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ASSESSING THE EDUCATIONAL NEEDS OF MEDICAL TEACHERS AND PROVIDING AN APPROPRIATE PROFESSIONAL DEVELOPMENT PROGRAMME:
A PARTICIPATORY BASED APPROACH.

BY

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ABSTRACT

This study aimed to determine the appropriateness of a participatory-based approach to assessment of educational needs of medical teachers in the Faculty of Medicine at Chiang Mai University by developing a procedural model and empirical testing its validity and efficacy. The main purpose is to design and run the Professional Development Unit effectively in the Faculty.

The development of the participatory based approach was undertaken within the theoretical framework of self development and humanistic adult education philosophies, and also within the context and constraints of the Faculty of Medicine at Chiang Mai University. A set of key characteristics of the approach was identified as appropriate to the Faculty situation. A number of criteria was then operationally defined to test empirically the validity of those characteristics and the efficacy of the procedural model itself.

A series of tests was conducted in connection with training workshops in the Faculty of Medicine at Chiang Mai University during 1981-1988. This series was divided administratively into four stages: (1) preliminary field research on 6 medical teachers; this is an informal assessment of educational needs of medical teachers; (2) local expert judgement of the educational needs of medical teachers in Workshop 1, the aim of this stage being for gaining permission from key persons and developing the Professional Development Programme; (3) The core committee
based approach was applied in Workshop 2, the main purpose being for the heads of departments to study the possibility of implementing the Professional Development Programme; and (4) a participatory based approach was applied directly to the sample groups of medical teachers. The validity of the approach characteristics and the efficacy of the procedure were tested before implementation in various groups of medical teachers.

The major results of the study are that the participatory based approach to identification of educational needs of medical teachers is highly appropriate for the Faculty of Medicine at Chiang Mai University.

The procedural approach and its characteristics were well accepted by all individuals at the workshops. All professional experts readily accepted that the initial approach was the best available and provided a suitable format for their programme planning. Substantially, the test results of the modified approach indicate that it is highly acceptable to the professional experts for the purposes of programme planning.

A number of recommendations have been forwarded for the refinement of this participatory based approach to assessment of educational needs of medical teachers, and for the empirical testing of the validity and efficacy of its refined characteristics in the Faculty. The recommendations also indicate the possibility of using the approach in other purposes as an integral part of the programme planning process.
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Change Agents

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Heads of Departments

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INTRODUCTION

I have been interested in teacher training workshops for a number of years. I have participated in those run by other people throughout Thailand and abroad. I also have run a number of workshops myself.

My first attended workshop was the two weeks workshop at Suan Son, Doi Sutape, Chiang Mai in 1963. The workshop was organized by a group of staff from the Medical Educational Unit of Chulalongkorn University. The trainers designed games, simulations, role plays, and other teaching methods. They tried to put across the message which they hoped to deliver in such a way that participants would change in some way. The change may involve the acquisition of mental skills, manual skills, and attitudinal, which Bloom(1956) would regard as the cognitive, psychomotor and affective domains, respectively.

It is a fact that in any workshops participants may not, of course, accept the message in its entirely. It is more likely that some will accept it partially, some will adopt it and some will reject it.

In my first workshop, I was interested in some massage. I tried it later, then I adopted some of the results and rejected the others. After I attended and helped organize more workshops, I began to see the need for a format to present to the workshop participants, as a rationale for what they were
being expected to do, how and why. Frequently, after a workshop, some participants could be heard discussing their dissatisfaction with it. A typical comment was that it would be quicker and more effective if the organizer had given lectures instead. I agree with this, and have discussed with other organizers. A group have found that there is a long term benefit of the participants being actively involved in the session; they can remember, understand, and apply such knowledge to solving the educational problems much better than attending lectures.

I have been a member of the administrative team of the Faculty of Medicine, Chiang Mai University, since 1980. My first responsibility was to assist the Assistant Dean in Academic Affairs. I found that there were a number of problems in education. Calls for solutions and teacher training activities might be one of the possible mechanisms in helping teachers to solve their educational problems. The need for a format and content of effective workshops was brought to my attention personally. Fortunately, the Dean gave me the opportunity to persuade this interesting field so I decided to train in teacher training courses at the School of Medical Education, University of New South Wales, Australia, in 1981. This was sponsored by the Staff Development Fund of the Faculty of Medicine at Chiang Mai University.

I came back from Australia to Thailand in 1982 and joined the administrative team at the same position I had before I left. I was appointed by the Dean to take responsibility in establishing the Professional Development Unit in the Faculty. It was to be
initiated as a project, a programme, a center or whatever could be a vital organization of teacher training. Since it involves a mass of medical teachers, many strategies would be needed.

In this study, I intended to search for an appropriate format and content of the workshop which could be used effectively in the Faculty as a means for professional development. The study was designed to assist the medical teachers to rethink all of their teaching programmes. The participatory based approach was applied by running a series of workshops for the medical teachers at three levels—faculty, departmental, and individual. The basic aim was to assist the medical teachers to adopt a systematic approach to curriculum planning and implementation based firmly on educational needs of medical teachers and conditions of the Faculty of Medicine at Chiang Mai University. More specifically, this has meant the development of teaching and learning in the Faculty based on:

1. An overall set of medical curriculum objectives together with related sets of departmental objectives;
2. the selection of topics of instruction and statements of these in terms of competency-based, learner-oriented behavioural objectives, together with a judiciously selected set of teaching/learning processes; and
3. the hope that medical teachers could be encouraged to develop these curricula on integrated lines, both inter- and intradepartmentally.
Since the workshops were conceived of as a means of initiating a sense of corporate enthusiasm for educational change within medical teachers, the follow-through educational activities were seen as a means of capitalizing on enthusiasm generated and assisting medical schools to reach a stage of educational self-efficiency. Clearly the workshops and the follow-through programmes should be considered as a total programme of faculty development, and not as isolated activities.

Medical education is going through one of its most exciting and challenging phases. Medical graduates of the future, if they are truly to contribute to health care in Thailand, will need increased sensitivity to community needs, an ability to work with a wide range of health workers, and a concern to emphasize preventive and promotive aspects of health as well as being competent in curative aspects.

It is clear that high technology, science based medicine has not been shown to increase health status of the majority of the population, however much finance is available. Consequently the Government of Thailand and the medical schools are increasingly emphasizing a primary health care orientation in the allocation of funding, provision of services and training of the health manpower. Such an orientation was indicated by the introducing of new medical curricula in some universities, giving policy in reorientation of medical curriculum, changing in methods of evaluation, and convincing all medical schools to reorient their curricula by medical council.

(4)
It is often the case that planned changes in a curriculum or any adventure are not fully implemented. Although a plan may be generally supported and be agreed to be important and appropriate, nevertheless the old curriculum often continues to dominate. This can be because of the existing organizational structures which were developed as appropriate for the old curriculum; it can be because difficulties arise in implementation so that teachers are unable to develop new teaching patterns, or it can be that some teachers are simply reluctant to change.

In the case of the Faculty of Medicine, Chiang Mai University, in order to maintain high quality of teaching and graduate standards within the budget and manpower constraints, the Faculty has to search for a programme to bring about improvement in management, teaching-learning processes and quality of their staff and thus an appropriate faculty and professional development programme is needed.

In general, the professional development has been characterized by diversity, in that it has various definitions, techniques and strategies. So prior to this study, the formulation of a definition, conceptual framework and procedures of a participatory based approach to assess the educational needs have been imprecise and based upon a dearth of empirical knowledge.
The professional development includes all activities that help improvement of academic qualification, managerial skills, and teaching skills of medical teachers. However, in this study I paid much attention to the improvement of academic qualifications and improvement of teaching skills. Of course, many programmes must be running concurrently.

Historically, the process of helping academic staff to become better at their work, particularly teaching which is generally reckoned to be their chief concern, has been almost entirely neglected. It has been assured that teaching at this rarefied level is something that anyone can do. It is only recently that serious efforts, and not so serious, have been made to correct this erroneous superstition. The Faculty of Medicine at Chiang Mai University is still a long way from having the expert teaching force that medical education needs, but I count myself fortunate to have played some small part in the process of upgrading, ever since I took responsibility in running a Professional Development Unit for the Faculty.

From many pieces of literature I have found that people may change if there are 1) the needs, 2) alternatives and 3) the absence of organizational barriers to implementation. The organizational barriers will be minimized if the key persons of the Faculty become involved in the programme, so in this study the administrators at both faculty and departmental levels were invited to join many steps of the programme planning. The alternatives should be given to all individuals by introducing
teacher training courses which was a main activity of the Professional Development Unit.

The most important aspect was that implementation of any programmes the assessment of needs was necessary to assure their success so in this study I would like to assess the educational needs of medical teachers by various means before implementing the teacher training courses.

The conceptual principles of self-development and humanistic adult education philosophies may be integrated with the compliments of the configurational model and successfully applied in using the participatory based approach to assess the educational needs of medical teachers in the Faculty. In application of the approach, the participation of the medical teachers was regarded as the most important factor, with the involvement of administrators as an important supportive factors along with the teaching development committee or the working group preparing all tasks as well as possible.

Whereas professional development is an individual and personal thing, it is also a process of non-formal and continuous learning. Everyone has a certain measure of freedom and autonomy to make personal judgements in any learning situation. So the unique characteristics of the professional development programme should be respect for individual capability; freedom and autonomy; participation of medical teachers in all aspects of the programming; and self evaluation by the medical
This dissertation is divided into 10 chapters. After this introduction, Chapters 1, 2, 3, 4, and 5, the background of why the Faculty needs the professional development unit, are presented. The first chapter speaks about the health situation of Thailand which is faced with the problems of shortage and maldistribution of doctors and other health manpower. The Thai Government recognized these problems and have given policies which are aimed to provide better medical care to all Thai people. It also speaks about why and how the medical schools who are assumed to take responsibilities in educating and training doctors and other health personnel can play an active role in solving such a problem. To clarify what should be the roles of the medical schools, the needs of consumers were considered. And I found from this chapter that Thailand needs a greater number of doctors who have a good attitude towards rural services. I end up this chapter by showing that less than half of the total number of medical graduates from the Chiang Mai medical school are serving in rural areas. Most of them are still working in urban areas. This made me interested in one important question: "are the present methods of teaching and learning of physicians adequate enough to meet the national needs now and in the future?"

To answer this question, the systematically educational planning was studied in Chapter 2. This aims to find out the proper roles of the medical schools and medical teachers if they
are to contribute to the educating of qualified medical graduates for Thai society. The chapter runs sequentially from health situation, health manpower needs, training activities, and curriculum to learning experiences. This chapter stresses the necessity of medical teachers to bear the principle of systemically educational planning in mind to make learning both effective and efficient.

However, the implementation of any venture involves two sets of tasks- academic and managerial. I speak briefly about the two tasks at the end of this chapter and study more the organizational model and study programme of the Faculty of Medicine at Chiang Mai University in Chapter 3. Medical curriculum is analyzed and described in terms of why it has to be flexible enough to give allowance for many variables such as the needs of society, the political system and the current status of science and technology.

Chapter 4 presents the changes and trends in medical education. I study this part by looking at the examples from American medical education and discuss whether Thai medical education should adopt any parts of these changes and if so, how these could be effectively adopted. I found from this chapter that the curriculum reform or re-orientation of medical education should be applied in the Faculty of Medicine at Chiang Mai University. Since the curriculum reform or re-orientation of curriculum is a slow process and threatens those who have been accustomed to a set way of carrying out their teaching tasks, a
professional development programme is needed to facilitate the continuous changes among the medical teachers.

The professional development which is the main theme of this study is studied in Chapter 5 in terms of definition, aims, context, structure, activities and course design, and roles of persons responsible for professional development. By reviewing literature I found professional development varies in size, structure, approaches and etc. Nevertheless, they attempt to achieve the same goal— a more qualified staff. This made a point; it brought me to rethink the answer of an important question: how could I set a proper professional development programme for the Faculty?

The second half of chapter 5 speaks about the professional development programme of this Faculty, mostly in terms of what its meaning and aims should be. The establishment and implementation of such a programme are parts of this study. I developed conceptual framework based on philosophies behind human behaviour, adult education, innovation theories, model of planned social change and limited the study mostly to appropriateness of professional development in facilitation of change and in the context of the particular Faculty. The heading of the study is "Assessing of Educational Needs of Medical Teachers and Providing an Appropriate Professional Development Programme: a Participatory Based Approach."
Chapter 6 is a review of literature. The chapter runs under 6 headings: 1) understanding of the Faculty as an organization; 2) understanding of innovation, innovation process and organizational innovativeness; 3) understanding of needs as stimuli for innovation; 4) a model of planned social change; 5) selection of appropriate strategies; and 6) understanding of professional development as a process and product of changing. These equipped us with understanding of the Faculty as an organization. It explains how organization and individuals in an organization behave and emphasizes that individuals may change their behaviours if there is a reward, a norm changed, and organizational structure changed. The understanding of innovation and its process was made and it leads to the necessity to study more about needs as stimuli for innovation. Many strategies for planned social change are presented. I studied these strategies in detail before excluding the power coercive and selecting the empirical-rational and normative re-educative strategies for this study. However, in bringing educational innovation into the Faculty it was found that the Faculty needs the professional development programme so I end up this chapter by reviewing the professional development in various aspects.

In Chapter 7, programme planning is studied. Definition and description of programme planning are defined and process of programme planning is explained step by step. Needs assessment, the categories of needs assessment model and the selection of procedural elements are illustrated. The participatory based
approach was selected to be used as the main procedure in assessment of educational needs and I study it in detail and end up this chapter with the researchable questions.

Chapter 8 provides an overview of research methodology and research techniques that were used in this study. The definition of key terms and purposes of the proposed inquiry are presented. Research methodology was divided into 5 headings: strategies which were applied in the research procedures (the five step plan), setting up of the key characteristics of the approach, testing of validity of the key characteristics, the criteria and standards used in the assessment of validity of the characteristics and efficacy of the procedural approaches. Selection of samples and their characteristics was added to the same chapter.

All results are presented in 6 parts of chapter 9. A comprehensive was made and follows by scheme the overall results in part 1, the testing of validity of key characteristics of workshops 1 and 2 in part 2, the comments and recommendations from the first two workshops in respective parts 3 and 4, the testing of approach efficacy by professional experts in part 5, and ends by the sequences of events in part 6.

The summary, discussion and recommendations are made in Chapter 10. The discussion of the appropriateness of a participatory based approach to assess the educational needs of medical teachers runs sequentially from the development of a
participatory based approach, research methodology, the appropriateness of the approach in terms of components and characteristics, to recommendations in development of Professional Development Unit and improving strategy for professional development. The external strategies which were found to affect the success of professional development are also discussed before a conclusion is made.

In brief, the study attempts to ascertain the appropriateness of a participatory based approach in assessment of educational needs of medical teachers and provide an appropriate professional development programme for the Faculty. The main objectives of the programme are to create better attitudes among medical teachers toward teaching and to stimulate the personal development among them. The participatory based approach is selected based on the belief that "changes are rarely successful if forced upon the people." So the study presents a number of opinions intended to provoke thought and stimulate discussion in improving medical education. This would result in changes in individuals and leads to faculties innovated as a whole.
CHAPTER 1
HEALTH SITUATION AND MEDICAL EDUCATION

To understand the health situation and background of medical education in Thailand, the first question I would like to ask myself is what kinds of doctors does Thailand need?. And to answer this question, there are four basic considerations. First, the health situation of Thailand; second, the Government's plans; third, the roles of medical schools; and fourth, the needs of the consumer.

THE HEALTH SITUATION

Thailand, like most developing nations, is subject to pressing problems of rapid population growth, poor environmental sanitation, malnutrition, and maldistribution of resources. Major health problems are indicated by the National Health Plan (1981) as follows:

Population Factors.

The National Seminar (1987, p47) reported that the population was 52.0 million. The population growth rate was 3.7% in 1972, 2.6% in 1978, 1.9% in 1983, 1.7% in 1986 and 1.5% in 1987. About 83% of the population live in rural areas. The median ages of the population were 17 and 19 years, for the whole country and for municipal regions respectively. The main source of income is agriculture.
Disease Patterns.

The top ten causes of death in 1984 (National Seminar 1987, p 73) are diseases of pulmonary circulation and other forms of heart diseases, diseases of the digestive system, various accidents including late effects, homicide and injuries purposely inflicted by other persons, malignant neoplasm of other and unspecified sited, motor vehicle traffic accidents, cerebrovascular disease, pulmonary tuberculosis, disease of the nervous system, and pneumonia, respectively.

Inadequate and/or Maldistribution of Health Services.

A provincial health care service has been designed by the Ministry of Public Health to deal with health needs as efficiently as possible in the context of a large rural population. At the end of 1984 there were 729 districts, 6590 sub-districts, and 58,954 villages throughout the country (Department of Provincial Administration, Ministry of the Interior, 1984). The service is accessible only to those who are within easy reach of health facilities. It appears that 80% of the budget is spent on hospitals, medical and health centre services which actually serve some 20% of the population, whilst 20% of the budget goes to solving the main problems of the majority of the population. Even where an adequate range of service is available, access may be impeded by lack of public transport.
However, in the past decade, the Government had policy in rural development and built various sizes of hospitals (10 to 90 beds) in the rural areas. The National Seminar (1987, p. 41) reported that in 1987, health service centre covers 100%, 90%, and 97% of the population at the provincial, the district, and the sub-districts levels, respectively. There were 15 centre hospitals (more than 500 beds), 74 general hospitals, 540 district hospitals, 90 sub-district hospitals, 7465 health service centres, and 466 midwifery stations outside Bangkok.

Besides the Ministry of Health, other organizations also provide health services. For examples, there were 20 public hospitals, 93 private hospitals, 2,319 private clinics in Bangkok, and 773 public hospitals, 166 private hospitals, and 2,672 private clinics outside Bangkok.

Manpower Problems.

Shortage, maldistribution and malutilization of manpower result from limited production of physicians from medical schools arising from a shortage of staff members and expensive facilities. Medical education lacks relevance to the national health goals and health needs of society. Medical curricula are not concerned with the principles and practices of promoting health and delivering primary health care in situations outside hospitals. In 1985, there were 12,955 doctors. The average ratio of doctor to population was 1:6254 in 1984. The ratio in Bangkok was 1:1512 while in the rural areas it was 1:10740 (National Seminar, 1987, p. 46).
In summary, the health problems in Thailand are enormous; as for health personnel the magnitude of the problem is not only in terms of shortage, but worse, in distribution.

THE GOVERNMENT'S PLAN

The Thai Government, recognizing the national health problems, has responded by setting up a national health policy in the National Plan of Action and National Health Development Planning (Appendix 3, National Economic and Social Development Plan, 1981). This states that:

"Development efforts in the future must aim at a more equitable distribution of the benefits of growth. The level of living of the poorest groups in different sectors of the economy must be raised. This is necessary in the long run, and will contribute significantly to the political and economic stability of the nation."

Within the context of the Regional Economic and Social Development Plan, the main emphasis is laid on the betterment of health of the rural population, especially at the village level.

The specific health sector goals are:
- reduction of population growth
- reduction of maternal and child health problems
- the reduction of infant mobility and mortality
- improvements in nutrition
- eradication and control of communicable diseases
- protection against environmental hazards
- improvement of medical care
increased coverage of rural population through better utilization of the existing health infrastructure and integration of health services
the use of volunteers at the village level

In order to achieve the goals of the National Plan, especially to increase the coverage of rural population through better utilization of the existing health infrastructure and integration of health service, Richardson (1972) proposed three basic points to underlie the administration's health care policy as follows:

First, the administration will judge alternative solutions in the national health problems by their comparative effectiveness in achieving a fundamental objective. I agree with his proposal and think a fundamental objective of health care policy of Thailand should be to promote the opportunity for all Thai people to lead healthy lives regardless of their location, their economic status and the social, physical or environmental barriers that would prevent them from achieving their full health potential. The promotion of an equal opportunity for a healthy life of Thai people involves more than access to medical care and the health manpower resources which are necessary to make that care readily available. It also involves provision for adequate income through welfare reform; good nutrition; better housing; safe transportation; family planning; occupational and product safety; the right to a job and career opportunity; pollution control; and comprehensive health education.
Second, Richardson (1972) stated that

"...action should be based on an organized interrelated strategy and not simply on an accumulation of piecemeal, categorial solutions to specific health problems."

On this second point, I think in order to achieve a fundamental objective many strategies should be used by the Thai Government or other responsible organizations. The health strategies include a strong commitment to medical research; the assurance of equal access to health care regardless of the ability to pay; a balancing of supply with increasing demand and an equitably distributed and efficient supply of health manpower; the use of incentives to organize more efficiently the delivery of health services; and an increased emphasis on preventive medicine and health education.

Third, he stressed a recognition of what should be the appropriate federal role in improving the health of all people. On this point, I think the Government must increase and encourage the efficient use of all resources in order to meet the national needs. The most important resource is health manpower. Available evidence indicated that simply educating more doctors will not solve the doctor shortage and it is the Government's responsibility to influence the distribution of health manpower resources, both geographically and by specialty.

The Thai Government took actions along these lines by increasing medical enrollments in every medical school and giving sponsorship to all medical students. These actions resulted in the increasing of the total number of M.D. graduates in Thailand
from 600 to 900 each year since 1982 (National Seminar Report, 1982). The M.D. graduates who study under the Government sponsorship are bound in an agreement to work for the Government for three years.

THE MEDICAL SCHOOL'S ROLES

While the provision for better health care facilities, better financing of health care services and the administration of health care agencies are the responsibilities of higher government bodies, the production of better trained manpower and in part the planning for the health manpower and a health care delivery system are the responsibilities of Universities and other Ministries, those engaged in education and delivery systems, respectively.

Since the task of the medical school is the education and training of the most highly skilled health manpower, it must assume a great responsibility for the welfare of the nation. This tremendous importance of the medical education system and the increasing need and expense of educating physicians requires that special attention must be given to medical education.

The growth of concern about the health of the Thai people requires that those responsible for present and future medical education concern themselves with a question that is of utmost importance and that has far reaching consequences: Are the present methods of teaching and training physicians adequate enough to meet the nation's needs now and in the future?
To answer the above question, I would like to clarify the needs of consumers under the next heading.

