * consistent with local labour market information
   * evidence of college support
   * results of consultation process
   * priorities
   * timescales
   * progression from previous planning

A12.3
Management Information and Performance

10. Does each part of the mission statement relate to an output performance indicator (PI)?

11. Does each strategic objective have links to at least one PI?

12. Could other relevant measures be used?
   * destinations including HE
   * target qualifications gained by completing students/ by enrolled students
   * range of unit costs for enrolled students
   * completion rates
   * evidence of employer partnerships
   * increased open learning provision/students
   * FE participation rates by client group
   * student /employer perceptions of value
   * increase in competency-based assessment
   * modularisation and accreditation targets
   * interviews for guidance and counselling
   * accommodation usage

12. How are Joint Efficiency Study requirements to be met?
   * quality of management information systems (MIS)
   * senior management involvement in MIS strategy and implementation
   * progress from previous year

13. How well will the information being obtained help with the achievement of the strategic objectives?
   * relevance
   * timing
   * scope for fine tuning

14. What level of aggregation (of PIs ) is appropriate to judge quality and efficiency?

15. What corrective action do the LEA intend to take if necessary?

16. Are the PIs expressed in measurable outputs?
   * precise criteria
   * observable
   * outputs not processes
   * significant rather than minor detail
   * refers to the product
   * do not require evaluative statements

17. Are all the institutions to be funded to provide WRFE included?
   * FE
   * Adult education
   * Polytechnics and HE colleges
SECTION C: ARRANGEMENTS FOR MONITORING AND EVALUATION

1. Is the process for joint monitoring explicit?
   * presentation of documents
   * scope of formal review (over 3 years)
   * timetable of meetings with Training Agency
   * seniority of representatives of LEA/college/Training Agency
   * informal reviews
   * attendance of advisers etc.
   * continuous dialogue

2. What quantitative and qualitative information will be presented?
   * level of analysis
   * management by exception
   * broad-brush and in-depth
   * account for expenditure

3. How will the reviews reflect performance against the plan?
   * mission statement
   * labour market and skill needs
   * wider community needs

4. How can progress towards the desired character of provision be assessed?
   * quality
   * cost-effectiveness
   * access and flexible delivery
   * progression and coherence

5. Is there an adequate self-monitoring system for colleges?
   * course teams making decisions
   * departmental overviews
   * cross-reports to senior management
   * decision making links between quality and resources
   * discrepancy-reports to LEA -timed and ad-hoc

6. How will the LEA instigate corrective measures if provision is not according to plan?
   * relationship with Governors
   * reports
   * informal reviews
   * notification to Training Agency

7. Does the plan contain clear information on strategic progress?
   * tabular objectives
   * qualitative and quantitative indicators
   * progress to date
   * progress to be achieved and timescale for completion

8. How will the LEA identify any new developments and determine appropriate planning responses?
   * budget changes
   * recruitment outside range of virement
   * political priorities and sector re-organisations
8. How will Training Agency and the LEA request additional formal reviews?
   * dealing with difficulties/disagreements
   * informal dialogue
   * intermediaries

9. Does the plan specify the timetable for presenting evaluative data?
   * date to be received in advance of meeting
   * pre-meeting to discuss
   * additional briefings
   * specialist inputs/advice
   * Training Agency strategy for vocational education/training
   * interaction of Training Agency and LEA targets

SECTION D: ACTION PLANNING

1. Does the delegated funding to colleges reflect the aims and intentions in the plan?
   * weightings for programmes
   * weightings for target clients
   * use of LEA development funds

2. Does the other expenditure of the LEA support the steers and assumptions in the plan?
   * LEA Training Grants Scheme
   * Education Support Grants
   * Use of advisers
   * Technical Vocational Education Initiative
   * PCFC facilities and expertise
   * other

3. Does the plan indicate clear priorities for the use of (any) Training Agency Development Funds to achieve the strategic objectives?
   * links to aims
   * targets to be achieved by project
   * arrangements for embedding after the project ends
   * senior management support for the project's aims