THE NEEDS OF CONSUMERS

Dr. Preecha Deesawat, Chief Officer, Primary Health Care Division, Ministry of Public Health, described in the Report of National Seminar (National Seminar Report, 1982) that the basic elements of health services in Thailand are curative, preventive and promotive. And the function of the Ministry of Public Health is to serve community needs in health services, technology and health manpower development. He stressed that the health personnel, i.e. doctors, paramedics, dentists, pharmacists etc, should be developed in regards to:

a) Knowledge in community orientation, team work, utilization and management of existing resources, technical aspects, appropriate technology in health, management and managerial skills.

b) Attitude towards community and concept of health team in support of primary health care.

c) Practice at different levels.

Such development in the medical practitioners as well as health personnel would be an essential strategy to attain the goal of "Health for All by the Year 2000". This goal could be attained with the full participation of all the universities in the country in producing doctors who are capable of working with the community.
Dr. Prapont Piwaratt, the consultant of the National Social Development Project, spoke of the idea of rural medical education management (National Seminar Report, 1982). He also discussed the qualities and training necessary for a primary physician. He stressed that the medical education system was primarily hospital based and subsequently produced doctors who are curative minded and meant for few. Now the emphasis has shifted to community based health manpower development, and this strategy is geared towards the implementation of Primary Health Care, health services with the objective of "Health for All by the Year 2000".

He concluded that an improvement in this area would depend on a change in the medical education system which would stress more rural teaching in the medical schools.

In conclusion, Thailand needs a greater number of doctors who have a good attitude toward rural services. To show the current status the distribution of graduates from Chiang Mai medical school was surveyed.

Distribution of Medical Graduates

The distribution of Chiang Mai medical graduates from 1958-1980 was surveyed in 1984 (Faculty Report, 1984). The data is presented in Table 1 and Table 2 as follows:
Table 1 Distribution of medical graduates from the Faculty of Medicine, Chiang Mai University in 1958-1980 by working place.

<table>
<thead>
<tr>
<th>Working place</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Private Sector</td>
<td>286</td>
<td>16.49</td>
</tr>
<tr>
<td>2. Government Sector:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Ministry of Military</td>
<td>107</td>
<td>6.17</td>
</tr>
<tr>
<td>2.2 Ministry of Health</td>
<td>721</td>
<td>41.58</td>
</tr>
<tr>
<td>2.3 University</td>
<td>339</td>
<td>19.55</td>
</tr>
<tr>
<td>2.4 Others</td>
<td>8</td>
<td>0.46</td>
</tr>
<tr>
<td>3. Abroad</td>
<td>187</td>
<td>10.78</td>
</tr>
<tr>
<td>4. Miscellaneous</td>
<td>4</td>
<td>0.23</td>
</tr>
<tr>
<td>5. No reply</td>
<td>61</td>
<td>3.52</td>
</tr>
<tr>
<td>6. Death</td>
<td>21</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1734</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Table 2 Distribution of medical graduates from the Faculty of Medicine, Chiang Mai University in 1958-1980 by geography.

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>1. Bangkok</td>
<td>420</td>
<td>24.22</td>
</tr>
<tr>
<td>2. Provinces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Urban areas</td>
<td>738</td>
<td>42.56</td>
</tr>
<tr>
<td>2.2 Rural areas</td>
<td>307</td>
<td>17.46</td>
</tr>
<tr>
<td>3. Abroad</td>
<td>187</td>
<td>10.78</td>
</tr>
<tr>
<td>4. No reply</td>
<td>61</td>
<td>3.52</td>
</tr>
<tr>
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<td>21</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1734</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Although nearly half of the medical graduates from the Faculty of Medicine, Chiang Mai University, are working in the Ministry of Health (Table 1), most of the medical graduates are working in Bangkok and urban areas (66.78%). This showed a maldistribution of doctors and reminded me of the important question "Are the present methods of teaching and training of physicians adequate enough to meet the nation's needs now and in the future?". So I would like to investigate the systematic educational planning in the next chapter.
CHAPTER 2

EDUCATIONAL PLANNING

In planning any venture, there is a need to consider goals, strategies to achieve those goals, and evaluation to determine if the goals are being/have been achieved (Bandaranyake, 1985). I understand that there are at least three components which have to be considered in all systematic planning—the goals, the strategies to achieve those goals, and evaluation. The feedback from evaluation is used to make appropriate changes in goals and strategies.

In educational planning, if I would like to ensure that educational programmes will meet the society's needs, the planning components should be sequenced as above at various levels. These levels pertain to health needs of the society, to health manpower development to meet those needs, to the contribution made by individual institutions to meet manpower needs, and to the contribution of each teacher towards the institution's goals.

According to this systematic planning in education, if a medical school aims to serve a consumer's needs, the medical educational planning should consider the following sequences: health situation, health manpower needs, medical institutional goals, medical curriculum, and the contribution of each medical teacher towards the curriculum.
For the medical schools in Thailand such as the Faculty of Medicine, Chiang Mai University, the educational planning could be described systematically as follows:

**FROM HEALTH SITUATION TO HEALTH MANPOWER NEEDS**

The relationship of the health situation and health manpower needs can be explained in terms of health problems and tasks of health manpower.

Since the health problems in Thailand are shortage and maldistribution of doctors as I have summarized in Chapter 1, there is a need for a greater number and more equitable distribution of doctors. The Thai Government has responded by setting up a national health policy which aims at a more equitable distribution of health manpower.

To meet this goal, the provisions for better health care facilities, financing for health care services and administration of health care agencies are the responsibilities of the Government; the production of better trained manpower and in part the planning for the health manpower are the responsibilities of medical schools.

The Faculty has increased enrollment and has specified their curriculum objectives to produce medical doctors for serving rural areas. To achieve this goal, strategies in training doctors are needed. One appropriate place to start designing a training programme is to define the task of doctors who can work in the rural areas.
As referenced in the heading of the needs of consumers in chapter 1 page 8 and 9, the community needs medical doctors who have knowledge in community orientation, team work, utilization and management of existing resources; skill in general practice; and attitude development towards community and the concept of primary health care.

Since the medical graduates will be directors at the district hospitals, they have to handle medicine in general practice, work in teams with other health personnel, manage the hospital and provide knowledge and skill to their assistants, so the tasks could be defined as a doctor, a leader, a manager and also a teacher.

Having defined the tasks of physicians, the training needs can now be described. In this case the training needs will not be presented explicitly, but the objectives of the medical curriculum will be stated directly.

FROM HEALTH MANPOWER NEEDS TO TRAINING ACTIVITIES

Focusing on overall curriculum goals for a training programme, with the emphasis on graduate competencies, the objectives of the medical curriculum of the Faculty of Medicine, Chiang Mai University, (1978) are for the graduates to:

1. acquire knowledge and skills in solving common health problems, handling emergency medicine and injuries and managing medicine in general practice, with emphasis on physical, psychological and environmental factors involving
the patient himself, his family and his community.
2. behave according to good moral and ethical codes.
3. be able to and be enthusiastic in pursuing further education in order to solve problems by themselves.
4. be able to work with others in community development, especially in area of public health.

At an educational workshop, "Writing a Programme For Teaching Development at a Department Level" on 27-29 December, 1982, the participants were comprised of faculty executives, heads of departments and academic staff from the Faculty of Medicine at Chiang Mai University, Lampang and Buddhachinaraj Hospitals. They discussed the conforming of the curriculum objectives and the tasks of the doctor. They concluded that:

"Although the medical curriculum (1978) used at the present have wide objectives covering many areas, an improvement is still needed in order to integrate the curriculum with the requirements of medical boards, public health systems, and society.

In doing so, the detail of every subject should, therefore, emphasize application to suit the needs of rural hospitals and primary health care."

I agree with the comment from the workshop because I have seen a conformation between the objectives of the curriculum and the tasks of the graduate. The graduate will be able to provide health care to the community if he has acquired knowledge and skill in solving common health problems. He can manage medicine in general practice if he has acquired skills in handling emergency medicine and injuries and can follow good moral and ethical codes. He will be able to manage a hospital, be a
leader, and teach other personnel if he can be enthusiastic in pursuing continuous education and can work in a team.

I have found the curriculum objectives cover all areas of the graduate tasks. Even though he has emerged in changing society he will be able to justify himself by pursuing continuous education since he should realize that the present facts might prove false in the future. Since the medical school is related to and affected by many associations such as medical council, public health systems, and society, as mentioned in the workshop's report, and all systems are dynamic, general and behavioural objectives for the medical curriculum are needed at respective faculty and department levels.

In my opinion, the objectives in general may in time need to improve, but at present, it seems appropriate to use these as the primary objectives. The main problem is how teachers who carry the training task interpret those objectives and how they apply them to their subjects. If they could understand, have a correct interpretation, and realize that the objectives are worthwhile, they might try to write the behavioural objectives for their own subject and design the appropriate training activities for their students.

In order to do these tasks effectively, the teachers need to acquire some knowledge and skills in planning education.
FROM CURRICULUM OBJECTIVES TO LEARNING EXPERIENCES

Having defined training needs, the task that follows is to begin planning a curriculum whose objectives will fulfill those needs. I as well as other teachers who take responsibility in educational planning must understand what exists at present and how to plan an effective curriculum.

The curriculum is defined by Bandaranyake (1985) as a series of planned activities which bring about the desired learning in students, although it is recognized that much learning takes place through unplanned activities. A complex system such as the curriculum consists of many interrelated components, one of which is the sequence in which the content is arranged. Traditional content is sequenced from:

- simple to complex
- concrete to abstract
- basic to applied
- normal to abnormal
- example to principle
- theory to practice
- analysis to synthesis

The possibility exists, however, for each of these approaches to be reversed. An example of reversal is problem-based learning.

In problem-based learning, students focus their attention on a problem, which may be clinical or community-based. While attempting to define, analyse and solve the problem through a
process of sharing of experiences and work, students learn fundamental principles and facts, which can be transferred to different problems they may encounter in the future. Concurrently, they also learn the process of problem-solving. Learning is thus meaningful and relevant. When entire curricula are based on this approach to sequencing, problem-based curricula result (Barrows, 1973; Reerink, 1978; Barrows, 1980).

Based on the above theoretical basis, there are different approaches to every situation. The example, obviously, is the different approaches to traditional curriculum and problem-based learning. For the Faculty of Medicine at Chiang Mai University, the content of the medical curriculum is arranged traditionally, from basic science and basic medical science to medical science as the same as many other medical schools all over the world. Examples of other approaches can be seen in those at the University of New castle, Australia; McMaster University in Canada and Maastricht Medical School, Limburg University, Netherlands.

Another important component of the curriculum is the environment in which learning takes place. While problem-based learning is one way of setting the appropriate "psychological environment for learning", just as important is the physical environment for learning. For example, with the increasing emphasis on community health, many are the opportunities and strategies through which the community is used as a learning environment for the student in health professions. Community
health projects and living within the community are some ways in which an appropriate physical environment is created for learning.

The community-oriented curriculum has been seen in the medical curriculum of the Faculty of Medicine at Chiang Mai University (1978) since more credits are given to community medicine. A community health project and living in the community are compulsory for the medical student during a summer term.

Learning experiences and teaching methods play an important role in handling the curriculum. In the minds of many teachers teaching is equated with lecturing. Rotem (1980) stated that the teachers should realize that there are many approaches to teaching, of which the lecture is only one. Much learning takes place through a process of discussion, both with and among students. Experiences which encourage such discussion are small group teaching (Report of Royal Commission, 1968; Beard, 1970). Combined discussion which involves bringing together several teachers to discuss some point which cuts across departmental boundaries is another alternative. Such sessions are usually tied up with the concept of integrated teaching, and Clinical-Pathological Conferences (CPC) which is usually used in the medical schools is one example of this type (Patterson, 1956). Problem-solving exercises, case studies, role plays and games are also useful.

Many other resources and methods are also suggested: books; writings; pictures; use of overhead projectors (Barabas, 1965);
films and filmstrips (Marshall, 1953); television and videotapes (Olson, 1970); demonstrations (Joyce and Weatherall, 1959); and practical work (Thompson, 1966). Apprenticeship is recommended for medical students in addition to a clerkship in a hospital, wherein students spend a period of attachment to a general practitioner in order to obtain experience in dealing with types of illnesses which do not normally require hospital treatment.

Skills are learnt through a sequence of demonstrations, supervised practice and independent practice. The lecture used by itself is often inadequate for learning, and, unless combined with frequent variation in the type and level of student activity, it results in a gradual waning of the level of the performance. This variation can be provided by activities such as buzz groups, role plays, questions and visual aids.

Another common misconception among teachers is that if students have been taught, then learning must have taken place. Rotem and Page (1980) defined teaching as helping students to learn. It implies a wide range of activities which any teacher must carry out. The teacher's role as a facilitator of learning includes activities as diverse as role modelling, provision of learning resources, organization of field visits, provision of feedback and counselling, in addition to the traditional role of the teacher as the impartor of knowledge.

In considering teaching and learning methods, one principle to remember is that students vary in the method by which they learn the same material best, as learning styles vary. Another
concept is that of mastery learning (Bloom, 1976 and Jackson, 1984) which is based on the assumption that, given sufficient length of time, a student can learn almost anything. Evidence of how students learn best can be obtained through a critical incidents technique, or by using learning inventories.

In planning learning experiences for students, teachers should bear these principles in mind to make learning both efficient and effective.

Among the medical teachers, if they are to contribute to the curriculum, they need to know how to plan learning experiences for their students and how to select appropriate teaching methods which can help their students achieve the learning objectives.

Having written a good lesson plan, teachers need skill in implementing the lesson. The educational planner also needs skill in implementing a well-planned curriculum. The implementing curriculum depends on many organizational factors.

ORGANIZATIONAL FACTORS IN IMPLEMENTING A TRAINING PROGRAMME

The implementation of a well-planned curriculum depends on the establishment of links among the teaching organization, the service sector, other professional groups, and consumers (Coggeshall, 1965).

Curriculum development and implementation involves two sets of tasks for which appropriate bodies are necessary, viz, academic tasks and managerial tasks (Bandaranyake, 1985).
The Academic Tasks

This task includes defining abilities of graduation; identifying essential principles underlying those abilities; specifying core knowledge, skills and attitudes; sampling from non-essential areas; arranging sequence and linkages of subject matter; selecting effective teaching methods; and evaluating student learning.

The Managerial Tasks

These are: achieving consensus on the institution's purposes; consulting various sources about abilities desired at graduation; arranging for teachers to be clear about, and to analyse, those abilities; ensuring effective processes for discussion and negotiation of content; creating formal structures for implementing curriculum change; ensuring feedback for monitoring the curriculum and for evaluating processes and personnel. The curriculum committee usually takes care of these tasks.

At the Faculty of Medicine, Chiang Mai University, there are a Faculty Board, an administrative team, and an academic committee. All of these committees play the role of the curriculum committee. When problems in curriculum arise, the administrative team first reacts to them. Some of the problems may be referred to the academic committee, but most of the problems are dealt with and reported to the Faculty Board by the administrators. The Faculty Board consists of the Dean, the Vice
Dean and 20 Heads of Departments. The administrator consists of the Dean and his assistants. The academic committee consists of Assistant Dean in Academic Affairs and representatives from departments who can be either the heads or other medical teachers.

Whatever institutional system exists, its formation and functions should be based on certain principles if implementation of the plan is to be effective (Gaff, 1975).

1. The implementers should develop a sense of ownership and commitment to the plan. They should be kept informed and be heard throughout all stages of the curriculum planning.

2. To achieve the goals, all individuals responsible for implementation should be aware of each other's contribution. Thus adequate and genuine representation of each department or unit should be ensured within the body responsible for curriculum planning.

3. As it is essential that implementers agree on the final outcome of a plan, those with conflicting views on institutional goals should have adequate representation on the planning body.

4. In order to give those subjected to the plan an opportunity to voice their opinion, a genuine student opinion survey should be conducted.

Planning and implementation of educational activities require skills which need to be developed in planners and teachers.
through the activities of established educational units in each body of institutional training health personnel.

For the Faculty of Medicine at Chiang Mai University, the medical curriculum started changing in 1974. The planning stages involved many different groups of people. A chairman of the curriculum committee and the Dean have experience in educational managing. There were opportunities for teachers, students, and consumers to voice their opinions by various means (Johnson, 1972) such as meetings, discussion sessions, and questionnaires. The new curriculum was implemented in 1978. However, it might be true to say that the planning stage is easier than the implementing stage. In the case of the curriculum changes at this Faculty although a new curriculum may be generally supported during planning phases and be seen as important and appropriate, planned changes in a curriculum are often not fully implemented, a point which I will discuss at length in Chapter 4, page 47.

After understanding the educational planning, if I would like to implement the planned programme I must study the structure and behaviour of the organization. This must be done to ensure that the educational programme will meet its' objectives. So in the next chapter I will analyze the Faculty of Medicine at Chiang Mai University as a target organization.
CHAPTER 3

ORGANIZATIONAL MODEL AND STUDY PROGRAMME OF

THE FACULTY OF MEDICINE AT CHIANG MAI UNIVERSITY

The emerging view of universities playing a more active role in society poses a series of challenges to universities. How can universities or institutions combine extension programmes with training and research essential to the purpose of education?

There are varieties of ways in which institutions can be organized for development. Some institutions deal primarily with the curriculum; some combine curriculum and training; some offer advice to government; and some delegate development problems to satellite organizations with varying degrees of autonomy.

Different purposes seem to produce different organizational models, and each model has a different mixture of the ingredients that education contributes to development. It is important to know what mixture makes the most sense for a particular institution at a particular time.

BASIC MODEL OF ORGANIZATION

Four basic models have been identified by Thompson and Fogel; (1976) as follows:
1. Traditional university in which teaching and research are directed largely towards understanding development needs rather than doing something specific about them; the institution expects its graduates to acquire a general knowledge of arts, sciences and social studies and to bring the knowledge to bear indirectly on social problems.

2. The model emphasizes training for development jobs, therefore starting with need. This model has a partly autonomous faculty inside the university structure in which research or training is closely connected to social needs.

3. The separate development institution which furnishes advice to government and department planners.

4. A wholly independent institution such as the Development Academy of the Philippines with its own university trained staff complemented by a consultant drawn from a broad manpower pool. This type of institution may devote itself entirely to research, training and action required by specific development problems.

**ORGANIZATIONAL MODEL OF CHIANG MAI UNIVERSITY**

The organizational model of Chiang Mai University is traditional. Its functions have been viewed as four holds: teaching, research, community services especially for the North spreading the arts and the Thai cultural heritage creative activities (Chiang Mai University Bulletin, 1978).
The broad objectives relating to these functions are:

1. to offer undergraduate and graduate academic programmes of excellent quality in the liberal arts and sciences, and in many professional disciplines so that qualified students may develop into responsible thinking citizens, prepare for a lifetime of learning, and be equipped with a sound general education as well as the professional and technical skills needed by society.

2. to add to knowledge through research and creative activities in both fundamental and applied fields, and to seek ways of applying that knowledge to the betterment and enrichment of humanity.

3. to make readily available to all people in the community the results of research, services, activities with the preservation and stimulation of the rich heritage and the good of Thai culture, embodied in the arts and sciences.

In relation to the general public, the university will apply the benefits of knowledge by making expertise available to communities, institutions or organizations for consultation or research, and by maintaining programmes of public service for the North as well as providing any assistance possible to the country.

At present, Chiang Mai University is composed of 13 faculties and 84 departments, the student population is about 10,000, and the members of the teaching staff number more than 1,500.
The educational system is interdisciplinary so as to provide students with the most flexible study programmes.

Using the four basic models of Thompson and Fogel (1976), I classify the organizational model of Chiang Mai University as a traditional university since teaching and research are directed towards understanding development needs rather than doing something specific about them. The graduates from Chiang Mai University have acquired general knowledge and bring the knowledge to bear indirectly on social problems.

Let us look at the faculties inside the University, especially the Faculty of Medicine, where the research and training being done are closely connected to social needs. The hospital has been set up to train medical students and provide services to the local people. It is an organizational model which emphasizes training for development jobs. However, it can also be seen as a traditional model because teaching and many research projects are also directed toward understanding, and graduates must bring the knowledge to bear indirectly on social problems.

It is a fact that the organizational structure of the Faculty of Medicine, Chiang Mai University, is more complicated than the other faculties. The educational system is somewhat different from the others and has some special rules and regulations for itself.
Primary Function

The Faculty of Medicine, Chiang Mai University, is one of nine medical schools in Thailand. Its primary functions are presented in the Faculty of Medicine, Chiang Mai University Bulletin 1983-1984, as follows:

**Educational Function** Medical teaching is carried out by the joint responsibility of 20 departments. Training has been provided for 44 rotating interns each year, up until March 1983 when this training was terminated due to the change of the curriculum. Currently training is provided for approximately 110 residents in various clinical residency training programmes. The courses for students in Nursing, Pharmacy, Dentistry, Associated Medical Sciences and Education are provided by the Faculty according to the interdisciplinary educational system of the University.

**Research Function** The medical research is aimed at helping to solve both local and national health problems and the utilizing of available resources.

**Public Services** Public services are given as follows:
1. The Maharaj Nakorn Chiang Mai Hospital is a 1000-bed medical center in the north of Thailand with a daily outpatient concensus of 800-1200.
2. A joint programme was set up for the Faculty of Medicine to provide physicians for working at local municipality health posts.

3. With the co-operation of the Ministry of Public Health, physicians from the Faculty of Medicine give medical services at rural health centres or give special lectures for doctors and other health personnel at provincial hospitals.

Organizational Model

DIAGRAMME 1 The Organizational Model of the Faculty of Medicine, Chiang Mai University.

The Dean of the Faculty has full legal responsibility in running the Faculty. The Faculty Committee functions as a consultative board, and it is comprised of the heads of the 20
academic departments. In practice, the Dean consults and develops policies based on the consensus of the Faculty Committee.

In terms of collaboration and co-operation, it is important to run the Faculty with general agreement from the Faculty Committee.

Each academic department is comparatively free in decision making, especially in teaching and services. The Heads of Departments take full responsibility for the functions of the departments.

The Dean may appoint assistant deans to supervise certain areas of organization. For instance, there are assistant deans for academic affairs, for student activities, for general administrative activities, for welfare and supporting services, and for postgraduate training.

The appointment of the Dean is given legally by the University Council, but the nominee is elected by the faculty officers. The dean then forms his administrative staff, which includes associated deans, assistant deans, a hospital director and assistant directors. The term of each administration is 4 years.

STUDY PROGRAMMES

The Chiang Mai Medical School was established in 1958, six years before Chiang Mai University. At the beginning, it belonged to the University of Medical Science. It was the first medical school outside Bangkok (the capital of Thailand). The main
reason for establishing a medical school outside Bangkok was to bring students in touch with community problems. Chiang Mai was selected because it is in the heart of the northern rural area of Thailand. The expressed purpose of Chiang Mai Medical School was to train physicians for work in rural areas (Johnson, 1970).

A number of study programmes have been developed in many institutions designed to bring students in touch with community problems. Some programmes have been voluntary and others have been made by the university. Some have been part of the curriculum and some have been added before or after academic terms. Most were instituted with the hope that they would counteract student elitism, motivate study and interest in social problems, and possibly even contribute to constructive community change.

Since its inception, this Faculty has used its member to aid development mostly through the curriculum and training programmes. The medical curriculum was changed in 1978, the purposes of the change being to increase emphasis on clinical clerkship and to train graduates to serve the Thai community. It is important to look at the medical curriculum more closely.

MEDICAL CURRICULUM

Although the medical school's curriculum is only one factor that determines the product of medical education, it is a very important one. Medical education in Thailand has been dominated by the American medical system which sets high standards for
individual patient care. But the economic situation in Thailand denies most patients access to a high standard of medical care. Consequently, a large group of the population is not reached.

In planning the medical undergraduate curriculum, there are three important factors to be considered. These are: the society (community-consumer); the political situation (government policies, especially regarding health); and the nature of medical science and technology itself.

**Important Factors:**

The **Society** Community, and ultimately the consumer will define what problems the future medical graduate will be asked to solve, and which community needs must be met. It logically follows that the acceptability and workability of solutions will be mainly determined also by the community. However, since all needs of the community cannot be met, care must be used in choosing from many needs, whilst also ensuring that the best use is made of scarce resources. Some of these decisions will be made in patients' homes, in physicians' clinics, in crowded health centers, or in provincial hospitals. All of these must be taken into consideration when designing the curriculum. Since the future physician is also a member of the community, his attitudes and his concept of the role of a physician will have a direct relationship to his own perceived needs and the demands of the community.
The Political System of a country will also shape the medical educational process. For instance, the government defines the health policies of a nation and also prescribes the health care delivery system. It must also define where in this system the skills of physicians should be maximized. Moreover, the government is in the best position to define what resources will be made available to a physician as he performs his tasks. In all these roles, of course, it is assumed that health care is the responsibility of the government. However, in a system of free enterprise, it becomes more difficult for the government to be explicit in these matters.

The Current Status of the Science and Technology of medicine has a direct influence on curriculum content. Since the knowledge explosion is achieving its highest momentum one of the problems common to many discipline is that of an information overload (Anderson, 1980). I agree with this opinion, however, an information overload was recognized in medical education already many years ago, since then the situation has become much more acute. Here many teachers passing on to their students as much as possible of overwhelming mass as rapidly as possible, more often in an undigested fashion than otherwise. It could be so much improved if the teachers understood better in the following issues: what does a particular course try to achieve and why; what are the best and most efficient teaching methods to achieve those aims; what are the criteria to be use to achieve an appropriate curriculum; should the curriculum be biased to reflect the present day opinions or should it be of a more...
theoretical nature to prepare the student for possible future innovations and changes; what provision should be made for the revision of the curriculum to allow for necessary addition; how can we balance our courses so that the information load in each is comparable, both in different disciplines and indeed in the same discipline; what solutions are available and more importantly; what solutions are effective for a particular situation; and what is often a theoretically ideal solution may not be practical because of various constraints. A flexible medical curriculum must, therefore, give allowance for these variables.

At this stage the organizational model, the study programme, and the medical curriculum have been studied and it was found that a flexible curriculum might be one of the possible ways to train a qualified physician for rural area of Thailand. However, various medical schools are searching for solutions and it will be very helpful to study how other people solve the same kind of problems in the next chapter.
CHAPTER 4

CHANGING AND IMPLEMENTING CHIANG MAI MEDICAL CURRICULUM

An expectation of change is cultivated by the problem concept, especially as it relates to human behavior. Problems are important stimuli to change because we make them out of the substance of our wishes. We have become accustomed to asking for solutions. One way of searching for solutions is looking at other successes in solving the same kind of problems to see whether we can adapt their solutions to our current problems.

Let us look at changes and trends in medical education in American medical schools. Afterwards, I would like to discuss whether Thai medical education should adopt any part of these changes and trends and if so, how these could be effectively adopted.

CHANGES AND TRENDS IN MEDICAL EDUCATION

Pellegrino (1971), stated about the American situation that

"Medical education is now regarded by society as a means to an end defined more by social and public utility than by academic and intellectual criteria..."

"...In short, the cry is everywhere the same: a demand for visible, accessible, available, volume medical services for every citizen in terms that the community and the public will understand and accept."

Matlack (1972) reported the main changes in medical education in America proposed over the last two decades. They
formed the response of medical education to the "health care crisis". He presented them separately for the sake of clarity as follows:

1. Increasing enrollment in existing medical schools is the most obvious way to attack the shortage of physicians.
2. Establishment of new medical schools.
3. Accelerated programmes.
4. Integrated programmes.
5. Advanced standing admission

HOW DOES THAILAND SOLVE THE HEALTH PROBLEMS?

Thailand like other countries in the world face the problem of a "doctor shortage". The Government has responded to the problems in the following ways:

Increasing Enrollment in Existing Medical Schools.

At least 300 additional graduates were needed between the years 1982-1986 by the Government. All medical schools in Thailand had to share this responsibility by increasing the size of their enrollments. This brought up the problem of the optimum class size.

The long standing assumption by the medical profession that large classes mean lower standards has finally been challenged. As Coggeshall (1965) stated:
Within the field of medical education, strong views have been held concerning the optimum size of a medical school. There has been a fairly limited evaluation of the effect of size on instructional results. There has tended to be great reliance on tradition in adhering to prevailing enrollments and limited consideration given to ways of serving large enrollments.

Sanazaro (1966) studied the class size in medical schools and indicated that in medical schools, as in other colleges and universities, class size rarely influences the effectiveness of classroom instruction. He found that large medical schools with larger classes had lower average costs per student, with no observable drop in the quality of education.

I would like to comment on the effect of class size on the study programmes being used in the Faculty of Medicine at Chiang Mai University as an example illustrating many factors which we have to think about when we consider the optimum class size.

At the beginning, the number of students per class in this Faculty, each year was approximately 60. Since it was a newly established school there was a shortage of staff, equipment and other resources; teaching and learning were didactic rather than active.

In 1962, a mutual desire for establishing a relationship between the Faculty of Medicine, Chiang Mai University, and the college of Medicine, University of Illinois arose. An agreement was signed, and a joint programme was operated during the period of 1962-1970. The recruitment of staff and resources was done immediately so that the teaching pattern could be changed from
didactic teaching to active learning.

This leads to the assumption that the optimum class size depends on teaching and learning styles. For didactic teaching, the instruction is mostly given by lecture, and an increase in the number of students rarely influences the effectiveness of the classroom. But for active learning, in which knowledge is acquired through experience in practical and clinical work, discussion and debate (Brigh 1976), the number of students will affect greatly the success of the learning process. The class size at this Faculty remained the same until 1978 when the new curriculum was implemented after the Government had issued its policy of increasing the number of enrollments at medical schools. The number of students increased from 60 to 120 immediately at this Faculty and to 144 a year later. This doubling of the number of students has effected organization and other resources, even rooms for study. It was more complicated when the Faculty had to organize the overlapping of the old curriculum and the new curriculum since one premedical year was cut. The staff worked so hard in the overlapping year that they recognized it as a painful experience. The pressure did not leave time to furnish the actual teaching.

No formal research has shown the results of this educational situation but it was at least, a cause for releasing pressure in the clinical year by bringing students to study some clinical work in provincial hospitals. Lampang and Buddhachinaraj hospitals were selected first and then Chiang Rai Hospital. It was also a first step towards building up a new environment for
Establishment of New Medical Schools.

The Faculty of Medicine at Chiang Mai University was founded in 1957 with the expressed intent of producing medical doctors for rural areas. It was the first medical school established outside Bangkok. In 1985, there were 8 medical schools in Thailand. The establishment of a ninth or tenth was considered with deliberation among the medical professionals and others concerned since it would require a lot of investment. Nevertheless, the ninth medical school was established in 1988.

Accelerated Programme.

The Medical Curriculum was changed from the 2-2-2 system and a one year internship to the 1-2-3 system with no internship. This automatically accelerated the total programme. Research on whether the graduates from the two programmes have different levels of performance has found some differences in some clinical performances (Varavit, 1982).

Integrated Programmes:

Some medical schools in the USA have admitted a small number of students in a six year, integrated, premedical-medical programme. The student receives his bachelor's degree about two years before his M.D degree.

One of the first plans of this type was the five year
programme offered by The Johns Hopkins University School of Medicine in 1959 (Asper 1964). Hand-picked students entered the five year programme after two years of college. The first year was used to complete the necessary premedical courses. They followed the conventional four year curriculum, with the B.A degree given at the end of the second year. Acceleration of the last four years into three Calendar years was a permitted option. The total time needed to complete both the B.A and M.D degree requirements was six to seven years.

The key concepts of integrated plans are

1. a better connection of medical education to premedical education
2. an attempt to move beyond the rigid structure of the traditional programme with its sharp separation between the college curriculum and the medical curriculum and its sharp separation within the medical curriculum, basic sciences and clinical medicine.

In Thailand, during the period of 1968-1975 the medical student always received the B.Sc degree about two years before his M.D degree. After the first degree, some students left the medical school. Most pursued a Ph.D degree directly in another field of science and some finished their student lives early.

In 1970, the Faculty picked 4 students to enter the 5 year programme from the B.Sc holder, and they used their first year to complete the necessary premedical course.
During the period of 1964-1978, the Medical Curriculum was more flexible; the medical students and paramedical students had studied some core courses together in preclinical years and in the premedical years, they had studied with science and social science students through the interdisciplinary system of Chiang Mai University. This might be seen as an attempt to move beyond the rigid structure of a traditional medical programme. Unfortunately, the medical programme was brought back to its previous sharp separation in 1978, since the number of students was immediately increased, and there was a problem in the management of the medical curriculum. To date, no research shows the impact of the different Medical Curriculum implemented at this Faculty.

To me, having students take common courses may be one possible way of teaching them to work with teams and may change fundamental attitudes towards health practice. However, the various methods of education work only in certain situations, and there is no single "right method" to ensure the new curriculum (1978) by good advice of trained medical teachers can also produce a qualified graduate.

Advanced Standing Admission:

The Medical Education in the United States from 1969-1970 reported that in 1969, sixty-four students entered medical schools with advanced standing from other degree programmes, and 76 transferred with advanced standing from foreign medical schools.
Advanced standing admission accomplished several objectives. By drawing qualified candidates into shortened programmes, it increased the short-range output of M.D's. More important, it brought into medicine men and women with graduate training in other fields. This cross-fertilization of disciplines should prove beneficial both to medicine and society (Matlack, 1972).

In my judgement, the situation in Thailand does not allow a medical school to offer advanced standing admission. All medical schools are strictly fixed in their standards for admission. To be a medical student at the Faculty, the candidate must have matured and passed from a high school with healthy sound mind and a clean record of good behavior. Even though some candidates have other degrees, they can be admitted through one of three ways (Faculty Bulletin 1983-1984):

1. The national entrance examination given to candidates from all over the country by the Office of the University Affairs each year in April.

2. The 50% quota entrance examination for candidates from the 17 provinces in the North, given by Chiang Mai University.

3. The cooperative project between the Ministry of Health and the Office of the University Affairs M.D to admit graduates for rural development by an annual selection of 24 students from 17 provinces in the North.

Since the number of currently available places at the University is still inadequate, especially places in the Medical
School, the Medical School cannot offer any places through other forms of admission.

Curriculum Reform

As I mentioned previously, one of the most difficult problems facing developing countries such as Thailand is how to bring effective health services to those who need them most, namely the poor. There are not enough physicians, nurses, or paramedics, and those who do have medical training are reluctant or ill-prepared to work in rural areas. Medical schools traditionally have emphasized hospital practice and research, neglecting rural health and preventive medicine.

Let me now turn to the question of how Thailand can best solve the basic health problem: the shortage of physicians. The problem might be solved by increasing enrollments, establishing new medical schools, and accelerating programmes such as those in the United States. Of course, it must be kept in mind that care must be emphasized. Although studies show that many institutions are doing innovative things and, by extension, that other institutions could follow their lead, the cases studies have also shown that something being done in developmental education at one institution does not necessarily work at others. Curriculum reform is one possible way for the medical school to solve the maldistribution problem and to get more physicians to work in rural areas.
Looking at the Faculty of Medicine at Chiang Mai University, I see four underlying reasons for the reforming of the Chiang Mai Medical Curriculum in 1978. First, though the academic preparation of many students was beyond that of students a generation ago, the standard medical curriculum had not kept pace with the new levels of preparation. There were two groups of students, one who completed high school with excellent grade and the other who had ever studied in other faculty in the university before coming a medical student. For these students the first year of the standard medical curriculum are too elementary.

Second, there was a need for more flexibility of programming and more tailoring to suit individual needs. Besides the better prepared students, there were also those with medium academic preparation and an increasing number with below standard preparation who should have been able to get medical training. The later group includes minority group members and some students from the Ministry of Public Health and Chiang Mai collaborative programme.

However, since I have mentioned that the increasing number of enrollments does not allow for flexibility in the medical training programme, the Faculty has had to leave it as the individual's problem for the minority groups.

Third, there is traditional curriculum. There is a reaction against cookbook instruction and massive memorization of facts that may never be used by the student. There is a
dissatisfaction with the duplication and fragmentation of instruction caused by department teaching patterns. There is a call for more independent study and for class work more relevant to practice. There is a need for more correlation between the bio-medical science and clinical work. There is a need for those going into clinical medicine to get into clinical training earlier in their programme. There is a need for those preparing for research careers to get into research earlier.

Fourth, the explosion of knowledge is reaching its highest momentum. Most medical teachers are passing on an overwhelming mass of subject matter to their students as rapidly as possible. This causes a lot of problems in managing curriculum at all levels: course, subject, department, faculty and university. Many courses call for more credit and time. The overlapping of content in different subjects has been seen. There is also a requirement for opening new courses.

On the other hand, the explosion of knowledge makes it less important to depend on the undergraduate medical curriculum as the only opportunity to acquire the basic facts of medicine. Much of a physician's practice will be based on knowledge discovered after he graduates.

Therefore, providing students with the motivation and ability to continue self education is one of the most important goals of a modern curriculum.
CHANGING AND IMPLEMENTING CHIANG MAI MEDICAL CURRICULUM

There is little formal evidence of the changing of the Chiang Mai Medical Curriculum in 1978. One available source, however, is the Medical Curriculum statement from 1978.

"The Chiang Mai Medical Curriculum was changed from the 2-2-2 system, namely, 2 years each of premedical, preclinical and clinical levels to the 1-2-3 system in 1978. The new system consists of one year premedical, 2 years preclinical and 3 years for clinical levels. The change emphasizes more clinical clerkship for students; and the medical courses are oriented to training M.D graduates to serve the Thai Community."

..."to gain more experiences in rural community, 26 credits out of the total 286 are given to community medicine."

The objectives of the Medical Curriculum are for the graduates to

1. acquire knowledge and skills in solving common health problems, handling emergency medicine and injuries and managing medicine in general practice, with an emphasis on physical, psychological and environmental factors involving the patient himself, his family and his community.

2. behave according to good moral and ethical codes.

3. be able to and pursue be enthusiastic about pursuing further education in order to solve problems by themselves.

4. be able to work with others in community development especially in the area of public health.

In my investigation, the first question I would like to address concerns what the new curriculum actually is? The
curriculum is not just structure and objectives. There are the factors of content, "teaching climate", and also assessment. All of these must be designed before implementing the curriculum.

First, let us look at the structure of the new curriculum, as mentioned above. The structure was changed from the 2-2-2 system to the 1-2-3 system. This means that one year of premedical was cut and a clinical year was added so the clinical clerkship would be emphasized more. One possible way to design medical courses to train M.D graduates to serve the Thai community is to give more credit for community medicine. However, in my view, that is not enough to develop good attitudes for graduates toward the community. A great deal of mechanisms are needed such as doing research focused on community needs with feedback to the teaching, processing medical students learning clinical work in villages and rural communities, assigning the students field work, and changing some teaching and learning styles.

Second, let me turn to the objectives of the curriculum. In Chapter 2, page14-16, I discussed that I have seen a conformation between these objectives and the tasks of graduates. My colleagues and I have discussed this point in a workshop and we all agreed that these objectives are worthwhile and can be used as guidelines in managing the curriculum for the Faculty.

Third, is the content, which is presented in the Table 3.
Table 3 Medical Courses:

<table>
<thead>
<tr>
<th>Year</th>
<th>Course + Credit</th>
<th>Year</th>
<th>Course + Credit</th>
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<tr>
<td></td>
<td>1st semester</td>
<td>1st semester</td>
<td>2nd semester</td>
</tr>
<tr>
<td>1st</td>
<td>BIOL 181 4(3/3-1/3)</td>
<td>BIOL 182 4(3/3-1/3)</td>
<td></td>
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<tr>
<td></td>
<td>CHEM 155 4(3/3-1/3)</td>
<td>CHEM 156 4(3/3-1/3)</td>
<td></td>
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<tr>
<td></td>
<td>PHYS 113 4(3/3-1/3)</td>
<td>STAT 140 3(3/3-0/0)</td>
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</tr>
<tr>
<td></td>
<td>ENGL 191 3(2/2-1/1)</td>
<td>ENGL 192 3(2/2-1/2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BEH.SC 101 3(3/3-0/0)</td>
<td>PHYS 114 4(3/3-1/3)</td>
<td>ELECTIVE 3</td>
</tr>
<tr>
<td></td>
<td>ELECTIVE 3</td>
<td>Total 21</td>
<td>Total 21</td>
</tr>
<tr>
<td>2nd</td>
<td>ANAT 201 8(6/6-2/6)</td>
<td>ANAT 204 4(3/3-1/3)</td>
<td></td>
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<tr>
<td></td>
<td>ANAT 203 2(1/1-1/3)</td>
<td>ANAT 206 4(2/2-2/6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEN 201 3(2/2-1/3)</td>
<td>BIOCHEM 201 8(6/6-2/6)</td>
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<tr>
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<td>COM.MED 201 1(1/1-0/0)</td>
<td>PHYSIOL 205 10 (7/7-3-9)</td>
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<td></td>
<td>BEH.SC. 202 3(3/3-0/0)</td>
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</tr>
<tr>
<td>3rd</td>
<td>MICROBIOL 301 7(4/4-3/8)</td>
<td>PARASIT 301 4(2/2-2/4)</td>
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<tr>
<td></td>
<td>PHCO 301 6(5/5-1/3)</td>
<td>PARASIT 302 1(1/1-0/0)</td>
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<td></td>
<td>PATH 301 6(5/5-3/8)</td>
<td>PATH 302 5(3/3-2/6)</td>
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<tr>
<td></td>
<td>PATH 303 4(2/2-2/6)</td>
<td>PATH 396 0(0/1 -0/0)</td>
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<td>PATH 396</td>
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<td></td>
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<td></td>
<td>MED 307 2(2/2-0/0)</td>
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<tr>
<td>4th</td>
<td>COM.MED 403 3(3/P-0/0)</td>
<td>MED 401 18(12/6P-0/0)</td>
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<td>PED 401 9(9/3P-0/0)</td>
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<td>PHCO 402 1(1P-0/0)</td>
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<tr>
<td>5th</td>
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<td>ORTHO 502 7(7/1P-0/0)</td>
<td>OPH 502 5(5/1P-0/0)</td>
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<tr>
<td></td>
<td>OTOL 502 5(5/1P-0/0)</td>
<td>ANES 501 6(6/2P-0/0)</td>
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<td></td>
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<td>COM.MED 502 2(2/P-0/0)</td>
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<tr>
<td></td>
<td>COM.MED 503 4(4/P-0/0)</td>
<td>FOREN.MED 502 4(4/2P-0/0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MED 591 0(0/1 -0/0)</td>
<td>Total 51</td>
<td></td>
</tr>
</tbody>
</table>
Fourth is the teaching climate, which affects the quality of education and is affected by many elements. The changing of the university's role, the fluctuation in the number of students, the explosion of knowledge and technology, the growth and development of institutions, the management of education, the student activities along with other factors which lead to a change in the educational environment, all effect the teaching climate and create some pressure on the institution.

The growing pressure stimulates the institution to consider its relationship with other institutions and to reconsider how and what it teaches, and how the institution might evaluate its effectiveness. In the case of Chiang Mai University, the student activity made the Faculty of Medicine more conscious of the inadequacies of much of the teaching.

Evidence of this concern about the quality of teaching was to be found at the Faculty of Medicine in 1983, when a group of medical students evaluated the 2nd year medical courses without
permission. Even though an informal and poorly constructed questionnaire was used, this action by the students showed some dissatisfaction with teaching methods (Faculty Meeting Report 10/1983).

To appreciate the present situation it is necessary to consider the roles of students, staff and institution in moving to improve the general quality of medical education in the Faculty.

In closing, the changing of the medical curriculum is, in general, a slow process. It is also very threatening to those who have been accustomed to a set way of carrying out their teaching tasks, especially in an institution with an established curriculum like the Faculty of Medicine. Thus any change which is considered desirable should be introduced gradually, perhaps on a trial basis. For others, change is perceived as a threat as it may often be incongruent with their value systems, or it may involve extra effort. Any curricular change is likely to be more costly in terms of staff time, at least in the initial stages, as more time would be required for preparation.