4. Does the plan describe large capital investment which changes college facilities?
   * buildings
   * large scale refurbishment
   * change of sites
   * new colleges
   * mergers and re-organisations

5. Are the major objectives for central support services consistent with the plan?
   * in-service training
   * activities of inspectors and advisers
   * LEA specialist staff: Curriculum development, marketing college management information systems etc.
6. Does the action plan give the information required for the current year?
   * input, process and output information
   * pre and post academic/financial year information
   * timescales
   * safeguards/audits
   * cost of collection

SECTION E: PRESENTATION OF THE PLAN

Strategic planning is underpinned by detailed research and analysis and by adequate communication and feedback. All these processes will generate considerable amounts of written material. It is the task of the writer(s) to distil this to a concise, readable document that will give appropriate messages to those who use it. Methodical attention to the process of planning and consultation allied to an open approach that accepts the validity of the views of all the players concerned (in this case, community groups, local politicians, staff, employers and Government departments) will usually result in good plans.

The final documents will reflect the local context and the extent of the work that went into the planning process. The following points are intended to be a general guide to the size and format of the finished plan.

1. Is it readable and accessible to all concerned?
   * jargon-free
   * economically written (no padding)
   * attractively presented
   * free of typographical and semantic errors
   * uses graphs and visual material effectively
   * available in minority languages
   * widely distributed

2. Is it strategic?
   * 15-20 pages overall
   * free of operational detail
   * unambiguous
   * based on quality data

Employment Department: Training Agency
London Regional Office
236 Grays Inn Road, London WC1X 8HL

September 1989

A12.7
CASE STUDY SOURCES

WRFE Plans for the Inner London Education Authority and the London Boroughs of:

- Barking
- Barnet
- Bexley
- Brent
- Bromley
- Croydon
- Ealing
- Enfield
- Haringey
- Harrow
- Havering
- Hillingdon
- Hounslow
- Kingston
- Merton
- Newham
- Redbridge
- Richmond
- Sutton
- Waltham Forest

Strategic Plans for Inner London Local Education Authorities:

- Camden
- City of London
- Greenwich
- Hackney
- Hammersmith
- Islington
- Newham
- Kensington & Chelsea
- Lambeth
- Lewisham
- Southwark
- Westminster
- Tower Hamlets
- Wandsworth

Department of Education and Science Statistical Bulletins

- 2/87 Educational and Economic Activity of Young People Aged 16 to 18 Years in England From 1975 to 1986
- 6/87 Participation in Education by Young People Aged 16 and 17 in Each Local Education Authority and Region: England 1981-82 To 1985-86
- 13/87 Statistics of Further Education Students in England - November 1986
- 14/88 Educational and Economic Activity of Young People Aged 16 To 18 Years in England From 1975 To 1988
- 1/89 Education Statistics for the UK 1988 Edition
3/89 Participation in Education by Young People Aged 16 and 17 in Each Local Education Authority and Region: England 1983/84 To 1987/88

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1/90 International Statistical Comparisons of the Education and Training of 16 To 18 Year Olds


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VOCATIONAL EDUCATION AND TRAINING AND THE LABOUR MARKET: 
AN ECONOMIC CURRICULUM MODEL

GLOSSARY

Adult Education
Teaching and learning activities for people over 16 years of age provided by an educational institution.

Adult Training Strategy (1983)
Manpower Services Commission policy that retraining for adults should be designed, organised and controlled by employers and the Government's role limited to that of a catalyst.

Affordability
Concept of the Economic Curriculum Model - assessment of price (including actual costs and income forgone) and monetary resources available to spend on the item.

Competence
Ability to perform tasks to a stated standard.

Curriculum
Education and training activities, inputs and outputs, including ancillary elements designed to support participation in those activities.

Ecological Balance
Key concept of the revised Economic Curriculum Model - state of equilibrium between the economy, the labour market and individuals which is self-sustaining and non-exploitive.

Ecological Curriculum Model
Curriculum model which combines Economy, Efficiency, Effectiveness and Equity with regard for the well-being of the social and physical environment.