Other factors which may hinder change are the lack of adequate resources for implementation, incongruence between the existing system and the intended innovation, and lastly, poor administrative support could stunt the positive effects of a well thought out plan. It is often the case that planned changes in a curriculum are not fully implemented as in the Faculty of Medicine at Chiang Mai University. Although a new curriculum may
be important and appropriate, the old curriculum often continues to dominate. This often occurs because the existing organizational structure which was developed as appropriate for the old curriculum remains in place; or it can be because difficulties arise in implementation, and the teachers are unable to develop new patterns of teaching; or it can be that some teachers are simply reluctant to change.

Based on the above review I have found that some mechanisms are needed to help medical teachers to expose self development concept. Since the curriculum development and adjustment process must be maintain as a viable process in the medical schools it would be necessary to have an appropriate infrastructure that will enable this process to be put in motion. The next chapter, I would like to look at the professional development practiced in various countries and discuss whether the Faculty of Medicine at Chiang mai University should adopt any parts of those.
CHAPTER 5

PROFESSIONAL DEVELOPMENT

The higher education crisis in Thailand has its roots in the tremendous growth in numbers of secondary school graduates during the past decade. Although many new universities and colleges have been established simultaneously, the number of places currently available is still inadequate.

Budget and manpower constraints limit the growth of various universities which are forced to stabilize their student enrollment in order to maintain quality of teaching and standards of graduates. However, the general public as well as the Government will almost certainly pressure the universities to reconsider their enrollment policies. Increasing enrollments have already been seen in some faculties such as Medicine in every university in Thailand, especially at the Faculty of Medicine, Chiang Mai University, where enrollment has doubled in recent years.

In order to maintain high quality of teaching and graduate standards within the context of these constraints and demands, the university has to search for programmes that bring about improvement in management, teaching-learning processes and quality of their staff. In other words, an appropriate organization and staff development programme is needed.
STAFF DEVELOPMENT IN GENERAL

Definition

The term staff development was defined by Pipper and Glatter (1977, p14) as:

"A systematic attempt to harmonize individuals' interests and wishes and their carefully assessed requirements for furthering their careers with the forthcoming requirements of the organization within which they (are) expected to work."

Applying it to higher education, Teather (1979) stated that this definition covers the development of abilities of academic staff in the areas of teaching and examining, research and research supervision, consultation and administration. It also applies to administrative, technical and clerical staff.

Shore (1979, p77) stated that

"Staff development refers to improving the skills and knowledge of the faculty."

"Some improvements can be made by changing the reward for good teaching, upgrading if vis-a-vis the publishing, committee, and administrative achievements which are, in practice, the main criteria for tenure and promotion. Other improvements can be effected by providing better media services, heating classroom in late October, and spending money on the library."

Gourlay (1988, p 57) define staff development as

"The systematic attempt to improve the functioning of an organization through the performance of its staff."

Aims

Although staff development efforts of different universities have specified different aims, in general, the main intention is for members of the academic staff to have more knowledge in the
fields of politics, ideology, university pedagogies and group management as well as in their own specialised subjects.

Context

Foster and Roe (1979, p22) has adapted a number of categories which provide a framework for professional development as follows:

- clearinghouse for information;
- library for local use;
- newsletter publication or other information dissemination;
- reading, study skills and other training for students;
- formal courses leading to qualification;
- short informal courses;
- seminars, workshops and discussion;
- packaged material, such as self-instructional programmes,
- consultation with individual members of staff;
- assistance with course and curriculum planning;
- advice on policy matters;
- descriptive research;
- theoretical and experimental research;

Some of these items such as courses, workshops, seminars and self-instructional programmes are very direct and are obvious ways of addressing professional development.

Organizational Structure

Staff development can have various organizational structures. Shore (1979, p77-78) has answered the question of how universities and colleges provide for instructional development:

"...Some leave it to chance. Some set up committees or ask a seemingly appropriate unit, such as a counselling service, to operate workshops. A few assign an individual co-ordinating responsibilities. The persons responsible for these services include directors of services, vice presidents and deans of universities, chiefs of staff development, co-ordinators of research and experimentation, institutional research and development personnel, planning animators, and counsellors. Some colleges and
universities which do not list pedagogical services or personnel have committees on instructional development instead. Finally, a growing number of institutions have established pedagogical service units of various sizes, charged with relatively broad ranges of instructional development activities."

The same as Harding (1974) and Trickey (1977) Greenaway and Mortimer (1978, p63) described various organizational structures for professional development:

In some cases single posts were created with, say, responsibility for running an induction course in teaching methods. In other cases one or more units were established to cover a range of supporting services in, for example, educational technology, curriculum development, staff and training and development

Activities and Course Design

Both Harding (1974) and Trickey (1977) stated that most polytechnics in Britain provide induction courses for new members of staff whether they are trained and experienced or not. They described the induction courses as follows:

"They are usually held at the beginning of the academic year before teaching starts and vary in duration from one day to about one week. The courses aim to introduce staff to the philosophy, organizational structure and facilities of the particular institution. Topics covered include academic and administrative structures and procedures, support facilities such as library, media services, computer services, and staff and student affairs. Most courses consist of lectures, discussions, tours and visits to specialist facilities."

"...if the member of staff is new to teaching, support may be available either from a senior colleague in a related subject area acting as mentor or, in an increasing number of institutions, from an educationist acting as a professional tutor".

Trickey (1977) analysed the content of these teaching method courses. He found that they are remarkably similar,
including such topics as the nature of learning; choice of teaching methods; use of audiovisual aids; methods of examination and assessment. In every case an attempt was made to relate the topics to practical experiences of the students. Formal presentation of theory was kept to a minimum.

In Denmark, Conrad (1979, p96) has described the design of two teacher training courses, one for a number of teachers from the Faculty of Medicine and the other for teachers at the Institute of Chemistry.

These courses were oriented towards the following subjects:
- the systems approach to education, analysis and formation of educational objectives (six hours)
- students' characteristics (two hours)
- the psychology of instruction and learning (six hours)
- course planning and instructional methods (12 hours)
- programme instruction (2-4 hours)
- audiovisual aids in education (4 hours)
- educational evaluation (6-8 hours)
- voice test
- an attempt to establishing a syllabus for the participants' teaching during the ensuing semester, presented and discussed at a seminar (4 hours)
- course evaluation

Roles of the Person Responsible for Staff Development

McAleese(1978b, p56) described the roles of the person responsible for staff development under a number of unsolved
"In the absence of a clear definition of the nature and purpose of development or training, it is inevitable that the role of the staff development officer should be uncertain. He is organizer, teacher, researcher, consultant, counsellor and facilitator. He mounts formal courses, carries out research studies on teaching and learning in higher education, adopts a consultancy relationship with those of his colleagues who approach him, and tries to establish himself in decision-making in areas concerning the management of teaching and learning. His strategies are various: the long siege, the commando attack, the leaflet raid, the calculated alliance, the fifth collumn, the wooden horse. His central problem is the ambivalence between active intervention and non-directive support, and his approach must be sensitive to the work undertaken and the problems encountered".

As the above reviews, we can see the general situation of staff development. It varies in size, organizational structure, approaches, etc. However, the various methods attempt to achieve the same goal: a more qualified staff. A number of activities in a wide context are carried out by different governing bodies with uncertain roles and strategies.

**PROFESSIONAL DEVELOPMENT AT THE FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY**

Now, let me apply the definition of staff development defined by Gourlay (1988) to the Faculty of Medicine at Chiang Mai University.

"The systematic attempt to improve the functioning of an organisation through the performance of its staff"

I can define the staff development at this Faculty as "the systematic attempt to improve the functioning of the Faculty
through the performance of the medical teachers and other personnel". By this definition, all members have to involve if the whole faculty is to be developed effectively. However, in this study I would like pay much attention on medical teachers because I recognize them as the most important group. And, since they are professional so I would like to use the term professional development instead of staff development.

Gourlay (1988) explained what happens to professionally, technically, and managerially trained people during the course of their careers if there is no continuing education. There are two main trends as the time pass:

1. the change and growth of required knowledge in particular technology leaves the medical teachers needing to know more and more compared with what they first knew when they completed their basic training: this is a new knowledge gap.
2. what they once knew is itself steadily reducing, by forgetting or falling to use all of that initial stock of knowledge in which they were originally trained: this is a retention gap.

Adding these two forces together they are faced with an ever-widening total gap which is not only of knowledge but frequently of skills and sometimes of attitudes. The whole is educational needs for medical teachers to perform well.

According to the primary functions of the Faculty which I presented in Chapter 3, page 29, medical teachers as professional health workers can contribute to their own development; they
should acquire competencies in teaching, research and public services. Particularly, in their teaching function, generally considered their chief concern, medical teachers must acquire academic, teaching and managerial competencies.

I would like to describe what is being done at the Faculty of Medicine, to sharpen these three competencies in medical teachers. I will start with the improvement of academic qualifications, then the improvement of managerial skills and the improvement of teaching skills. The improvement of teaching skills being the major thrust of my study.

Improvement of Academic Qualifications

Improvement of academic qualifications appears to be the most attractive to all medical teachers. Being a Ph.D holder is always prestigious in a university in Thailand. Besides, there are many other advantages, i.e. salary, faster promotion to higher official and academic ranks, and greater recognition in the profession.

The usual practice is to send staff members aboard for a period of time to pursue courses in advanced study and research. The majority go to the United States and the United Kingdom, but an increasing number now go to West Germany, Australia, and Japan. Scholarships offered by foreign governments and foundations are major sources of support. A small number of staff members rely on their own funds for further study.

Since 1982, through the collaboration with the China Medical
Board of America (CMB), the Faculty can send staff members to further their education at the Ph.D level and obtain short-course training aboard. This is done through a fund called the Staff Development Fund of the Faculty of Medicine, Chiang Mai University.

Faculty members who study under government or other official forms of sponsorship are bound in an agreement to work for the sponsoring organization for twice the number of years spent for studying abroad.

The Bureau of University Affairs of Thailand recommends that the ratio of doctorate-master-bachelor degree holder in the university should stand at about 2.5: 5.5: 2.0 in the year 1986 and 3:5:2 in the year 1991 (National Development Plan of Higher Education, 1987, p13). However, the present ratio in most universities have not reach the recommended ratio yet. The qualification given to medical graduates after fulfill the residency training programme (3-4 years) by the professional board is equivalent to a doctor degree makes the ratio of doctorate-master-bachelor holder at this Faculty looks better. It is about 1: 5.5: 4.5 (Faculty report, 1984) However, the further education for a medical teachers who hold bachelor degrees still needs to be upgraded.

In evaluating the quality of teaching, there are many important statistics to be considered. The student-teacher ratio is one. The Bureau of University Affairs guidelines require that the student-academic staff ratio for social science
be kept at 18:1 and for health science, 4:1.

The Faculty of Medicine tries to keep the full time equivalent student to academic staff ratio at 4:1. But because of the interdisciplinary system of Chiang Mai University the Faculty has to serve other faculties by providing many courses for paramedical students, especially in preclinical and some clinical departments, so it has not met the preferred ratio yet.

**Improvement of Managerial Skills**

By the laws of sound management used in the world of business, good managerial skills are essential to every manager. If we look at the university, we observe that it is an organization which deals with teachers, academic supporters, and administrators. It can only function through their staff, the quality of that work depends vitally on the nature of the relationship between management and staff—the interaction between the administrators and the administered, both individually and collectively. Where this relation is good, there will be high **morale**, which has been defined by Gourlay (1988, p63) as

"a general attitude of workers based upon their faith in the fairness of employer's policies and behaviours, the adequacy of immediate leadership, a sense of participation in the organization, and an overall belief that organization is worth working for"

In such an atmosphere people work willingly and well. Where quality of their relationship is bad there is noticeable lowering of morale with an adverse effect on standards of work and therefore on the quality of education.
Consequently, the development and maintenance of good management/staff relations is a major responsibility of personnel management. And, there are always at least two parties to a relationship. First, the primary responsibility for its quality belongs to the administrators or the managers, because the climate in which the organization works is largely determined by their attitudes and actions. Second, the day-to-day interaction with staff, individually and collectively, has a major motivating impact. So there is a wide-ranging in the operational techniques of achieving a positive, constructive staff relationship in the area of staff supervision, styles of management, motivation methods, delegation, participation, achieving discipline, managing conflict and negotiating.

Applying to the Faculty of Medicine at Chiang Mai University, first, as a health servicer it requires a high proportion of people in relation to buildings and equipment so "people problems" are very likely to be numerous. Within those staff are many different health professions whose members have been trained to use independent judgement and strive for excellence, sometimes leading to competition and conflict. Human behaviour and personal relationships are often unpredictable and irrational, leading to additional kinds of problems that would not arise in the management of material things such as stores or records. Second, as the medical school it requires appropriate number of medical teachers and academic supporting staff. To achieve the educational goals of the Faculty it would need qualified processes of basic professional/technical education,
recruitment, selection and induction of staff into the Faculty.

However, in this study I am not concerned with the recruitment, the selection, nor the induction but with the continuing education, throughout their careers, of those staff who have become trained employees of the Faculty, on whose skilled, motivated and experience work the Faculty's functioning chiefly depends.

In order to run the professional development programme effectively there are two main aspects to be developed. First is the development of administrative and interpersonal competencies among leaders of the Faculty: administrators at every level—dean and his staff, heads of departments, and head officers. These people perform leadership roles but are seldom prepared to administer or manage Faculty, and they must learn a variety of concepts, skills and techniques relevant to the kind of professional responsibility they are to take.

Second is the development of policies which support professional development. When professional development are established, one of the first problems encountered is the fact that policies within the Faculty do not entirely support such activities.

The professional development programme will succeed in the long run only if the institution has policies and individuals believe that they can advance themselves through their efforts.

In practice, there are no formal courses, workshops or
consultation programmes provided in the Faculty. However, there are some activities operated by the University to help persons clarify their attitudes, identify various leadership styles, classify and establish organizational goals, etc.

Improvement of Teaching Skills

First, let us consider the changing concepts from the point of view that "a teacher is born, not made" and "teaching is an art, not a science". The basic assumptions of the new concept are that the instructional behaviour of academic staff is a learned mixture of knowledge, attitudes, values, motivations, skills and sensitivities, and that academic staff may learn to improve these instructional competencies (Gaff 1974).

To focus on the improvement of instruction, attempts are being made to help academic staff become more competent teachers. Gaff (1974) has reviewed the situations in medical schools in USA and I think it is similar to the situation in Thailand and elsewhere. He suggests that the persons responsible for running the instructional-improvement programme should bear in mind the following assumptions:

1. The medical teachers are the most important educational resource of the medical school. Special care and attention must be given to retain and improve their values, talents, and skills.
2. Teaching is the primary professional activity of the medical teachers. A major reason for choosing to work in medical schools is their commitment to teaching, and most of them are interested in excelling in this area.

3. Teaching is much neglected by academic tradition. This is not due to the lack of interest in teaching among the medical teachers but due to factors pervading the teaching environment, such as the lack of preparation for teaching roles during graduate education, and the paucity of academic policies which provide incentives and support for effective teaching.

4. Improving teaching requires working with administrators and students—perhaps even members of the large community as well—and with medical teachers. All of these groups have a legitimate interest in and responsibility for making the instructional programme work well.

Let us look at the present status of this Faculty which is that just as medical teachers receive little preparation for their instructional roles, so do administrators have little training in leadership, policy for action, and the administrative and managerial roles of their work. The dean, the associate deans, and heads of department—no less than medical teachers—need to develop these skills and, furthermore, they need to encourage and support the growth of individuals under their charge. So the professional development programme is urgently needed.
If any programme in any institution is to be established, the first and the most important question is what benefits will the institution get from such a programme. To answer this question, let us consider the general aims of the professional development.

Although many professional development units are conducted by administrators, members of a group, persons with special appointments, or the staff of special projects, many institutions have found it useful to establish more formal organizations. Indeed professional development units are becoming the newest entry on the organization charts of many colleges and universities.

A professional development unit is, by definition, an organization that is charged with the responsibility of the continuing development of professional and personal competencies of instructors, particularly those that lead to the improvement of teaching and learning (Ruscoe, 1969).

The professional development unit is a centralized organization: it has a professional staff; it focuses on improvement within the institution; it has an in-service training rather than a preservice emphasis; it focuses on higher education; its clients are primary institutional members; and it is not a media center.

It is not defined by its size nor by its location in the hierarchy of the institution; it may operate under the authority of a faculty committee or an existing service unit. The point is that all professional development units are engaged in
"centering" attention on certain key issues in teaching and learning, bringing generalized and specialized resources of a faculty to the service of individuals and groups, developing understandings and competencies concerning teaching and learning, and helping to place effective teaching and learning at the center of academic life.

In this study, I intend to use the participatory-based approach to assess the educational needs of medical teachers, to plan a professional development programme for the Faculty and to implement the planned programme. That this approach is the most suitable approach is justified by the reasons presented in Chapter 6 page 136-137.

Related closely to the professional development programme, various sources of evidence have shown that different universities have utilized the professional development unit in different ways. Some units emphasize the production of learning materials that may used in courses; others designed or redesigned whole courses. Some helped implement whole curricula by working with staff; others sought to inform professors about various aspects of the instructional development process. And still others rely largely on providing consultative services to individual faculty members about a variety of issues and concerns.

Rather than develop products and learning materials, design courses, or improve curricula, I belief that a better strategy is to develop people who have knowledge of and sympathy for the professional development process. By encouraging individual
teachers to have favorable attitudes, diagnose student needs, set objectives, use various teaching strategies, and evaluate their instruction, a professional development programme may be able to stimulate a process of continuous instructional development that will have more impact on student learning than any single product, whether a module, course, or curriculum.

This approach is captured by University of Michigan's Erickson (1974, p viii) cited in Gaff (1975) who declared...

"Projecting one's voice to the back of the room and projecting visual images to the front are judged to be less important for teaching than is the instructor's ability to make sense to young adults, to challenge their curiosity, and to provide the resources for learning"

Erickson further stated that at the University of Redlands in addition to a varied programme of activities during the academic year, had a summer workshop in which thirty-five professors, about one-third of the entire faculty, assembled to consider such topics as course planning, organizing instruction, motivating students, leading class discussions, meeting special needs of minority students, utilizing audio-visual instruction, and evaluating student achievement. The workshop was evaluated quite positively, with many faculty members reporting they gained ideas they would put into use.

The other important reason, as I have reviewed in the chapter 3, page 47, that the Medical Curriculum of this Faculty was changed in the year 1978 and the changes were not fully implemented. Moreover, there were many factors which hindered change, such as the lack of adequate resources for
implementation, incongruence between the existing system and the intended innovation, poor administration, teachers unable to develop new patterns of teaching, or teachers who are simply reluctant to change.

For all of these reasons, a well planned professional development programme is needed. The aims of the programme should be to develop medical teachers who have knowledge of and sympathy for the professional development process. Medical educational workshops should be organized for the medical teachers and it can be expected that they change in such ways as cognitive, psychomotor, or affective domains.

In order to establish and implement the professional development programme effectively, the conceptual framework has been developed based on philosophies behind human behaviours, adult education, innovation theories, models of planned social change, and in the context of this particular Faculty.

A review of literature will be made in the next chapter in order to provide a bulk informations for this study: "Assessing the Educational Needs of Medical Teachers and Providing an Appropriate Professional Development Programme: A Participatory Based Approach."
CHAPTER 6
REVIEW OF LITERATURE

This chapter provides a literature review. It is divided into six main headings: (1) understanding of the Faculty of Medicine at Chiang Mai University as an organization, (2) understanding of innovation, innovation process, and organizational innovativeness, (3) understanding of needs as stimuli for innovation, (4) models of planned social change, (5) selection of appropriate strategies, and (6) understanding of professional development as a process and product of changing.

UNDERSTANDING OF THE FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY AS AN ORGANIZATION

Nature of Organization and its Management

"Organization" is difficult to define because it means different thing by different people at different time; however, the term has been defined in various ways by such persons as Bennis (1966), who stated that "Organizations are complex goal seeking units." Zaltman (1973) defined "organization" as

"a social system created for attaining some specific goals through the collective efforts of its members. Its most salient characteristic is its structure that specifies its operation."
Lupton (1985) defined "organizations" as "social arrangements for the controlled performance of collective goals". This definition can explain why, according to Lupton, a chemical company, university, hospital, etc, can be labeled as organizations:

"The organizations are collections of people who interact with each other in a particular way because of their common membership to a particular group. Organization exists where individuals acting alone cannot achieve goals that are considered worthwhile pursuing. Organizations are concerned with performance in the pursuit of their goal."

Gourlay (1988) did not define the term "organization" however, he gives a model of organization functioning comprises of inputs, activities, and outputs. The organization exists to perform work. This is achieved by activities which transform inputs into outputs. He also uses the "simple model" of a basic system explain the set of related parts that are organized to form a functioning whole.

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OBJECTIVES   ACTIVITIES   EFFECTS
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             EVALUATION     
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He explains from the preparation of meal or the making of journey, to the organization of a business or patient's care it is capable of being corrected, through evaluation, to perform better and it portrays the key elements in the process of
managing anything. At root, then, management is ordinary, simple, common-sense planning, taking, checking and correcting of actions.

To explain the characteristics of organizations in terms of structure and processes that facilitate or inhibit innovation, Zaltman (1973, p. 62-64) presented an overview of the total change process as it relates to the organization:

"There is the social milieu, which consists of two levels, within which organization exists. The first level of this social milieu or megasystem is the general industry, for example, a field of education, the iron steel industrial, public health, of which the individual or organization is a part...

Components of this system include competing firms, customers, trade associations, unions, relevant governmental regulation agencies, and supplies. These components provide the immediate external environment of the organization.

The second level environment is society in general, including those sectors of the economy that indirectly influence the well-being of the particular industry, for example general government activity, the educational sector which provides the needed skills, and the level and nature of activity production methods, or new product opportunities."

In understanding what an organization is, at this stage I have seen that it comprises a few key words which are units and goals from Bennis (1966); social system, specific goals and structure from Zaltman (1973); social arrangement, collective goal and controlled performance from Lupton (1985); and inputs, activities, and outputs by Gourlay (1988). The next question is can we define the Faculty as an organization and let us analysis further.
Analysis of the Faculty of Medicine, Chiang Mai University

Can we define the Faculty of Medicine, Chiang Mai University, as an organization? Of course it is an organization. It comprises of professional, technical, and managerial staff to perform work. As a medical school, it transforms medical students into medical graduates and as a hospital, it does diagnosis, treatment, disease prevention, etc.