Economic Independence
Key concept of the revised Economic Curriculum Model - a state of financial self-sufficiency, from whatever source, which enables individuals and groups to provide for its/their financial requirements.

Economic Individualism
Key concept of Monetarism and Market Forces policies - processes and policies by which individuals are made responsible for, and undertake, to provide for their own financial maintenance.

Economically Active Population
The population aged between 16 years and 60 years (for women) and 65 years (for men).

Economy
Key concept in Economic Curriculum Model describing thrifty and efficient use of resources; frugality in expenditure.
The structure of economic life in a country, area or period.

Education and Training System
All the state institutions providing education and training.

Effectiveness
Key concept in the Economic Curriculum Model describing ability to add value by the transaction; fitness for purpose.

Efficiency
Key concept in Economic Curriculum Model describing maximum output from minimum input as a ratio of energy, products or services supplied to energy, products or services produced.

Further Education
Colleges providing VET for people aged over 16 years.

Government
Collection of Ministers backed by Parliamentary processes.

Higher Education
Courses and institutions at degree and post-graduate levels.

Intermediate Training
Vocational education and training for people between school and employment, designed to equip them with employment-related skills.

Labour Force
The number of workers potentially available for work, including the employed, unemployed, armed services and people on training schemes.

Labour Market
Dynamic interactions of the supply of workers and the demand for workers between the economically active population and public and private enterprises.

Labour Market Intelligence
Information, including statistics, about the supply of workers, employment and unemployment and the structure and outputs of the labour market, used to plan education and training resources and programmes (see Appendix 1).

Neo-corporatism
Policies and practices which hold that the values and requirements of business, particularly large employers, should determine education and training provision.

New Right
Ideas developed from Monetarism in the 1980s, symbolising the Market Forces policies of the Thatcher Government (1979 - 1990) based on de-regulation of industry and minimal public welfare.
Occupational Competence
Ability to perform tasks specific to an occupation to a stated standard, demonstrated in observable assessment.

Omni-proficeres
Key concept of the revised Economic Curriculum Model - occupationally competent people who support, train and mentor others so that quality and productivity are enhanced; activities in an organisation which facilitate 'right first time' and 'just in time' outputs.

Post-16 Education and Training
All the state institutions providing education and training for people over 16 years of age.

Post-industrial Economy
The structure of economic life in a country, area or period based primarily on non-physical resources, following the development of industrialisation.

Qualification
Recognised award attained through examinations; or the sum of certificated awards, skills, training and experience applied to a set of tasks.

Skills
Special ability, especially acquired by learning and practice.

State
Wide set of institutions over which the Government has control.

Unemployed (Government Statistics Definition)
People actively seeking paid employment and in receipt of state benefits for the previous 4 weeks.

Utility
Concept in Economic Curriculum Model describing the usefulness measured by satisfaction in the product or service.

Value-transference
Key concept in the revised Economic Curriculum Model - reciprocal transfer of values between the education and training system and the labour market.

Work Experience
Planned activities on employers' premises scheduled as a part of an education or training course.

VET
Vocational Education and Training undertaken for the purpose of acquiring occupational competence.

Workforce
Same meaning as Labour Force
BLANK IN ORIGINAL
GLOSSARY OF GOVERNMENT SCHEMES

[Dates denote when scheme was operational; some are approximate]


CALLMI
Computer Assisted Local Labour Market Information - database of employers' assessments of skill and recruitment shortages, introduced by the Department of Employment, now maintained by Training and Enterprise Councils.

City Technology Colleges (1987 - )
Schools offering a predominantly science and technology curriculum sponsored by entrepreneurs. Government originally intended to establish 20 schools in inner-city areas. By 1993, 15 colleges had opened but with about 80 per cent Government funding. The scheme has been criticised as socially divisive by some large employers, for example, Shell Petroleum and BP. Relaunched in 1993, the scheme is restricted to Grant Maintained Schools and religious schools. Several hundred CTCs sponsored by private companies are intended to be operational by 1994. Sponsor companies will have an active role in running the CTC and have 4 seats on the governing body in return for around £50,000 - £100,000 initial sponsorship and ongoing financial support.

Community Programme (1983 - 1988)
Programme in the New Training Initiative, for unemployed adults to gain skills working on building and environmental projects of public works; subsumed into ET in 1988.

Compacts (1988 - 1992)
Department of Employment scheme where local employers and schools set minimum standards for attendance, literacy and numeracy, offering school-leavers who achieve the standards, an interview for a job.

Education Business Partnerships
Various 'partnership' schemes transferred from the Department of Trade and Industry to the Employment Department in 1990; coordinators funded through Training and Enterprise Councils to oversee all the schemes in the TEC area.

Employment Action (1993 - )
Merger of some Restart schemes, providing job search and employment counselling for recently unemployed adults.
Enterprise Allowance Scheme (1983 - 1991)
Financial support of £40 per week for 12 months, and business counselling, for unemployed adults to start their own business. Applicants had to provide evidence of £1000 capital for the business. Replaced by Business Start-up Schemes.

Enterprise in Higher Education (1989 - )
Posts funded in universities and polytechnics to increase vocational relevance of the curriculum.

Developed from the Job Training Scheme and Community Programme to offer training and work experience for adults out of work for more than 6 months. Training for up to 12 months based on an Initial Assessment and agreed Action and Personal Training Plan containing NVQ units of competence.

Grant Maintained Schools
After a majority vote of parents, schools can opt-out of local authority control and receive funding direct from the Department for Education. As an encouragement to adopting GM status, capital and running costs are more generous than for local authority-controlled schools.

Higher Technology Training (1988 - )
Small programme of intensive technology training for unemployed graduates, run by HE institutions, funded by Department of Employment.

Investors in People (1990 - )
Public and private employers apply to be accredited on the basis of their corporate training programmes linked to company business plans; consultancy and support to reach accreditation standards provided by Training and Enterprise Councils.

Job Club (1985 - )
Employment Service scheme for unemployed adults providing coaching and facilities, such as telephones etc., for intensive job search activities.

Joblink (1984 - 88)
Part of WOPT programme; 10-12 weeks planned training related to local skill shortages, up to 21 hours a week for unemployed adults.

JTS Job Training Scheme (1985 - 87)
Short part-time courses in practical trades related to local skill shortages linked to work-placements.

Local Collaborative Projects (1984 - 87)
DES/MSC pump-priming funding for joint arrangements between local employers and
training organisations to assist employers to define and tackle skill shortages.

NAFE see WRFE

National Training Awards
Annual prizes to public and private organisations, colleges and individuals for good practice in training initiatives.

National Training Task Force (1990 - 1992)
Small group of industrialist providing advice to Employment Department Ministers on VET requirements; changed to Advisory Body on Education and Training Targets in 1993.

NROVA (1989 - )
National Record of Vocational Achievement, certificate of vocational achievements based on certificated courses, skills and other work-related experience drawn from profiles constructed by the trainee and teacher/trainer.

NVQ National Vocational Qualifications (1987 - )
Accreditation of vocational courses based on competence-units and assessment; 5 levels from Foundation to Professional.

Open College (1987 - )
Full-cost arts, business and commercial courses delivered through media learning packages.

Open Tech (1988 - 1991)
Similar scheme to Open College offering practical subjects; folded when Government funding withdrawn.

PICKUP (1983 - )
Department for Education / Welsh Office programme of organisers and consultants based in FHE institutions providing updating skills for staff and customised, full-cost training courses based on employers' requirements.

Project TRIDENT
Department of Trade and Industry funded coordinators in schools to link with local employers for work experience.

Replan (1984 - 1991)
DES scheme of LEA-based coordinators working with AECs and colleges to meet skill shortages, and improve access to VET, by retraining adult unemployed.

Restart (1986 - )
Interviews, counselling and short courses in job seeking and interview presentation, conducted by Job Centre staff; attendance for unemployed adults is a condition of entitlement to continue to receive benefit.
SATRO
Science and Technology Regional Organisations
Department of Trade and Industry scheme involving
12 large companies to provide assistance to schools
to develop science and technology programmes and
computer-based work simulations.