By Zaltman's Model, I look at the Faculty, as an organization which is surrounded by two levels of social milieu, external and internal. I analyze it in two different directions. First, the outward direction comprises two stages.

The first stage the Faculty is a part of such as medical school, professional associations in medicine, hospital, and etc.

The second stage the environment is society in general such as community and sectors of economy which have an indirect influence such as governmental agencies, funding resources and customers. These two levels of social milieu can be called the external environment of the Faculty.

Second, the inward direction I view the Faculty from inside and examine the many elements which comprise the internal environment. Important components of the particular organization are those such as the staff, administration, teaching and learning process, specification for M.D graduate, students, etc.

The organization can be of any size: a health center, a district health service, an office in a hospital, a department
within a Faculty, a whole Faculty, a Ministry of Health, or a Bureau of University. As the scale increase, the work is performed in complex human service organization. The process of management involves dealing with major problems such as resource shortages, low staff morale, inter-professional rivalry, political interference and pressures for change from outside and within the organization.

Perspectives on Organizations

As Lupton (1985, p 5) says "Organizations of course do not behave. Only people can be said to behave" .... and "Organizations do not have goals, only people have goals" (Lupton, 1985, p 6). Thus to study organizations it is necessary to study human behaviour in such organizations.

Organizations mean different things to different people who use them and who work in them. The individual members of an organization pursue a variety of goals of their own. Administrator or senior manager may decide on objectives and attempt to get others to agree with them by calling them "Organizational goals" but they are still the goals of the people who determined them.

The goals that the individual members seek to achieve are quite different from the collective purposes of their organized activity. This creates a central concern and theoretical problem in the design and study of organizations.
So to study organizational behaviour, the study of human behaviour must take part, as Pugh (1971, p 7) states:

"The study of organizational behaviour is the study of structure, functioning and performance of organizations and the behaviour of groups and individuals within them."

It follows that to study the Faculty of Medicine at Chiang Mai University as an organization, the study of medical teachers as individuals must not be neglected.

Individuals' Behavior within an Organization

For the human being in an organization, the way a person behaves depends on his or her perceptual world (Lupton, 1985). There are many elements which influence and shape the human's perceptual world, which are physical environment, psychological characteristics, needs, motives, goals, past experiences, and social/cultural environment. To understand an individual's behaviour, therefore, we must try to discover all of the elements.

When individuals join an organization of any kind they give up some personal freedom of action. That is part of the price of membership. The individual member then agrees that the organization may make demands on his or her time and effort, as long as these demands seem to be legitimate. The other members of the organization teach new members what is expected of them, what is customary, and what is acceptable. Different organizations have different standards concerning, for example, dress and appearance, time keeping, social activities, etc.
The newcomer has to learn these standards and the ways of behaving that they involve to be successful and accepted as a member of the organization. It is not enough just to learn the knowledge and skills required to perform work duties and responsibilities. The individual does not have to believe that the organizational standard are appropriate. What matters is that individuals behave as if they believe in them.

Individuals arrive in an organization with values, attitudes, beliefs and expectations that they have acquired elsewhere. The process through which new members learn to behave is usually an informal one, rather than a planned programme of instruction. Some organizations do have orientation programmes for new recruits, but these are generally short and superficial. The individuals learn about the organization by just being there. This is achieved by giving rewards such as praise, encouragement, privilege and promotion for correct behaviour. It is achieved also through punishments such as being ignored, ridiculed or fined for behaviours that are out of line.

Lewin (1951) discovered that "in order to change behaviour, one needed to change the norm".

Salaman (1981, p 177-90) further stated

"It is interesting to consider the pressure that a group can exert on an individual if it can influence something as unambiguous and familiar as judging the length of lines."
Perrow (1971, p 176) has argued that it is possible for designers of organizations to consciously change the behaviour of people in an organization by changing its organizational structure:

"...there is enormous potential in organizations for a direct attack on behaviour, without intermediate efforts to alter attitudes or personalities. It is possible to control reward structure."

For the defining of organizational structure Pugh and Hickson (1968, p 374-96) defined...

"All organizations have to make provision for continuing activities directed towards the achievement of aims. Regularities in activities such as task allocation, supervision and co-ordination are developed. Such regularities constitute the organization's structure, and the fact that these activities can be arranged in various ways means that organizations can have differing structures."

I found the above literatures reflected that organization can change if the norm, the structure and/or the regularities of that organization were changed.

Medical Teacher as an Individual within an Organization

Medical teachers are individuals in an organization. They all have their own values, attitudes, beliefs and expectations which they have acquired from their own backgrounds. They have their own goals which may or may not be similar to the Faculty's goals. They do not have to believe in the Faculty's standards. However, they give their time and effort to the Faculty if the demand is legitimate. They may change their behaviour if there
is a reward, if there is a norm change, or if there is an organizational change.

I think there is no single strategy that can be used to change individual or group behaviours. So in trying to introduce change or innovation, many strategies should be used. In this case a rewarding system, the strategies used to change the norm, and probably the changing of organizational structure are needed. However, in this study the strategies used for norm change are stressed.

UNDERSTANDING INNOVATION AND INNOVATION PROCESS

What is Innovation

Tilton (1971, p 4-6) used the term "innovation" in three different contexts. The first, which is the same as Myers and Marquis (1969), is synonymous with the invention which refers to a creative process to produce a configuration not previously known by the persons involved. The second use of innovation, which similar to Knight (1967, p 478), and Mohr (1969, p112), refers to a process of adoption and institutionalization. For the third, which is, also defined by Barnett (1953, p 7), Hagen (1962, p 87), Crain (1966), Walker (1969), and Roger and Shoemaker (1971, p 19), Roger states that

"An innovation is an idea, practice, or object perceived as new by the individual. It matters little, as far as human behaviour is concerned, whether or not an idea is "objectively" new as measured by the lapse of time since its first use or discovery.... If the idea seems new and different to the individual, it is an innovation."
Zaltman (1973, p 10) adopts the third context of Tilton (1971) and considers innovation as

"any idea, practice, or material artifact perceived to be new by the relevant unit of adoption."

Dill & Friedman (1979), and Hopkins (1984) described three types of changes: accidental change, purposive change and innovation. They explained that accidental change is a result of the changing of environment over which the individual institution has little control. If the environmental change occurred and the institution decided to act proactively to ameliorate the probable negative effects of this change, this would be called purposive change. Finally, innovation is the importing of a technological package into an institution for the prosecution of its activities. For example, when the Faculty decides to change its teaching method and adopt an already developed idea, which is, say, problem based learning, then the change which occurs is said to be innovative.

Innovation Process

Basically, however, four very different assumptions about what leads people or organizations to change are represented by four rather different change strategies. Some believe that humans are essentially rational, so reason and evidence should do the trick. Intentional change, therefore, tasks the form of a rational sequence of activities to produce a change message based in theory and research, then developed and tested empirically and
logically and finally accepted because of its sound evidence and reason. This is called a Rational Planning by House (1971), Research, Development and Diffusion by Havelock (1971), and the Rational Model by Wilson (1966).

The second model, Social Interaction, which believes that humans are social creatures. New attitudes and behaviours, though they may be developed by rational processes, raise awareness, interest, trial and eventual adoption through a process of social interaction and persuasion in which opinion leaders and reference groups are influences perhaps as significant as the rational soundness of the change message itself. Intentional change under these assumptions puts time and skill into linking innovative ideas, practices or products to "potential adopters" through the social networks. Professional associations, information clearinghouses, learning resources centers, conferences, workshops and extension agencies use this strategy.

The third, Human Problem Solving, the main obstacles to change are not impressive message nor social influences. Psychological barriers are the problem. What is needed is the skilled intervention of human relations consultation in order to diagnose and facilitate the reduction of those barriers. Leadership training, clinical counseling, T groups and organization development are examples of this assumptions at work.

The fourth, Political Model, is political animal at base,
busy protecting and strengthening over vested interests. In order to accomplish change, there was a need to build powerful coalitions among interests and obtain authoritative decisions which will be enforced by requiring people to change their attitudes and behaviors. This strategy is visible in the informal governance process and in such administrative controls as politics on programme and personnel.

The other approach process of innovation is described by Zaltman (1973) from the point of view of individual adoption unit. He divided the innovation process into two resulting stages which are initiation and implementation.

*Initiation stage* Taking place at the starting point, this is called the decision making stage by March and Simon (1958), Miller (1971) and Utterback (1971b), and also is called problem solving by Kelley and Thibaut (1969) and Straus (1970). Zaltman (1973) divided this stage into three substages which are knowledge awareness, formation of attitudes toward the innovation, and decision making.

He explained before any innovation can take place or be adopted, potential adopters must be aware that the innovation exists and that there is an opportunity to utilize it in the organization. For the question of whether the awareness of the innovation or the knowledge of the innovation comes first, Rogers and Shoemaker (1971) concluded that

"...The need for some pest probably comes first. But for other new ideas, the innovation may create the need."
However, whether the organization has awareness of innovation or of need, the incentive occurs and the decision maker will search for innovative alternatives. These occur in the substage of knowledge-awareness.

Once the search has taken place, the organizational members are motivated to change, and the attitudes toward innovation are then formed. Duncan (1972b) indicated two dimensions of attitudes which organizational members can exhibit. First is the openness to the innovation which means the members are open to the innovation whether or not they are willing to consider it, are sceptical about it; or feel it will improve how the organization carries out its function. Second, the organizational members perceive of potential for the innovation that there is some capability within the organization for utilizing the innovation; the organization has had some success in the part in utilizing innovations and there is some commitment on the part of organizational members to working for the innovation and dealing with some of the potential problems that might arise as implementation is attempted.

The last substage, which is called the decision substage by Zaltman (1973), is the evaluation of the information concerning the potential innovation. If the decision makers are highly motivated to innovate and their attitudes are favorable towards the innovation, there is likely to be a favorable attitude to implement it. On the other hand if the motivation is not much and the attitude towards the innovation is not favorable, it will
The Implementation Stage  This stage is concerned with the actual utilization of the innovation by organizational members as they perform their tasks. Zaltman (1973) divides it into two substages, which are initial implementation and continued-sustained implementation.

After deciding to implement the innovation, the organizational members often implement it on a trial basis to determine its practicality before implementing it on a full scale. This is an initial implementation substage.

After the initial implementation has been successful that is, the organizational members understand it, have information about it, and experienced a few significant problems, the implementation will be continued. This is a continued-sustained implementation substage.

Organizational Innovativeness

Becker (1978, p 5), described the difference between innovation and change in that innovation is the adoption of something new whereas change is the adoption of something different.

He identified the organization that regularly risk early adoption of new ideas from the developing pool of these ideas as organizational innovativeness. This term is not the same as
organizational creativeness which refers to the generation of new ideas, products or technologies. So the innovative organization may be either creative or noncreative since the ideas can arise either inside or outside the adopting organization.

There are many factors influencing the innovativeness of the organization. For example, the organization may innovate to survive, or to gain competition advantage. On the other hand, the desire for stability is believed to inhibit innovation and change. Lawrence (1969) stated:

"Individuals and organizations are believed to resist change. People prefer the familiar, and stable behaviour in organizations is a function of past experience, norms and established interpersonal relationships."

However, Becker (1978) argued that changes in organization can be explained along three dimensions. The organizations will change if there are:

1. need or incentives for innovation
2. mechanisms for bringing innovative alternatives into the decision-making process
3. absence of organizational barriers to implementation.

In order to create organizational innovativeness all three dimensions should be clarified. The first dimension—need or innovative incentive will be explained below. The other two dimensions—mechanisms for bringing innovative alternatives into the decision-making process and the absence of organizational barriers to implementation were already explained under the
headings of innovation process (page 80) in terms of four different change models. However, I will explain more under the heading of strategies for planned social change (page 96-100). At this stage the definition and classification of "needs" will be reviewed. This for make understanding of needs as stimuli for innovation.

UNDERSTANDING OF NEEDS AS STIMULI FOR CHANGE

Definition of Needs

Definitions for needs were suggested in many pieces of literature. For example, the term "needs" is best defined as the measurable gap between a current situation and that which is desired (Berry, 1971; Beatty et al., 1981; Bergevin, Morris and Smith, 1963; Boshier, 1980; Crouthamel and Preston 1979a, 1979b; English and Kaufman 1975, 1979; Knowles, 1980; McMahon 1970; Scissons, 1982; Witkin, 1975; Young, 1968).

Becker (1978) uses the term "incentive" to refer to that which provides a stimulation for innovation. He explains that the need for change in any organization occurs when the decision maker perceives that an existing procedure is inadequate and that a new procedure is desirable.

Down (1966) has explained innovation incentive and he uses the term "performance gap". When a discrepancy exists between what the organization is doing and what its decision makers believe it ought to be doing, there is a performance gap. The
performance gap increases the search for alternative courses of action.

Whatever the terms are, needs, innovation incentives, or performance gap, it means stimuli for innovation.

Classification of Needs

Needs can be classified into various types according to the individual's self-concept and values. The concept of "Needs" is complex and interpreted variously. McMahon (1970) points out that there are various types of needs. The number and importance of needs depends on each individual's own perception. If a person perceives "needs" only in terms of basic survival, he or she will have very few "needs". If the conception encompasses self-fulfilment needs, there will be many needs to be met.

The five levels of human needs are posited in hierarchy of value by Maslow (1970): 1) physiological needs, which refer to basic things necessary to maintain life such as thirst, hunger, and rest; 2) security needs, which are physical, psychological and economic desires to ensure against pain or danger in life, such as obtaining a house. 3) belonging and love needs, which involve a desire for affectionate relations with people and social groups. 4) esteem needs, which are those things which drive individuals to seek recognition and earn status within their social groups, such feelings as self-confidence, self respect, worth and beauty; 5) self-actualization needs, which
are desires to fulfill the individual's potential for development in terms of his capabilities. Maslow emphasizes that the need for self-actualization is a healthy person's prime motivation. The healthy individual is one whose basic needs have been met, with the result that he or she is principally motivated to achieve his or her potential.

Needs have been classified into two categories by Knowles (1980). There are basic organic needs, and educational needs. Basic needs comprise six types: physical needs, growth needs, security needs, new experience needs, affection needs, and recognition needs. These needs are regarded as motivating forces but reinforcement from education is still required.

Educational needs are defined as something that individuals should learn for the betterment of themselves, their organization, and their society.

Boyle (1981) and Scissons (1982) classify needs into four categories: basic human needs; felt and expressed needs; normative needs; and comparative needs. They described basic needs as being the same as Maslow's hierarchy of needs which were previously described.

Felt and expressed needs are feeling and values which result in individual interests and lead to motivational orientation. Normative needs refer to the discrepancy between the present situation and desired outcome of individuals. Comparative needs refer to the differences in capabilities or characteristics between individuals and groups of people.
In terms of discrepancy between present situation and desired outcome of individuals or organizations, if they have awared of performance gap and search for alternatives to fulfill the gap then change or innovation occur. The difference of the change and innovation was explained by Becker (1978, p7) that change is adoption of something different but innovation is adoption of something new.

I have already explained innovation and innovation process, the below are change and change process. The purpose of literature review in the following are to define the meaning of change and change process.

Definition of Change and Change Process.

Change, as used in this study, refers to the alteration of behaviour, attitudes and knowledge of medical teachers as a result of learning through personal relationships within their society and attending the professional development activities arranged by the Professional Development Unit (PDU). Change may be either unplanned or planned (Boyle, 1981). Unplanned change normally occurs either in a natural situation as an evaluation of the natural environment or in a social circumstance as a result of unorganized activity. Especially in the university, Elton (1981) has found change usually occurs in unprogrammed activities.

Bennis, Chin and Corey (1976, p14) defined planned change as
"a conscious, deliberate, and collaborative effort to improve the operations of a human system, whether it be a self-system, social system, or cultural system, through the utilization of valid knowledge". Lippit (1973, p 37) also defines planned change as a planned attempt by individuals, institutions or a social system to "influence directly the status quo".

Following Bennis, et al (1976), Boyle (1980), and Lippit (1973), change is here defined as a four-step process involving:

1. being aware of a need to create new experiences and better living circumstances,
2. pre-planning to accept or reject such experiences and circumstances,
3. moving in desired direction, and
4. utilizing the change components to produce a functional programme.

Application to the Faculty of Medicine at Chiang Mai University

Becker (1978) has identified the organization that regularly risks early adoption of new ideas from the developing pool of these ideas as organization innovativeness. I would like to apply this meaning to the Faculty of Medicine at Chiang Mai University as follows.

Since all of us are emerging in a changing environment, new ideas, products or technologies are always generated. Every organization has to be innovative to survive (March and Simon,
1958) and/or to gain a competitive advantage (Walton, 1963). Because organization is social arrangements for the controlled performance of collective goals (Lupton, 1985), it constructed by people who can also change goals. By this meaning, the organization can be innovative if individuals in the organization are innovative.

Pertaining closely to the educational institution, Havelock (1971) said people do not like to change. Watson (Ibid, p496-497) formulated a number of statements on how to reduce resistance to change:

"Resistance will be less if administrators, teachers, board members and community leaders feel the project is their own, not one devised and operated by outsiders."

"Resistance will be less if the project clearly has wholehearted support from top officials of the system."

Turning to the Faculty of Medicine at Chiang Mai University, it is an educational institution constructed by many groups of people such as medical teachers, students, academic supportive staff, administrators, etc. The interactions among these groups result in the overall behavior of the Faculty. So to study the innovativeness of the Faculty, it is necessary to study the innovativeness of each individual or group inside it.

Paying attention to the medical teachers, they might adopt or reject such new ideas, depending on their own decision making. For example, if the medical teachers as faculty members, are exposed to various teaching methods they might adopt some of the
new ones if they are perceived to be worthwhile; but the teachers might reject other methods. By their expertise they can tell whether a new idea will fit realistically into their line of tasks. They also can exhibit their innovativeness by being sensitive to educational problems, being aware of the discrepancies, and searching for solutions. They can be regularly standing abreast in developing their teaching and improving their other duties.

In general, individuals should have characteristics which reflect their acceptance of themselves and other people as social members on an equal basis, and their belief in the interdependence of culture and environment, and the autonomy and freedom of individuals. This set of characteristics was called "self actualization" by Maslow (1973) and was said to belong to the "fully functioning person" by Rogers (1969).

Rogers (1969, p. 288) interprets a fully functioning person as a person who realizes him/herself as a participant of a community and has an open mind to all external and internal circumstances. Overall, fully functioning people should make full use of their talents, capacities and potentialities in their everyday lives. If it is difficult for them to do so, they may find it necessary to acquire additional knowledge and skills.

In the case of the Faculty of Medicine, Chiang Mai University, faculty and individuals will become innovative if individuals in the faculty keep an open mind to all external and internal environment and make full use of their talents,
capacities and potentialities. It is the fact that some mechanisms are needed to stimulate personal development. These might be the increasing of awareness of the performance gap, the creating of appropriate atmosphere, the arranging of professional development activities, etc. So the Professional Development Unit (PDU) was set up to run some activities which could help faculty members, especially medical teachers, to open their minds, to develop themselves, and to have acquired knowledge and skills in performing their own duties, particularly, in teaching.

Self development is an individual and personal thing. It is also a process of non-formal and continuous learning. Everyone has a certain measure of freedom and autonomy to make personal judgements in any learning situation. These judgements are, admittedly, influenced by heredity, personal background, and environment (Elias and Meriam, 1980; Knowles, 1980; Maslow 1970; Patterson, 1973), but learning is seen by learners as the analysis of information which has meaning and relevance to their personal interests. They make decisions transforming the conditions which not only enables them to cope with present problems satisfactorily, but also affects subsequent decisions involved with learning (Brundage and Mackeracher, 1980).

In applying the self development philosophy to the professional development, person responsible for the programme should make sure that the programme has the following characteristics: respect for individual capability, freedom and
autonomy; participation of medical teachers in all aspects of the programming; and self evaluation by the medical teachers.

The respect for individual capability, freedom and autonomy implies that individual medical teachers see each other as competent and worthwhile people, capable of exploring their own needs and of managing their own learning processes according to such needs.

The participation of medical teachers in all aspects of the programming implies that medical teachers individually are actively and voluntarily involved in planning the Professional Development Programme and that, although they may have different degrees of capability and different types of experiences, they embark on the programme with the aims of gaining and sharing new life experiences.

Self evaluation by the medical teachers implies that individual medical teachers should be involved in the diagnosis not only of their learning and self developmental needs but also of the learning-related changes that they have experienced.

In applying the self development concept to the medical teachers at the Faculty of Medicine, Chiang Mai University, I must have regard for the characteristics of the teachers' culture. They address themselves as medical professionals. Some of them believe that teachers are born and not made. They are highly intelligent people engaged in tricky and responsible operations. A large proportion of them resolutely refuse all attempts to assist them in understanding the intriguing and
demanding process. To implement the Professional Development Programme in the Faculty, it is necessary to assess the needs of medical teachers to running such a programme. To reduce the resistance, the programme should have full support from the administrators and both the administrators and medical teachers should feel that the programme is their own. So they have to take part in establishing of a well planned programme which includes, effective units: basic, procedural, timing, and environmental.

MODELS OF PLANNED SOCIAL CHANGE

Even though unprogrammed change usually occurs in the university (Elton, 1981), the person responsible for professional development should bear the principle of planned programme in mind for success educational planning.

Planning can generate a programme, a plan, a process and even the implementation of each programme, plan and process. However, the programme planning process is amenable to modification in response to the critical cultural differences in each society.

In order to establish a well planned programme, it is necessary to study the models of planned social change. The purposes of literature review in this part are to identify the characteristics of planned social change strategies and to select the most appropriate strategies for implementing the Professional Development Programme in the Faculty of Medicine at Chiang Mai University.
Strategies of Planned Social Change.

There are a variety of strategies and models of planned social change (Boyle, 1981; Chin and Benne, 1976; Lippet, 1973; Thomas and Jenkins, 1975). Chin and Benne offer three widely used general strategies for achieving change, which are 1) empirical-rational strategies, 2) normative-re-educative strategies, and 3) power-coerceive strategies.

1. **Empirical-Rational Strategies.** Empirical-rational strategies for change are grounded in the belief that individuals are rational and also prepared to participate in any activities which represent a response to their interests and needs. They will be disposed towards change if they feel that such change is desirable, effective and meaningful.

   Through the use of empirical-rational strategies, changing the values or perceptions of an individual, group, organization or society becomes an initial goal. The change is likely to be made successfully if it is perceived by individuals to be necessary to them. On the other hand, their perceptions may function as a barrier to change if individuals and their society reject the idea of innovation.

   In applying the rational-empirical strategies to an educational programme such as the Professional Development, it is suggested that if the message comes from an unimpeachable source such as research, and is presented
through reasoned argument, rational people are bound to accept it. An example of a model which fits into this group of strategies is the Research, Development and Diffusion model (RD & D) of Havelock (1971). Hewton (1979) argues that if this strategy is working logically with research-based findings, people are likely to respect it.

2 **Normative-re-educative Strategies.** Normative-re-educative strategies are concerned with the interaction between people and their environment, both social and natural. These transactional relationships affect the changes in attitudes; values and skills of individuals; knowledge; and practice (Chin and Benne, 1976). In other words these strategies are concerned with the establishment of new norms or habits of behaviour. These types of change therefore require individuals to equip themselves with the knowledge and skills that can be processed to meet their needs and problem situations.

Applying normative-re-educative strategies to the educational workshop which is a favorable activity arranged by professional development unit such as the teacher training programme, the programme designer regards "participation" as a medium for re-education which require some intervention from change agents. In Havelock's Social Interaction Model (Havelock 1971), the participant is seen as a member of numerous social groups and communities through which he comes, in a quite informal way, to hear
about and act upon the message. The process is a function of a network of informal relationships. For these types of change, the clarification and reconstruction of the participants' values are significant factors of which all change agents must be aware.

There are five common elements in these strategies that need to be observed (Chin and Benne, 1976):

2.1 Full involvement of participants in a creative programme of change, with the essential aim of self-improvement. The change agent, functioning as a trainer, researcher, facilitator or peer, should be one who points out the problem through group discussion.

2.2 Problems may stem from various sources, not just from the participants themselves but attitudes, values, norms or social exchanges. They may require re-education in order to gain further knowledge and skill to resolve their problems.

2.3 The change agent should apply participatory techniques to problem solution.

2.4 The solution should be thought out carefully with elaborate examination of the planned change.

2.5 The change agent and participants should selectively and appropriately apply the methods and concepts of the behavioural sciences in learning to solve both present and future problems.

3 Power-Coerceive Strategies. Power-coerceive strategies consider the use of power or authority to enforce the
acceptance of the message through sanctions and rewards. Pressure to change may derive from power, authority, morality or even the feeling of obligation in each individual's mind towards issues of change. This type of strategy may be enforced by the application of knowledge, which is the most influential ingredient of power. In general, this category requires mass political, economic, and cultural power to reinforce the implementation of the change goals. When people are entrenched in power in a social system, they can use these strategies to effect change. A minority can often apply these strategies and influence the majority to accept change with little resistance. However, it questions whether the change is likely to remain, once the power or authority is removed.

**SELECTION OF APPROPRIATE STRATEGIES**

The strategies of planned social change categorized by Chin and Benne (1976) indicate different degrees of involvement of people in decision-making processes. Each strategy may be applicable to programme planning in different situations and at different times. For instance, the change agents who apply a professional development concept in any planned change may prefer to employ rational-empirical strategies. Each individual would then be in a position to make his own decision and thus to contribute to change in organizations and communities. The change agents who are more authoritarian might well seek to apply normative-re-educative strategies to influence individuals,
organizations, and communities to consider change. The persons who apply power-coerceive strategies, through economic, political or social power, direct individuals to achieve the goals of change. It is likely that individuals who are the subjects of such change will have little sense of commitment to its goals, process and outcome.

At this Faculty, the main target group is the medical teachers who are used to working logically with research-based findings. Among these who are well educated and highly responsible, the concepts of both the empirical-rational and normative-re-educative strategies should be used to outline the Professional Development Programme and educational researches are necessary for long term planning. The power-coerceive type is considered to be entirely incompatible with the Professional Development Programme. At the early stage normative-re-educative strategies are urgently needed.

I would like to apply the normative-re-educative strategies and would like the medical teachers to participate in the planning process of the Professional Development Programme so numbers of workshops were designed to assess their educational needs.

Before going to the programme planning and the assessment of educational needs in chapter 7, page 125 I would like to review the literature on professional development since it assumes a process and product maintain vitality of change and a promotion of change.
UNDERSTANDING OF PROFESSIONAL DEVELOPMENT

I have already described briefly some part of professional development in chapter 5 page 53-70. The definition, aims, context, organizational structure, activities and course design, roles of person responsible for professional development have been reviewed. At this stage I would like to review the similarities and differences in perspective of professional development among the various countries.

Similarities and Differences in Perspective

The similarities and differences in perspective of professional development are reviewed in three main themes—the context, origins, and concepts.

The Context of Professional Development There were some differences between the western countries and Asian in the recruitment of universities' staff. In western the highly qualified academic staff by means of higher degrees or other accepted criteria of academic excellence are recruited. The major element in professional development is the improvement of teaching competence not the improvement in competence in one's own discipline. But Asian countries, including Thailand, graduates are needed for the recruitment of academic staff in some special programmes especially the medical graduates because of the severe shortage of skilled manpower. The professional development which involve the provision of opportunities for improving in appropriate disciplines and improvement of teaching
competence are both urgently needed.

At the Faculty of Medicine, Chiang Mai University, Thailand, Johnson (1972) reported in the report of University of Illinios Survey team (1 September, 1961) that:

"... This faculty is comprised, for the most part, the young, earnest and talented physicians who have had postgraduate training abroad."

"... a number of faculty members have had only limited experience in administration, teaching and research."

However, at the present there are many self development programmes for medical teachers. For example, professional development in the disciplines includes a number of continuing education such as fellowship grants for junior staff to study aboard for higher degrees, short term refresher funds for briefer period abroad, residency training programme, and other postgraduate training.

In comparing with the improvement of teaching competence, the improvement of qualification in appropriate discipline appears to be much more attractive to the medical teachers. At the other, the major responsibility of the professional development may be to assist academics to find satisfaction and fulfilment in a job.

There are five basic factors affect the professional development in Thailand. First, all permanent academic staff are government officials and Thai people have a strong respect for the more senior persons. Second, student dissent has had a significant effect on universities. Third, the reward system of
the universities: the promotion is based upon publication and outstanding research. Fourth, there is no compulsion for academic staff to undertake courses in teaching and fifth, the professional development needs friends in high places. I would like to explain more on how these factors effected the professional development.

Firstly, the effects of being a government official and the strong respectation for more senior person on the professional development. Generally, professional development activity will inevitable be seen by some academic staff as a change, a disturbance, and as such it will not, initially at least, be welcomed. More generally, the attitudes and perceptions of staff reacting to defend cherished status, freedom and levels of accountability will have a significant influence on progress in the situation. Scepticism and ruthless questioning are academic hallmarks, and professional development proposals must stand up to there. But some groups of staff will go beyond scepticism. They will see concepts of change, analysis of actions, and evaluation, as threatening to established positions and practices, and will persistently resist them.

Such resistance is more likely from senior staff but may conform from others. In this respect, there are two identifiable groups of staff, those who are active and effective in their positions, and who are committed to and satisfied with the status quo; and those who, while continuing to draw their salaries, are essentially inoperative, able because of the nature of the universities to survive though making a minimum contribution to
research, teaching, or administration. The latter group are likely to feel threatened by any professional development proposal. The former group, too, however, confident in the virtues of the status quo, may have insecurity because they lack skills in one or more of teaching, research, or management/leadership. They may then be inclined to define their insecurity by attempting to confine professional development to the area of their weakness.

Staff who are effective themselves and are concerned with efficiency will come to accept professional development as an institutional and departmental responsibility which covers all aspects of the academic's many functions. The change in the situation of universities may be expected to make other changes more acceptable, and the changes implied by a professional development programme may be preferred, even by initially resistant senior staff, to more drastic changes imposed from outside. It is also conceivable that those staff described above, the "dead wood", may be less than comfortable in the changed situation, and may find stimulation rather than threat in at least some professional development activities.

An alternative strategy would be to leave the "deadwood" undisturbed, to by-pass resistant staff, and to concentrate professional development activities on those more receptive to them. Whether this is feasible depends upon whether there is an official, university-wide programme which cannot operate without general approval or at least tolerance. Such strategy is also
operate to the objective, legitimately made of many past and current professional development activities, that they preach only to the already converted.

Secondly, the effect of student dissent on universities. Harding et al. (1982, p11) stated that

"In some western countries in the 1960's, student dissatisfaction stimulated concern about standards of teaching; this has, in turn, led to the establishment of units concerned with teaching practice and professional development."

"In Thailand, where student dissatisfaction led to the overthrow of the government in 1968 student criticism had resulted in some review of curricula to make courses more relevant to the needs of society."

Closely to the medical students, Aubrey (1985) reflects on medical education concerns of student as follows:

First, the medical students are deeply concerned about the mastery of an enormous and expanding amount of scientific information, all of which teachers seem to feel must be presented in lecture form. Second, students are disturbed by the lack of curriculum integration, which leads to either redundancy or gaps in the informational offerings. Third, the thread of continuity between the various curricular blocks is often missing because of a lack of communication among responsible faculty members. Fourth, there is the lack of clearly defined course objectives states in terms of expected behavioural outcomes. Fifth, it has been widely noted that medical students as both intellectually and psychologically demanding. While most students have developed mechanisms for coping with stress, these students are,
nonetheless, taxed severely. Stress is manifest as feeling of unhappiness, depression, anxiety, and dissatisfaction with performance. Sixth, student surveys now demonstrate that medical students are anxious to learn more about ethical issues and rate medical ethics as a critical component of medical education and patient care. Seventh, they concern that too many clinical clerkship stress service over education.

Thirdly, the effects of the rewarding system of universities: the promotion is based upon publication and outstanding research. The literature shows the rewarding system is a most important element in professional development in universities. What are the criteria for advancement in the academic profession? Who gets promoted and why? Harding (1982, p13-14) summarized the typical comments from the representatives of 18 countries who came to the workshop on professional development in higher education: some of the comments are as follows:

"Promotion is mainly based on research output. Educational qualities are taken into account but not in a very systematical way" (Netherland)

"There is reason to believe that competence in teaching is now receiving more attention when judgement are made about promotion, but decisions are still largely influenced by research and publications." (U.K)

"The rewards for teaching are significant compared with the rewards for research and publication." (Australia)

"Good teaching as such, though always valued, has little to do with confirmation of appointment, less with other forms of reward." (Bangladesh)
The comments quoted above show the difference in rewarding system of many countries. In Thailand, traditionally, promotion, with corresponding increases in pay, has been the reward for excellence. The criteria used to determine qualification for promotion have officially been the whole range of an academic's professional competence in research, teaching, scholarship, administration.

In practice, the overriding and even the role criterion has been research as measured by publication. There has been little if any material reward for teaching competence, and inevitable teaching competence has not been a remarkable feature of university life. So the younger academics tend to be pre-occupied with improving their standing in their own disciplines at this is a major criterion for advancement. Doing research in a discipline therefore looms large, although again there may be special needs. But in spite of the pressures to concentrate on research in one's own discipline rather than the leading of it, special efforts are made to redress the balance.

Even though this study is not concentrate in the changing of rewarding system I always recognize it as an important factor influenced the success of planning and implementation of professional development in this Faculty.

Fourthly, there is no compulsion for medical teacher to undertake courses in teaching. The teacher training is compulsory or involuntary? These wider philosophic differences underlying development are directly relevant to questions of who should do
it and how it should be done. Each university has worked out its own answers to these questions. It is the exception rather than the rule for the university department of education to be given the responsibility for providing courses of training for university staff.

In some universities, media specialists in service centers have been given responsibility for teacher training and development; but where this is so, the director of the service centre himself has academic qualification in status and experience of university teaching prior to his present post. The usual arrangement is that responsibility is placed with an academic committee representing a variety of respectable disciplines. The job is seen as initial training or as staff support, inevitable the provision of the actual services has tended to develop on a small group—sometimes only one or two in the university—who work full time or part-time on this activity and so begin to develop specialisms and expertise.

In the university context, there is little likelihood that lecturers will be made to feel incompetent by professionalism of those who claim to be specialists in the areas of methods and curriculum design. Appropriate lip service is paid to collaboration and mutual respect, but there are few universities without some tension or ambiguity about roles, and attempts by one of the parties to take over the other's role.

The problem of structuring a training course is usually "papered over" by combining theory with a mixture of methods,
practical hints, workshops, videotape recordings etc. Most courses are a rag-bag of such offerings. This may be the only practical solution, since participant will choose which sessions to attend, but the practical solution is not necessarily the best solution, for practitioners base their choice on values and assumptions which they bring to the courses offered. The staff member attending the course is not necessarily best placed to assess his requirements or the likely benefits of different parts of the course. Nisbet (1979, p54) quoted the written of Paulson (1906) that:

"Some of the imperfections of bad lecturing are not just technical imperfections in a technical operation. Many critics of lecturing give this wrong impression when, for example, the complain of inaudibility, or fault in using the backboard, and go on to recommend attendance at a teachers training college. Technical training may be needed, but where is more needed (and more difficult to contrive) in a turning outwards of a personality that is inclined to be turn inwards. Speech that is inaudible or solvenly or inarticulate is not just a defective point of view, defective in relation to the actual need to communicate effectively with other people."

On this view, it is not training or development that lecturers need, but psychotherapy. In induction courses the elements of attitude change and confidence-building must be considered seriously. Other stages of education, primary, secondary and tertiary, include personal development and maturity high among their aims; and this "quaternary" provision should acknowledge the relevance of a mature personality.

The argument on voluntary or compulsory were observed in many workshops. Some participants were, however, not favour of compelling academics to attend courses of training in teaching:
generally it was feared that any element of compulsion would damage the credibility of professional development staff with their academic colleagues and turn them from "helpers" into "inspectors."

There have been demands from students, politicians and others for compulsory induction courses for new lecturers. University teachers are opposed to compulsion and still adhere to the principle of a scholar's prestige to teach as he choose. Staff members are also sceptical about the courses offered. What evidence is there that the "trainers" know how to train?

Fifth, the professional development needs friends in high places. There are many pro's references such as from University Sains, Malaysia comment in the seminar (Harding, 1982 p17) that

"Our own experience, which is also borne out by experience elsewhere, has shown that professional development efforts cannot be sustained for long and tend to be ad hoc in nature unless a high-powered central committee can be established to plan, implement and co-ordinate such activities"

At the University of Copenhagen (Harding 1982, p17) it is seen as a major difficulty that

"the governing bodies at the university and at other institution of higher education are increasingly reluctant to declare support for course activities for teachers."

At Auckland, New Zealand (Harding 1983, p17) It is argued that

"...additional funding for staff development is likely to occur as a result of decisions taken at the national level extra funds are unlikely... for staff development activities if there is direct competition with more
"mainstream" departmental proposals. Earmarked funds from University Grants Committee would enable development to occur."

Culture would appear to have an effect on the need for authoritarian leadership. It was noted that in other universities in other countries official support is so explicit and confidence in it so high that nothing more (except more resources) is being sought.

**Origins of Professional Development** The origins of professional development activities in any institution inevitable influenced both concept and practice, at least initially, but the situation has been increasing complex.

In New Zealand, both University Student Association and the Association of University Teachers have been active, and in 1972 the latter group called as the University Grants Committee and the government to provide funds "to enable all universities to develop suitable programmes of training for University Teachers in 1976 stimulated the establishment of University Teaching committees (Jalling, 1979).

At a number of other universities Teaching Methods Committees, by various names, were the first step towards some kind of professional development programme, however modest. Sometimes they were an initiative by the Vice-Chancellor, sometimes they were set up by a Senate a similar senior academic group. Such initiatives were taken in response to a climate which favoured them a climate create by signs of public or
institutional concern about teaching (including student dissent).

In contrast some professional development programmes had their beginning in research. In the Netherland, for example units mainly concerned with research were set up, mostly in the late 1960's, and in some universities their role has been considerably changed or expanded (Isaacs, 1979). Other professional development activities were founded in Educational Technology or Audio Visual Units. At the Universiti Sains Malaysia, there were "three significant moves", first the Educational Technology Unit (1974), then the Senate Committee on Teaching-Learning Process, established in 1977 with the Vice-Chancellor as chairman, and thirdly the decision to have a University Teaching-Learning Unit in 1980 (Harding, 1982, p 20).

At this Faculty, there was a group of medical teachers were interested in professional development activities. By cooperation of "friends" at Chulalongkorn University a series of workshops was organized for the administrators, the heads of departments and other medical teachers since 1963. The aims of the workshops were for the medical teachers to know how to organize the active learning for the medical students. No professional development unit was observed in this faculty until 1987. The workshops and other professional development activities were organized occasionally by various groups of medical teachers with supervision by Associate Dean or Assistant Dean in academic affair. A few medical teachers went abroad for further study in medical education. They occasionally organized some professional development activities both for their own
I shall now examine some of the differences between institutions in how they view professional development both in theory and in practice.

The concepts of professional development: The evidences show that the professional development was defined differently by different institution. For example, Piper and Glatter (1977) defined staff development as:

"a systemic attempt to harmonise individuals' interests and wishes, and their careful assessed requirements for furthering their careers with the forth coming requirement of the organisation within which they (are) expected to work"

Applied in higher education this definition covers, for example, the development of the abilities of academic staff in the areas of teaching and examining, research and research supervision, consultancy and administration; it also applies to administrative technical and clerical staff.

A few units, concerned with institutional research or staff development or both, came into existence in Australian universities in the 1960s and more at the beginning of the 1970s. They received their first official blessing in the fifth report of the Australian Universities Commission (1972, p102) in these words:
"Teaching Research Units. Units concerned with improving the effectiveness of university teaching and learning and with conducting research into problems of higher education have been established at nine universities and three universities are proposing to establish them in the 1973-75 triennium. The Commission supports the establishment of such units. Student representative who met the Commission stressed repeatedly their belief in the importance of such units as contributing to improved teaching. The commission believes that all universities should operate such units. Their cost is not great in relation to total expenditure on teaching and research and there is evidence that considerable benefits flow from them."

The years later, in its sixth report, the Commission repeated (p 62)

"There is evidence that the existence of such units has contributed to the effectiveness of universities teaching during the triennium"

The evidence from western countries presented above shows the improvement of teaching competence has been a major element in professional development, and improvement in competence in one's own discipline is less emphasized. But in Thailand, professional development directed at the improvement of qualifications in one's own discipline may guarantee an academic a step up the promotion ladder; so the improvement of teaching competence is somewhat less emphasized. However, the concept of professional development has also included the improvement of teaching and special units have been established in some universities for this purpose.

At Chulalongkorn University, training courses, workshops, and induction programmes for new staff had been carried but for some years before a staff Development Unit was formally established in December 1976. Matters receiving attention more recently are the role of heads of departments, the role and
responsibilities of academic advisors, and the quality of teaching at graduate level.

At this Faculty, as described previously as the same as Chulalongkorn training courses, workshops, and induction programmes for junior staff had been carried out for some years by working committee before a Professional Development Unit was formally established in September 1987.

The range of activities which should be included within the concept of professional development. The evidences showed the wide range of activities were organized by different units as previously described in Chapter 5. At this stage and I would like to review some examples from Australia and Germany. The activities provided in many Australian universities have been proposed by Shore (1976) are:

1. **Clearinghouse for information:** To some extent, any person who has an interest in teaching and learning in higher education can act informally as a clearinghouse, enabling colleagues and other with whom contact is made to find out what is going on elsewhere, what other are doing. However, some attempt is made to systemize the exchange.

2. **Library for local use** Units with small, specialized libraries usually provide not only the usual monographs and journals but also copies or microcopies of selected single article, together with locally produced materials which might be of insufficient general interest for wider publication.
3. Newsletter publication or other information dissemination
Some newsletters are produced by units to cover matter concerned with their own interests in teaching and learning. Other units contribute articles to a general newsletter produced for the educational institution as a whole. In either case this provides a valuable medium for modest articles on topics relevant to professional development, for advertising forthcoming course, workshops and seminars, for putting in contact people of similar interests, and for raising awareness of educational issues among its readership.

4. Reading, study skills and other training for students. These services have been an obvious direct value for those students who use them. They can also have, through their contribution to professional development, an indirect benefit to all students, whether they use them or not.

5. Formal courses leading to qualification Formal qualifications for tertiary teachers are not common.

6. Short informal courses There are more common and widespread than formal courses for qualifications. These take a variety of forms from set courses, repeated regularly, to impromptu events arranged to suit the needs of a particular group or department.

They may be offered in concentrated from over a few days at the beginning of the academic year, action partially as induction courses for new staff, or they may take the form
of regular sessions spread over several weeks during term or semester time.

7. **Seminars, workshop and discussions.** The purposes of these sessions, whether pre-planned or impromptu, are many; for example, to provide information, to impart skills, to raise awareness and to exchange ideas. In the absence of a pattern which can be taken as typical, all one can say is that there is wide scope for variety in this category, and much activity can be classed under this heading.

8. **Packaged materials, such as self-instructional programmes.** One-page checklist is the simplest from of self-instructional material. The others range through sinchronized tape and slide programmes and videotapes to computer-aided instruction programmes.

9. **Consultation with individual members of staff.** This is an especially intangible category, first because its definition is hazy, and second because many consultations are confidential and personal.

10. **Evaluation of teaching and of subjects and courses.** There is a wide variety in practice, ranging from the provision of short checklists for a staff member to use, to microteaching laboratories with elaborate videotape facilities, where experienced staff come offer constructive advice.

11. **Assistance with course and curriculum planning.** This is not typical. At many institutions, unit staff are never included
in course planning and at others they are called in as an afterthought. Many teaching departments continue to behave as they did before specialist units were available.

12. Advice on policy matters. In this category also, there is a wide divergence in practice. In some institutions the director or other members of research and development unit staff are, "ex officio" or by selection, members of key committee. In other they are never consulted.