SCIP (Formerly Schools Council Industry Project
1974) Schools Curriculum Industry Partnership -
industrialists providing practical assistance
with equipment and technical support for schools
including work-experience, work simulations and
mini-enterprises.

Skill Centres (1974 - 1990)
Government network of centres offering vocational,
craft and industrial training. Privatised with
£11 million dowry in 1990 and £1.3 million towards
costs in 1992, ASTRA Training Services collapsed
into receivership in 1993 with massive pre-tax
losses and staff redundancies.

TAP Training Access Points (1985 - )
Training opportunities database sited in job
centres, libraries and shopping centres; does not
fully cover UK and service is limited to stand-alone
computer access.

TOC Training and Occupational Classification (1984 - )
Classification of VET courses corresponding to
SIC (Standard Industrial Classification) of
occupations; introduced as part of NAFE to enable
colleges to plan VET in terms of the labour market.

TOPS Training Opportunities Scheme (1972 - c.1985)
Set up for 'training for stock' for employed and
unemployed adults for further training and
retraining by full-time courses leading to
professional qualifications; criticised as
expensive and ineffective in addressing skill
shortages, phased out under New Training Initiative.

Training Credits (1990 - )
Vouchers for school leavers to pay for part-time
training approved by their employer and the local
Training and Enterprise Council.

Training and Enterprise Council (TEC) (1989 - )
Private limited companies with responsibility
for VET schemes and budgets including ET, YT,
WRFE, TVEI and all VET / employer schemes
introduced since 1990.

TVEI The Technical and Vocational Education
Initiative (1983 -1993)
Department of Employment programme for 14 - 18
year olds in full-time education, providing
integrated vocational elements in classroom-
based teaching and work experience.
UVP Unified Vocational Preparation (1980 - 82)  
Prototype youth training subsumed into YT.

WEEP Work Experience on Employers' Premises  
(1979 - 80) Scheme for skilled unemployed adults offering part-time work experience.

WOP / WOPT Wider Opportunities Training Programme (1984 - 88) Manpower Services Commission programme of assessment and courses related to the local labour market run by Adult Education Institutes and FE Colleges for unemployed adults.

WRFE Work-Related Further Education (1984 - 1992) Introduced as NAFE (Non-Advanced Further Education) a planning process undertaken by the Local Education Authority and colleges to provide VET based on analysis of labour market intelligence, submitted in plans to the Department of Employment in return for 25% of rate support grant FE funding (see Part 2).

YOP Youth Opportunities Programme (1979 - 1982)  
Prototype for YTS, introduced training allowances for unemployed school leavers in a programme of combined college courses and employment with selected employers.

Youth Access Projects / Youth Development Projects (1989 - 90)  
Training Agency action research to promote good practice and remove barriers to participation in VET by alienated inner-city unemployed school-leavers.