13. Descriptive research. The sort of research which is not hypothesis testing, not "experimental", but simply intended to be illuminative, to desire the current reality of what is happening in the college or university.

Studies of the performance of students, of student workload and of patterns of library use fall in this category, and are all valuable in helping to provide a firm data base for decision making at all levels, to replace the "common knowledge" and folklore which has often been the only information available.

14. Theoretical and experimental research. The statements under the preceding heading were not meant to imply that properly conducted, meticulous, scientific research is undesirable, not to imply that it has no relevance to staff development. If it can be shown in a controlled study that one method of presentation produces significantly better learning than another, then this is valuable too. It is a sad fact of life, however, that it is difficult (if not impossible) to conduct
studies of this sort without seriously perturbing the day-to-day life of the department or the students involved. The number of such projects that result in clear cut conclusions is fewer than, ideally, one would have hoped for. Comparatively development units are willing to devote resources to this kind of research.

In Germany, Bernd Gasch (1979) reported that there are three main approaches for professional development in improving teaching: information by printed material, courses and seminars, and personal consultations. He described: The printed material is not the most important method because it depends on whether the individual "client makes the effort to find, select and read the relevant paper; and even if he does make the effort, there is no guarantee that he will modify his behaviour or attitudes.

The courses and seminars are the most important methods. However, they too have their problems, beginning with the procedure for inviting people to attend. A circular, for instance, appears to be a good deal less successful than a personal invitation or a personally addressed letter.

Brandt (1978) suggests from his experience the number of participants in these courses should not exceed 25. However, to attract even half that number represents an achievement. Burrmann (1978) reports the feeling of a number of people who run such courses that a compact form is best, lasting from two to five days, and preferably held off campus, for instance in a well-
equipped country hotel, which should have some recreation facilities to promote a stress-free environment. Of course, the question of cost arises in this case. No answer has been found to the question of whether participants should come from the same discipline or a group of disciplines, or whether a heterogeneous combination is preferable. There are advantages and disadvantages either way.

With respect to the methodology of the courses themselves, the organizers are naturally under a moral obligation to follow their own percepts consequently, in almost all cases, they start with a discussion of the aims and objectives of the courses and then adapt various kinds of instructional and training methods and audiovisual and media techniques (simulation, games, case studies, written summaries, change from plenary to small-group work, etc). The basic principle is constant change of phase from information to training to application (Brandt, 1978).

A special type of course in that which deals with group dynamics, sensitivity training, communication training and the like. This method was thought by some people to be a wide-spectrum antibiotic for all diseases of university teaching. However, now attitudes are more realistic, and people seem later able to judge where the undoubted value of the method lies and where it does not.

Consultations: One method of consultation, which could be mentioned also under "courses" is microteaching, and some universities have made efforts to make it a more or less regular
feature of their institutions. Given enough time and genuine interest on both sides, it is probably one of the most effective methods of improving teacher performance.

Other kinds of consultation or counselling are probably employed quite often, either with individuals or with groups; but it is very difficult to reach general conclusions about their degree of success, because the specific circumstances strongly influence content, style and outcome. It may be only an instinctive judgement, and one not susceptible of proof, but here, especially in these one-to-one situations, a lot of useful work is done with understandably does not become public knowledge. Consultation with groups and committees becomes more difficult the more official they are, and its effectiveness seems to depend more on whether the group acknowledges are respects the advises as a person than the force, accuracy or brilliance of his arguments.

Comback to our situation at the Faculty of Medicine, Chiang Mai University, what are the activities which contribute to the process of professional development? As I have already discussed previously in chapter 1 that the health problems in Thailand is deficiency and maldistribution of physicians and paramedics. There are many causes of these problems. As the same as many other Asian countries, Thailand is facing with poverty, lack of equipment of teaching and research, insufficient research to revitalize teaching, an inadequate knowledge base of research into higher education, out date curricula, higher education as
the privilege of an urban and wealthy elite, and under respect for authority and wrote learning at the expense of independent thought.

There is no necessary nor ideal purpose for professional development nor a "correct" meaning. Meaning and purpose will vary within an educational system or culture due to different needs, local conditions and personalities. It follows that there can be no definitive set of practices which suit it at any time. So in order to set appropriated and agreeable activities for the Faculty the programme planning process and the assessment of educational needs will be reviewed in the next chapter.
CHAPTER 7

PROGRAMME PLANNING PROCESS AND ASSESSMENT OF NEEDS

Thus far the understanding of the Faculty of Medicine, Chiang Mai University, as an organization has been presented, and the definitions of innovation, innovation process, organizational innovativeness, and needs as stimuli for change have been clarified. The programme planning process and the assessment of needs should be reviewed. I found that in planning any programme for any organization, it is necessary to assess the needs and resources among those involved in that organization. This chapter provides a review on programme planning process and the needs assessment process which will be used in the structuring of this study.

PROGRAMME PLANNING PROCESS

As we already made understanding from the previous review that every organization have their own goals which are their norm needs. The members of those organizations who behave for them also have their own needs which can be called felt needs. The felt needs may or may not be the same as the norm needs. However, for success educational planning, the persons responsible for professional development have to have some strategies to gear the felt needs of members to be in line with the norm needs of organization. The appropriated strategies selected previously for this Faculty are normative reeducative and empirical rational but not power coercive strategies. The
next step is to examine the programme planning process.

Definition and Description of Programme Planning

Boyle (1981, p 5) defines "programme" as the "product resulting from all programming activities in which the professional educators and learners are involved". It also refers to "curriculum" or "learning and teaching condition" (Boyle, 1981; Brundage and Mackeracher, 1980; Brunner, Wilder, Kirchner, and Newberry Jr. 1967) or to the variety of activities conducted by any educational organization (Boyle and Jahns, 1980).

In this study, Professional Development Programme refers to a set of activities designed for medical teachers to be exposed to new ideas of learning and/or teaching with a positive purpose and direction. The Professional Development Programme is designed to create a better attitude of medical teachers toward teaching; to increase teaching capabilities; and to facilitate the medical curriculum change.

"Programme planning" refers to the planning of a set of educational activities. Ideally, in the self development programme, it should be undertaken with the co-operation of learners (medical teachers). Programme planning may be related to different administrative and institutional levels (Bruner et al., 1967). However, the Professional Development Programme used in this study focuses on developing individual medical teacher capabilities and attitudes towards teaching.
The Programme Planning Process

Literature reviewed on the programme planning process (Beatty, 1976; Boyle, 1981; Brundage and Mackeracher, 1980; English and Kaufman, 1979; Kaufman, 1972) suggests that there are at least five phases in the planning process as follows:

1. assessing needs and resources,
2. establishing programme objectives,
3. designing and implementing a learning plan,
4. assessing the outcome, and
5. reporting the programme results.

The sequential procedures of each of these phases are:

Assessing Needs and Resources In this study, the term "needs" refers to the needs of medical teachers in acquiring knowledge, skills, and attitudes to increase their teaching capabilities. The term "resources" refers to the resources available to meet those needs. In this process, the potential of medical teachers and the Professional Development Unit is guided by the teachers' perception of the value of meeting these needs to themselves and to the Faculty. The resources include people, time, money and various forms of managerial resources (materials, knowledge, skills, and environment).

Establishment of Programme Objectives Things to be considered in the establishment of programme objectives include relevant ideas on programme planning, organizational policy,
educational principles and such matters as the educational needs of medical teachers, timing and the availability of the managerial resources.

The establishment process can be repeated in a microscale such as in each educational workshop. The workshop designer must think about the assessing of needs and resources before establishing the workshops' objectives and then design and implement such a programme.

**Designing and Implementing a Lesson Plan** From the literature reviewed, cases studies, and the observation of practice, a tentative design of the Professional Development Programme will be developed and tested in this study.

**Assessing the Outcomes** An evaluation plan can be carried out to assess whether the design of the Professional Development Programme is appropriate. Evaluative criteria are used to identify any technical or operational problems that may have occurred during the implementation of the Professional Development Unit in the Faculty and to determine the programme outcomes.

**Reporting the Programme Results** The reporting of results may be undertaken in various ways. In this study, the reports on the implementation of the Professional Development Programme in the Faculty should be circulated to all concerned people. This includes clients, resource persons, curriculum committee, administrators and Faculty Board members. Additionally, Boyle
(1981) comments that different forms of reports should be designed to meet the needs of particular groups of people. A follow-up report on such a distribution would then be carried out to get feedback from those people. The feedback can be used to improve the programme, clarify any question about the role of the programme and obtain further support from interested organizations.

It may, of course, not be necessary to apply all of these phases in the process of programme planning, nor may it be necessary to follow the sequence suggested above. However, since this study focusses on the first three phases of the programme planning, a review of the literature of needs assessment; establishment of programme objectives; and the designing and implementing of the programme are needed in this study. An important consideration is the ways in which a participatory method might be applied to the needs assessment process, to the establishing of programme objectives and also to the implementing of the Professional Development Programme.

CATEGORIES OF NEEDS ASSESSMENT MODELS

Various approaches to and methods of needs assessment, used in both developed and developing countries, may be categorized into four different types: 1) the expert judgement approach, 2) the core committee approach, 3) the field survey approach, and 4) the participatory based approach.
The Expert Judgement Approach.

The expert judgement approach centres around judgements based on the information obtained from those persons who are officially accepted as specialists in a particular area of study or professional practice. These specialists are mainly academically oriented experts, who are called upon to comment on the educational needs of other people in a given society.

Care must obviously be exhibited in selecting the expert if any organization chooses to conduct a needs assessment following this approach. The criteria of selection should logically be based on the individual's knowledge of the community, its people, and their patterns of livelihood, and the educational services required.

For the examples of "experts" Weeit, Bell and Schwab (1984, p28-29) stated:

"public officials, the administrative and programme personnel in health and welfare organization of the community, including clergymen; health surveys from both the public and private sectors, including physicians and public health nurses; the programme clinical staff of agencies such as community mental health center, vocational rehabilitation organizations, guidance clinics, and others engaged in either the delivery of primary care or the administration of health programmes".

In general principle, different societies have different cultures and values (Kidd, 1981), and so it follows that the key persons in developing countries should be different from those in
developing countries. They may be representatives from various levels of educational institutions, administrative offices and community development agencies, or from private organizations. However, an organization which intends to conduct a needs assessment usually appoints a steering committee which carefully identifies those who are most suitable for the work. The selected key persons from various working groups then work out each step of the needs assessment process.

The methods most commonly used are the group meeting and the workshop. These methods gather complex and varied information normally based on personal experience, knowledge, attitudes and academic qualifications of the experts.

The advantages of the expert judgement approach in needs assessment are; first, it is a relatively simple process involving experts who are usually working in related departments and available to cooperate in needs assessment work. Second, it is a relatively economical way of securing and analyzing the necessary data. Third, it tends to increase inter-departmental understanding of educational needs and problems and improve inter-departmental co-operation.

On the other hand, there are many disadvantages of the expert judgement approach. Most experts rely on their own individual and departmental perspectives. Consequently, what such assessments are liable to obtain are the adjust "interests" or felt needs of the experts rather than the real needs.
Two main points support this argument. Firstly, specialists are not the representatives of the community. They represent the organizations or institutions to which they belong. Importantly, they represent themselves in any academic confrontation during the discussion process. Further, if they do not experience the perspectives of the community—urban or rural—they will not be aware of the different types of people in the society. They tend to categorize people by cultural measures, such as age, sex, ethnic background, social and economic circumstances, and geographical isolation. Differences of problems and needs of people may be neglected or lumped together. As a result, the needs of these people will not be adequately addressed in any planned social change.

According to Chin and Benne (1976), whom I referred to in chapter 6, p 93, this approach starts with the empirical-rational strategies based on individual knowledge and experience. However, it may fall into the power-coercive approaches of planned social change since it ends with a decision which is made by a minority group.

In this study, the expert judgement can be applied in the first workshop. The participants in the first workshop were administrators and experienced medical teachers. The Dean, the workshop leader and I established a set of criteria to select the group of medical teachers. We expected them to be the representatives of the local experts and intended them to express their educational needs. We believed that they should rely on
their own individual and departmental or faculty perspectives. In addition, we planned to organize a second workshop for the heads of departments and a third workshop for the sampling of the target group—volunteered medical teachers. Such workshops are necessary to ensure that the real needs will be adequately addressed in a Professional Development Programme.

The Core Committee Based Approach.

The participants in this approach are members of a core committee or Faculty Committee which is responsible for running the Faculty as a whole. They achieve membership to the committee both by being authorized by the University after election and by being appointed by the Dean.

This approach has the same basic characteristics as the expert judgement approach in being based on the perspectives of the individuals involved. The main differences between the first two approaches are in the sources of information and types of individuals involved.

In order to gather data on educational needs of medical teachers, the members of the core committee can apply such techniques as questionnaires and interviews. Boston (1974) recommends a mini-conference which is open to all members of the community to participate in gathering and analyzing data. He also recommends interviews with some interest groups. Rookey (1976) advocates the use of questionnaires. The core committee also can conduct a meeting to classify community needs. The
priorities of classified needs are determined and developed through process of small group discussions. During the meetings, the ideas, attitudes and perceptions of the members are recorded (Boyle, 1981; Siegel et al 1978; and Warheits et al 1974). The decisions are then used by the committee members as a guide in programme planning and development.

The advantages of the core committee approach are as follows: First, it is based on local key persons' responsibilities. As these key persons are living and working among the target group, they have knowledge about the local environment, similar attitudes, interests, needs, and they are able to gather good quality data for the assessment process.

Secondly, the core committee approach is relatively easy to arrange and inexpensive to conduct, and it is likely to provide much wider opportunity for input from the departments than does the expert judgement approach. Four disadvantages can be found, however. First, people do not have autonomy and freedom in the decision-making process due to political constraints and they generally tend to accept bureaucratic authority passively. Second, the members of the core committee may use their situation to serve their own economic and political purposes, needs, and interests. Third, some groups in the department may take over the core committee physically and/or psychologically and use it as a vehicle to further their own groups interests and needs rather than those of the Faculty. Fourth, the committee's members may create educational expectations that cannot be met.
In applying the core committee approach to the second workshop, all heads of departments and/or the next seniors were invited. We expected them to express their educational needs. We believed they would be able to gather good quality data for the assessment process because they work together with the medical teachers, they have knowledge about their departments, and they share similar attitudes, interests and needs.

Field Survey Approach.

This approach is generally based on the collection of quantitative data using pre-determined categories from a sample or from the total population of people living in a community. The common techniques used in this approach are interview or questionnaires. This approach is believed to be one of the most useful tools to obtain information about individuals (Alvir, 1978; Donsky, Miller and Parks 1979; Moore, Duther and Lee, 1977; Siegel et al., 1978; Warheit et al., 1974; Wilkinson, 1978).

There are several advantages of the field survey approach. Firstly, it can provide the researchers with quite valid and reliable information, if it is carefully designed and conducted. Secondly, although the data collection approach is generally planned by the taskforce and professional experts, the majority of the data are still obtained from individuals within the Faculty. Thirdly, some field surveys may seek to identify other relevant factors beyond the required needs determinations.

On the other hand, serious disadvantages may also arise from
the following factors: the method of planning the survey; the types of organizations involved in it; the ambiguity of the language; the format of survey instruments; the commitment, accountability and practical skills of the data collectors; the co-operation given by the respondents; the relevance of the data collected; and the analysis and interpretation of the data and results.

Another disadvantage is that individual respondents may feel reluctant to supply personal information. This may result in an unsatisfactory rate of return for questionnaires or a high refusal rate for individual interviews, which may seriously affect the validity and reliability of the results.

I did not use this approach because, from previous experience, I perceive difficulties in construction of a qualifying instrument and the co-operation of the respondents. The results in preliminary research did not show that validities and reliabilities could be obtain in these areas.

The Participatory Based Approach.

This approach focuses on the operational level. Data are collected from a series of meetings or workshops at which any interested individual is entitled to state his or her opinion about needs and problems. The meetings may be organized by various subgroups in order to diagnose symptoms and problems. Then, all refined data are presented at a general meeting for further diagnosis and assessment.
According to the strategies of planned change proposed by Chin and Benne (1976), this approach is an empirical process that helps the representative committee to sort out relevant factors and useful data from unnecessary or unrealistic information.

The process involved in conducting needs assessment by the participatory based approach is similar to that of the core committee approach. The representative committee identifies the goals of the assessment before a general meeting. It is important to ensure that all participants understand clearly the distinction between means and ends and between products and processes.

Many advantages can be identified. First of all, the participatory based approach is relatively easy to arrange and inexpensive to carry out. Secondly, it helps to develop a sense of belonging to the Faculty and encourages interested members to voluntarily take part in the Faculty work and to involve themselves in the Faculty as a whole. Thirdly, priorities can be established when the representative committee clearly understands what constitutes the discrepancy between "what is" and "what should be." Fourthly, it enables all individual participants to share their opinions and expertise not only in addressing themselves to the question of needs, but also in developing as individuals by participating in the life of a community and improving their standards and patterns of living in the process.

The participatory based approach may not always fulfill the
needs of the participants for several reasons, however. First, due to the inadequate experience of the committee members, they may not be able to analyse systemically the data collected. Second, the data may not relate to educational needs since some groups impose their political views on others. Third, difficulties can arise concerning meeting attendance, timing, clerical work and even the application of need identification techniques.

In this study, at the operational level, the participatory based approach was used. The first three workshops were organized for the three groups of medical teachers which represented respective local experts, core committee and potential learners. To ensure that the data collected would be analysed systematically, the validity of the key characteristics and the efficacy of the approach will be tested in this study.

**SELECTION OF PROCEDURAL ELEMENTS**

Several reasons indicate that the participatory based approach is the most appropriate for assessing the needs of medical teachers before establishing of the Professional Development Programme at the Faculty of Medicine, Chiang Mai University.

1. This approach is the most compatible with the philosophy of self development. This philosophy stresses respect for individual capabilities, freedom and autonomy; the involvement of medical teacher (as a student) in all aspects
of the programming; and self evaluation.

2. The data obtained through this approach are more relevant and closer to the existing problems of medical teachers, representing their educational needs more precisely and accurately than the data gathered through other approaches.

However, the other approaches do have some worthwhile advantageous characteristics for the collection and analysis of data. Therefore, it was felt that some elements of the other approaches should be selected to enhance the quality of the participatory based approach to educational needs assessment of medical teachers for the Professional Development Programme.

DIMENSIONS OF A PARTICIPATORY BASED APPROACH

Drawing upon the conclusions of the foregoing analysis, in this section the critical dimensions of the participatory based approach as applied in Professional Development Programme are identified. Based on these dimensions, a set of research questions which can be used to test the empirical appropriateness of the approach are then presented.

Approach Components.

The literature review indicated that a participatory based approach should have a set of interacting components. For the Professional Development Programme, these components were categorized into four types: basic units, procedural units, timing units, and environmental units.
Basic Units. Bagnall (1980) classified basic units of any educational situation into five primary elements: agent, learner, content, goal element and hardware element.

1.1 The agent is conceived of as the role position of an individual or a group who participates in the workshop. Individual participants, change agents, local experts, workshop leaders, administrators, and professional experts all have different roles in the workshop. The change agent who may be either a local expert, a professional expert, or a workshop leader plays the role of workshop facilitator, and provides the information required by the learners. The learners must make use of such information together with their own knowledge to assess their educational needs.

1.2 The learners in this study refer to the group of medical teachers who are involved in the workshop process within the Faculty. They are not only involved in determining their learning needs but also in learning how to work among themselves and with change agents to achieve a common goal.

1.3 The content refers to the information that is derived from interaction among potential learners (medical teachers); between the learners and the agents; and between all participants and their environment during the workshop process.

1.4 Goals refer to the desired results to which the group of participants work towards. These goals must be agreed upon
by all of the participants, and should be described in measurable terms. The agreed goals of a workshop would, of course, be essential to identify a set of learning needs.

1.5 **Hardware element** refers to the media by means of which content is transmitted between participants in the process.

2 **Procedural Units.** The procedural units refer to the set of tasks which the participants need to undertake in order to achieve the goals of a workshop. In this process, each step is sequentially arranged, and within each step there is an interactive relationship between the elements of the basic units.

3. **Timing** According to Bagnall (1980) any event may be identified within a matter of time. In this study the component of timing is very important. It relates to the period of time when participants may be available to be involved in a workshop. Within the process, the time intervals during which the participants are involved are also important.

4 **Environment Unit.** This unit is concerned with the social and natural context of the Faculty for which the workshop is being done the ecology of each department, the social stratification, the social pressures and the power structure each have a direct effect on particular elements of the basic units and relationship between them.
Approach Characteristics.

There is no universally accepted set of characteristics which defines societal values, goals, strategies and processes of needs assessment. Accordingly, and for practical purposes, a set of criteria have been drawn from the diverse sources reviewed in this chapter to develop relevant and appropriate characteristics for a participatory based approach to educational needs assessment.

As the professional development activities require a high degree of involvement from the medical teachers both in the process of needs assessment and implementation, there is by implication a need for a high level of interpersonal communication between and among elements of the basic units. These inter-relationships will result in a set of characteristics of the participatory based approach.

The needs assessment approach of the Professional Development in the Faculty can be characterized by a high degree of medical teachers' participation; a high degree of medical teachers' control over decision making; involvement of experts as resource persons; involvement of administrators as sources of information; the maximum use of local resources; a high degree of interactive communication; and a sense of ownership and commitment.

1. **High Degree of Medical Teachers' Participation.** The degree of participation may be measured by the extent to which the
medical teachers are actively involved in meaningfully interacting with one another over a decision issue in the workshop. It should be based on a clear understanding of the workshop process and its objective. The medical teachers should be involved in voluntarily sharing their knowledge, skills and experiences within their group. All should contribute to the decision-making process and feel that they are doing so; but they should also be prepared to abide by a majority decision. In the Faculty of Medicine, Chiang Mai University, it is necessary to involve not only medical teachers but also a number of change agents, an administrative committee and a Faculty committee in the needs assessment process. In order to ensure that the medical teachers are really the decision makers, their involvement in the decision-making process must be as high as possible.