YTS/ YT Youth Training Scheme (1982 - )  
Manpower Services Scheme, now run by TECs, for unemployed 16 to 18 year olds which replaced YOP; 1 year scheme, extended to 2 years in 1986; planned work-experience combined with work-related training leading to NVQs.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACE</td>
<td>Adult Continuing Education</td>
</tr>
<tr>
<td>ACFHE</td>
<td>Association of Colleges of Further and Higher Education</td>
</tr>
<tr>
<td>AE</td>
<td>Adult Education</td>
</tr>
<tr>
<td>AEC</td>
<td>Adult Education Centre</td>
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<tr>
<td>AI</td>
<td>Artificial Intelligence</td>
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<tr>
<td>AZTEC</td>
<td>South London Training and Enterprise Council</td>
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<tr>
<td>BGE</td>
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<td>BP</td>
<td>British Petroleum</td>
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<td>BTEC</td>
<td>Business Technical Education Council</td>
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<tr>
<td>CAD/CAM</td>
<td>Computer Assisted Design/Computer Aided Mechanical Engineering</td>
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<td>CALLMI</td>
<td>Computer Assisted Local Labour Market Information</td>
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<tr>
<td>CBI</td>
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<tr>
<td>CMIS</td>
<td>Computerised Management Information Systems</td>
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<tr>
<td>CPVE</td>
<td>Certificate of Pre-Vocational Education</td>
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<tr>
<td>CSE</td>
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<tr>
<td>CTC</td>
<td>City Technology College</td>
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<tr>
<td>DES</td>
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<tr>
<td>DfE</td>
<td>Department for Education</td>
</tr>
<tr>
<td>DHSS</td>
<td>Department of Health and Social Security</td>
</tr>
<tr>
<td>DTI</td>
<td>Department of Trade and Industry</td>
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<tr>
<td>EC</td>
<td>European Commission</td>
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<tr>
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<td>Educational Counselling and Credit Transfer Information Service</td>
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<tr>
<td>ED</td>
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<td>EGSA</td>
<td>Educational Guidance Service for Adults</td>
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<td>Educational Support Grant</td>
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<td>FE</td>
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<tr>
<td>FESC</td>
<td>Further Education Staff College</td>
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<td>FESR</td>
<td>Further Education Student Record</td>
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<td>FHE</td>
<td>Further and Higher Education</td>
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<tr>
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</tr>
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<td>GCSE</td>
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<td>GNP</td>
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<td>GNVQ</td>
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<tr>
<td>HFE</td>
<td>Higher and Further Education</td>
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<tr>
<td>HMI</td>
<td>Her Majesty's Inspectors</td>
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<tr>
<td>HND</td>
<td>Higher National Diploma</td>
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<tr>
<td>HNT</td>
<td>Higher National Training</td>
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<tr>
<td>ILB</td>
<td>Industry Lead Body</td>
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<tr>
<td>ILEA</td>
<td>Inner London Education Authority</td>
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<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
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<td>Industrial Training Board</td>
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<td>LASER</td>
<td>London and South East Regional Advisory Council</td>
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<td>LCP</td>
<td>Local Collaborative Project</td>
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<td>LEA</td>
<td>Local Education Authority</td>
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<td>Local Enterprise Council</td>
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<tr>
<td>LEN</td>
<td>Local Employers' Network</td>
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<tr>
<td>LMI</td>
<td>Labour Market Intelligence</td>
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<tr>
<td>MBA</td>
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<tr>
<td>MSC</td>
<td>Manpower Services Commission</td>
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<td>NAFE</td>
<td>Non-Advanced Further Education</td>
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<td>NCC</td>
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<td>NCVQ</td>
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<td>NEDO</td>
<td>National Economic Development Office</td>
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<td>NDPB</td>
<td>Non-Departmental Public Body</td>
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<td>NFER</td>
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<td>NIACE</td>
<td>National Institute for Adult Continuing Education</td>
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<td>NICEC</td>
<td>National Institute of Careers Education Council</td>
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<td>NOMIS</td>
<td>National Online Management Information System</td>
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<td>NROVA</td>
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<tr>
<td>NTI</td>
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<td>National Training Task Force</td>
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<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<tr>
<td>OJTS</td>
<td>Old Job Training Scheme</td>
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<td>Ordinary National Certificate</td>
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<td>Occupational Training Family</td>
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<td>PEL</td>
<td>Paid Educational Leave</td>
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<tr>
<td>PICKUP</td>
<td>Professional and Industrial Updating Programme</td>
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<td>SCIP</td>
<td>Schools Curriculum Industry Partnership</td>
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<td>Schools Examination and Assessment Council</td>
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<td>TQM</td>
<td>Total Quality Management</td>
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<td>Trades Union Congress</td>
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<td>TVEI</td>
<td>Technical Vocational Education Initiative</td>
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<td>Unified Vocational Preparation</td>
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<td>VET</td>
<td>Vocational Education and Training</td>
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<td>Work Experience on Employers' Premises</td>
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<td>Wider Opportunities Programme</td>
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<td>Wider Opportunities Training Programme</td>
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