2 High Degree of Medical Teacher Control Over Decision Making.

Regarding the concept of innovation-decision making of Rogers and Shoemaker (1981), and the transactional approach of interpersonal communication of Barnlund (cited by Mortensen, 1972), the decision making process is based on the following assumptions:

A. The decision making process may end up with either adoption or rejection of the participants' earlier ideas. The outcome may be changable according to such factors as different situation, time, new information, and other influences in the human and non-human
environment.

B. The decision making process must be compatible with existing values, past experience, and the general environment in different situations of the participants.

C. The decision making process is communicable and may be widely diffused to other people. The importance of communication cannot be too strongly stressed, as good communication may lead a different group of people to expose a further decision-making process.

Rogers and Shoemaker (1971) also stressed that individuals must first make a decision before acting. The integrity of group decision-making depends on the degree of individual participation and the extent to which members of the group understand the consequences of their decision. The learners should be given freedom to make their own decisions and also a wide variety of opportunities to determine their learning needs in a given situation. They should feel free to revise their opinions without pressure from change agents and administrators whose function is to advise, not to dictate.

Expert Involvement as Resource Person. The experts should not take on roles that direct the process towards a particular decision, but should provide advice and relevant information designed to help the learners to come to their own decisions.
The Involvement of Administrators as Sources of Information. The administrators play a supportative role to the work of the learner by providing information required during the workshop.

High Degree of Interactive Communication. A high degree of interactive communication implies that all participants are actively and verbally involved in discussion of the major issues relating to the needs assessment.

In the process of interactive communication, individual participants must define, observe and analyse not only their own ideas and information but also those derived from the participants. Ideas and information generated by individuals according to their own relevant thoughts are conveyed to other interactants. Other individuals may react with other responses, and then a high degree of interpersonal communication is established among the participants.

Sense of Ownership and Commitment. The need for potential learners to feel committed to the goals, processes, and outcomes of the workshop and implementing processes is emphasized.

In order to ensure that there is a general sense of ownership and commitment on the part of all participants towards the decisions made, it is important that every participant is highly involved and that no individual or section of the group becomes dominant.
After much literature was reviewed, the Professional Development Programme was then provisionally structured based on the philosophy of human behaviour, innovation theories, and the background of the Faculty of Medicine, Chiang Mai University.

The needs and resources will be assessed by a participatory based approach in a series of workshops. The results will be presented in terms of approach components and approach characteristics. The programme objectives, running procedures, and recommendation will be made concurrently with the assessment of educational needs.

The research questions are needed to spell out in order to serve as the foregoing framework as follows:

**RESEARCH QUESTIONS**

On the basis of the foregoing framework, this study ought to:

1. Determine whether a participatory based approach to educational needs assessment is acceptable as far as the process characteristics and components are concerned;

2. Determine whether, and to what extent, the approach components meet the expectations of appropriate experts in the professional development programme,

3. Determine whether, and in what way, the output from a participatory based approach to educational needs assessment can be applied in the development of a Professional
4. Determine whether the findings concerning the efficacy of a participatory based approach to educational needs assessment in the representative groups can be used with other medical teachers;

5. Establish whether the validated procedures of a participatory based approach to educational needs assessment are transferable to the identification of other types of developmental needs in the Faculty of Medicine at Chiang Mai University.

6. Determine whether, and in what ways, there are differences between the needs identified in a participatory based approach and the expert judgement approach in order to modify the initial structure of the professional development programme.

SUMMARY

In this section of the thesis the humanistic adult education and self-development philosophies have been developed as the basis to the needs assessment approach. Several strategies for achieving planned social change were then examined to determine the extent to which they might be consistent with those philosophies and with a participatory based approach to educational needs assessment. In light of this examination it has been concluded that the model most appropriate to situation
at the Faculty is a combination of the empirical-rational and normative-re-educative strategies. Programme planning was then explored in order to implement the educational needs assessment.

The literature addressing educational needs assessment and application to the Professional Development Programme was then discussed. Based on the background of the professional development programme, humanistic adult education and self development philosophies, and the cultural context of the Faculty of Medicine four criteria were developed to categorize the process approaches of needs assessment. These criteria are related to the initiators of the needs assessment programme, control over decision-making processes, use of local resources, and interactions of medical teachers in decision-making.

Four broad categories of the needs assessment approach were identified and compared: (1) the expert judgement approach, (2) the core-committee approach, (3) the field survey approach, and (4) the participatory based approach.

It was concluded that needs assessment by local experts or heads of departments with no potential learner involvement resulted in subject-centered learning programmes and an emphasis on solving theoretical rather than practical problems. On the other hand, needs assessment conducted largely by potential learners with some assistance from educational experts tends to lead to problem-centered learning programmes, and to the immediate application of solutions to local and real problems and needs.
The alternative approaches to needs assessment were then examined to identify the relationship between participatory and other approaches, and to identify possible procedural elements from alternative approaches that might be incorporated into a participatory approach within the given social context. It was concluded that some appropriate components and characteristics of the four categories of the model might be carefully selected to form a composite participatory based approach to educational needs assessment of medical teachers at the Faculty of Medicine.

Within the framework of self development philosophy, humanistic adult education philosophy, and the cultural context of the Faculty, set of components and characteristics of the participatory based approach to educational needs assessment were identified and discussed. These components and characteristics are designed from the basis of an approach to educational needs assessment which was developed and empirically tested in this study. In this way, it was intended to test both the validity of characteristics and the efficacy of a procedural approach developed from them. The strategies of the test and the research methodology are presented in the next section.
CHAPTER 8

RESEARCH METHODOLOGY

This chapter provides an overview of the methodology and the research techniques that were used in this study. The definition of the key terms, purposes of proposed inquiry, and research methodology are presented.

The research methodology included:
1. strategies that were applied in the research procedure,
2. setting up of the key characteristics of the approach,
3. the criteria and standards used in the assessment of the validity of the characteristic and efficacy of procedural approach, and
4. selection of samples and characteristics,

DEFINITION OF THE KEY TERMS

Most of the terms used in this study have been introduced in preceding chapters. The main purpose of this section is to clarify below their usage in this study.

Medical Teachers

The "medical teachers" refers to the teachers who teach in the Faculty of Medicine, Chiang Mai University, and some physicians in Lampang and Buddhachinaraj Hospitals who take
responsibility in teaching the medical students of the Faculty of Medicine, Chiang Mai University. These include all academic positions such as instructors, assistant professors, associate professors, professors, and invited instructors. These groups assume three major roles: (1) teaching, (2) research, and (3) services.

In this study the medical teachers were divided into three groups according to their roles in the workshop, namely, administrators, change agents and potential learners. The medical teachers and other resource persons involved in this study can also be classified by their roles in the workshops and their expertises as local experts, professional experts, workshop leaders, curriculum designers, task force members, workshop coordinators, faculty board members, and heads of departments which were defined as follows:

**Administrators.** The "administrators" refers to the medical teachers who have had experience in administration in different positions and at all levels. The administrative positions are Rector, Vice Rector, Dean, Vice-Dean, Hospital Director, Assistant Deans, Heads of Departments, and any positions appointed by the Dean which involve responsibility in administration.

**Change Agents.** The "change agents" refers to the medical teachers who have attended at least one medical educational workshop. They may or may not assume the role of change agents. I expected them to behave as change agents in the workshop.
Potential Learners. The "potential learners" refers to the medical teachers who have had no opportunity in attending any medical educational workshops. This was the main group, the target group, for the implementation of the Professional Development Programme.

Local Experts. The "local experts" refers to medical teachers who have more experience in teaching, administration, and service in medical school. These people comprise the senior staff who have taught in the medical school for more than 5 years. They might also be administrators, change agents or potential learners. If they have no experience in attending the medical educational workshop they should show their special interest in teaching.

Heads of Departments. The "heads of departments" refers to the medical teachers who were the heads of the various departments in the Faculty. If they were absent, the next senior teachers in those departments were invited to take their roles in the study. If some other medical teachers were assigned to take responsibility in the managing of a department, both the head of department and those teachers were invited.

Professional Experts

The "professional experts" refers to the professors in education who have expertise in educational area. These experts were professors from the Faculty of Education, Chiang Mai University; medical professors from the Faculty of Medicine,
Chulalongkorn University with experience in managing the medical educational unit there; and some of the local experts who have had experience in organizing medical educational workshops or those who have taken part in teaching development in the Faculty of Medicine at Chiang Mai University.

**Curriculum Designers**

The "Curriculum designers" refers to those persons involved in designing curriculum, and learning and teaching materials, for the needs assessment workshops. These persons were not necessarily employed directly by the Faculty. Some were invited from other organizations to participate in designing and developing the curriculum of the needs assessment process.

**Faculty Board**

The "Faculty Board" consists of the Dean, the Vice-Dean, and 20 Heads of Departments. The other administrative positions were not Board members but were invited to present information at the Faculty Board meetings. The Board functions as the Dean's advising committee. Although the Dean legally takes responsibility for running the Faculty, in reality the Dean sets policy and manages the Board by the consensus of all its members.

**Workshop Leaders**

The "workshop leaders" refers to the persons who were invited to be the directing staff of the workshop, or resource persons,
whether they were medical teachers or not.

Task Force

The "task force" refers to a group of people involved in the organization of the workshops. It comprises of the workshop leaders, the curriculum designers, the resource persons, and I as a heading of Professional Development Programme. They were responsible for managing academic tasks at the workshop.

Workshop Co-ordinators

The "workshop co-ordinators" refers to the academic support group. In this study, the workshop co-ordinators were the officers in the "Registrar's". They took care of managerial tasks at the workshops. At the beginning I closely advised them, helping them develop the handbook, "Procedures for Organization of a Workshop," and keep it entirely up to date.

PURPOSES OF THE PROPOSED INQUIRY

The main purposes of this study were:

1. to ascertain the appropriateness of a participatory-based approach in the assessment of educational needs and also in implementing a series of teacher training workshops in the Faculty. This was part of a set of designed activities for a Professional Development Unit,
2. to develop and empirically test a participatory based needs assessment model for possible use in implementing the Professional Development Programme in the Faculty.

RESEARCH METHODOLOGY

Strategies that were Applied in the Research Procedure

Accordingly, a number of strategies were applied to fulfill the above aims, and various methods of needs assessment were used. These included the preliminary field survey approach, the local expert judgement approach, the core committee approach, and the participatory based approach. The preliminary field survey approach was applied in this study by using interviewing techniques in the six cases of sample groups of medical teachers. The local expert judgement approach was carried out in the first workshop which was organized to assess the educational needs of medical teachers among the local expert group. The core committee judgement approach was applied in the second workshop for assessing the educational needs of medical teachers among the heads of departments. Finally, the participatory based approach, which was the main strategy in this study, was applied in the third workshop for needs assessment among the sample groups of medical teachers. In brief, interviews were conducted, three workshops were organized, and many meetings among the various groups of people were arranged in order to diagnose symptoms and problems of education.
The Five Step Plan

To study the appropriateness of the participatory based approach in assessment of educational needs of medical teachers in the Faculty of Medicine, the five step plan was implemented in the following ways:

1. The key characteristics of the participatory based approach described in chapter 7, p. 140-143 were taken to form a set of procedures to conduct a needs assessment at three levels - faculty, departmental, and individual (step 1);

2. The validity of these characteristics was then empirically tested in workshops 1, 2, and 3 (step 2);

3. A judgement of efficacy of the procedural approach, by using professional experts, was conducted by arranging of meetings before, during, and after each workshop among the groups of professional experts, workshop leaders, task force, and workshop co-ordinator (step 3);

4. Any deficiency found in steps 2 and 3 was then taken into account in the modification of the initial procedural approach and the workshop curriculum was then designed (step 4);

5. The modified approach of designed curriculum was then tested in other sample groups of medical teachers while a series of educational workshops were implemented (step 5).
For understanding more clearly, the five step plan was presented in a diagram 2 and described below step by step.

**DIAGRAMME 2** The five step plan for implementing of the research.

1. Development of the procedural approach

2. Empirical testing of the validity of the approach characteristics.

3. Professional judgement of the approach efficacy.

4. Modification of the procedural approach.

5. Testing of modified approach.
**Development of the Procedural Approach**

Two procedures developed were:

1. procedure for assessment of educational needs of medical teachers (at the same time it was a part of an implementation of the Professional Development Programme by using of a participatory based approach), and

2. procedure for organization of workshop.

### Procedures for Assessment of Educational Needs of Medical Teachers

The assessment of educational needs of medical teachers was carried out at three levels which were faculty, departmental, and individual levels. At the faculty level, the first workshop was held at the Chiang Inn Hotel among a group of local experts. The educational needs of medical teachers defined by the local experts was reported. At the departmental level, the second workshop was held at the Chiang Mai Hills Hotel for the group of heads of departments. The educational needs of medical teachers defined by these heads of departments were also reported. At the individual level, the sample group of medical teachers was selected from the whole population. The third workshop was held at the Sujinno Building. The participatory based approach was applied in this third workshop. The curriculum could then be designed based on the real educational needs before implementation of the professional development programme.
Next, the procedures for implementing a participatory based approach in assessment of educational needs was then developed and modified in the meetings among various groups of people and tested in a series of workshops. A semi-structure interview survey was conducted for six cases, and the first three workshops were planned for assessing the educational needs of medical teachers among the local experts, heads of departments, and the sample group of medical teachers, respectively.

The purposes of the interviewing was to collect some information from different groups of medical teachers. The questions asked concerned the interest in a Professional Development Programme, ideas on setting up of the Professional Development Unit, timing for attending the workshop, etc. This information could be used in planning the workshop for educational needs assessment.

The participatory based approaches were carried out by organizing workshops at three levels--faculty, departmental, and individual. At the faculty level, the first workshop was organized to assess the educational needs among the group of medical teachers who have had more experiences in teaching, administration, and services. I expected these local experts could represent the educational needs of medical teachers precisely because they are medical teachers and they have had much experience. This approach could also be called the expert judgement approach. At the departmental level, the second workshop was organized for assessing the educational needs among
the heads of departments. The heads of departments were expected to represent the educational needs of the medical teachers in their own departments accurately because they were responsible for running the departments. This was a core committee judgement approach. However, the participatory based approach was also used at the individual level in many sample groups of medical teachers while part of Professional Development Programme was implemented.

Before, during, and after each workshop, many meetings were arranged by the taskforce and the workshop co-ordinators in order to set the objectives, the learning experiences, and self evaluation for the participants.

The participatory based approach was selected for the reasons which have been reviewed in Chapter 7, page 136, as follows:

1. This approach is the most compatible with the philosophy of self development. Self development stresses respect for individual capabilities, freedom and autonomy; the involvement of medical teachers in all aspects of the programing and self evaluating. By this philosophy the structure and activities of the Professional Development Programme must be established and accepted by the medical teachers from all levels and self evaluation of the approach was carried out by using the feedback from participants in each workshop.

2. The data obtained through this approach are more relevant
and closer to the existing problems of the medical teachers, representing their educational needs more precisely and accurately than the data gathered through other approaches.

The procedures used for implementing the Professional Development Programme which utilized a participatory based approach were applied in this study through the following steps:

1. Assessment of educational needs of medical teachers by using a participatory based approach among the local experts (workshop 1);

2. Assessment of educational needs of medical teachers by using a participatory based approach in the core committee or heads of departments (workshop 2);

3. Assessment of the educational needs of medical teachers by using a participatory based approach directly to the sample group of medical teachers (workshop 3);

4. Curriculum designing, modification of initial approaches, and testing in other groups while implementing the Professional Development Programme (series of workshops).

Procedure for Organization of Workshop

Many factors influence the success of a workshop, well prepared contents, methods used, timing, designated roles of people involved, etc. These factors could be classified as components of organization of a workshop. Bagnall (1980)
categorized the components of the participatory based approach into four types: basic unit, procedural unit, timing unit, and environment unit.

Component of Workshop

1 Basic Units. Bagnall (1980) classified basic units of any educational situation into five primary elements: agent, learner, content, a goal element, and hardware element. In applying this configuration model to this study, the five primary elements were:

1.1 The change agents represent the roles of an individual or group who participate in the workshop. The change agent may be a local expert, a professional expert, a workshop leader, etc., who play the role of workshop facilitators and provides information required by the learners.

1.2 The learners refers to the group of medical teachers who are involved in the workshop.

1.3 The contents refers to the information that is derived from interaction among the medical teachers; between the change agents and the medical teachers; and between all participants. In this study the content was partly prepared by the workshop leader and the task force and the rest was the information which was derived from interaction among the participants.

1.4 The Goals are the objectives of the workshop. These
objectives must be agreed upon by all participants, and should be described in measurable terms. In this case the workshop objectives were written by the task force and approved by the Dean, however, before running the workshop the workshop leader asked the participants to consider and approve the workshop objectives.

1.5 The Hardware elements refers to the media by means of which the content is transmitted between participants in the workshop. The handouts, overhead projector, and stationery were prepared for all participants.

2 Procedural Units. refers to the set of tasks which the participants need to undertake in order to achieve the goals. In the educational workshop, tasks were partly planned beforehand by the workshop leader or the task force. However, tasks can be done by the participants in the workshop if the objectives are clear to them.

Since this unit is involving many people, many tasks are effect directly to the success of the workshop so I will presented it in detail in the heading of "Procedures for organization of a Workshop" in appendix 6.

3 Timing According to Bagnall (1980) any event may be identified within a matter of time. In this study the matter of time is very important. It is related to the period of time when participants may be available to be involved in a workshop and time available for activities in the workshop.
4 Environmental Unit This unit is concerned with the social and natural context of the Faculty. The social structure and its power structure have a direct effect on particular elements of the basic units and relationship between them. In the workshop, the social arrangements, the readiness of equipment, places, classroom, etc have indirect effect on success of the workshop. The hotels were selected instead of the inside campus in the first two workshops because the task force decided on the place which was well equipped, was convenient, and had good entertainment.

STEP 2. Empirical Testing of the Validity of the Participatory Based Approach Characteristics This step was implemented in the first three workshops which were:

1. The first workshop was organized for obtaining permission from the group of local experts, assessing educational needs, and establishing of a provisional Professional Development Programme (structure and action plan).

   The outcomes of the workshop were a list of educational needs of medical teachers identified by the local experts, the provisional Professional Development Programme in terms of structure and its action plan, and the feedback to the organized workshop by the participants.

2. The second workshop provided the assessment of educational needs and the judgement of the established provisional
Professional Development Programme by the heads of departments who represent the core committee.

The outcomes of the workshop were a list of educational needs of medical teachers identified by a core committee, justification of appropriateness of the established Professional Development Programme for implementing in each workshop, and feedback to the organized workshop by its participants.

3. The third workshop provided the assessment of educational needs in the sample group of the medical teachers.

The outcomes of the workshop were a list of educational needs of medical teachers identified by the sample group of medical teachers and feedback on the organized workshop by its participants.

**STEP 3. Professional Judgement of the Approach Efficacy.** Meetings were arranged among the groups of professional experts, task force, and workshop co-ordinators to justify the efficacy of the participatory based approach which was used in three workshops.

**STEP 4. Modification of the Procedural Approach.** The feedback from the first three workshops was used to modify the procedure in organization of the workshop and planning for workshop curriculum.
STEP 5. Testing of the Modified Approach in a Series of Workshops. The modified procedure was tested during implementation of a participatory based approach in the series of workshops for medical teachers.

Having described the five step plan the next step are explanation of procedures in implementing the five step plan in this study. As I have already reviewed previously that the main strategies selected in this study were normative re-educative and empiricel rational but not power coercive. And in applying any programme of self development it should make sure that the programme has to respect for individual capability, freedom and autonomy, participation of medical teachers in all aspects of the programme planning, and self evaluation by the medical teachers.

The five common elements in the normative re-educative strategies were reviewed in page 97 and found it can be observed by 1) full involvement of participants in a creative programme, 2) re-education may be required by the participants in order to gain further knowledge and skill to resolve their problems, 3) participatory based approach should be applied, 4) the solution should be thought out carefully with elaborate examination of the planned change, and 5) the change agent and participants should selectively and appropriately apply the methods and concepts of the behavioural sciences in learning to solve both present and future problems. So the following are procedures of setting the key characteristics of the participatory based approach, testing of the validity of the approach, and
professional judgement of the approach efficacy.

Setting up and Testing of Validity of the Key Characteristics of the Approach.

There is no universally accepted set of characteristics so in this study a set of criteria have been drawn from the diverse sources of reviewed literature as described in Chapter 6. The criteria and standards were set as follows:

The two branches of this study were:

1. Empirical testing of the validity of the key characteristics of a participatory based approach to educational needs assessment within the social context of the Faculty.

2. Procedural approach efficacy was judged by professional experts and tested in the series of workshops.

The six key characteristics were:

1. The client participation characteristic
2. The client control characteristic
3. The democratic process characteristic
4. The workshop leader characteristic
5. The local resources characteristic
6. The client commitment characteristic

Criteria and Standard Used in the Assessment of Educational Needs

Measures of Characteristic Validity. To test the validity of the key characteristics, it was necessary to define the
variables which are the main components of each characteristic. These variables were then used as the criteria for assessment. Standards within each criterion were also set below for the purposes of this study.

**Standards Setting for each Criterion.** To measure the characteristic validity, a set of questionnaires was read to the participants at the end of the workshop. For practical reasons, in this study a set of questionnaires was distributed at the end of the workshop and more than 15-20 minutes were available for participants to complete all items. Some interviews were added during the breaks or social functions in some groups of participants, informally when necessary.

In order to measure the validity of six characteristics, six groups of items related to each criterion were prepared and presented under each characteristic. Some of the items were selected to form a part of three questionnaires and used in workshops 1, 2, and 3. Each set was somewhat different, however; the details were presented in appendix 1, 2, and 3.

The satisfactory index was calculated from the returned five point rating scale questionnaires by the method recommended in a WHO handbook for running effective workshops (Gilbert, 1985):

Since I adopted the method recommended by Gilbert (1985) but I set different minimum acceptable standard so I would like to explain here on how does Gilbert calculate the minimum acceptable
and why I do not follow it.

**Calculating of Satisfaction Index.** Take an uncompleted questionnaire and mark beside each question the answers given by each participant. For example, for 30 participants, the answers to question 1 might be:

| no of answers | 0 | 2 | 0 | 10 | 18 |
|

1) It was clear to me from the start of the workshops that I was expected to play an active part in it.

The corresponding coefficient \(=(0 \times 1 + 2 \times 2 + 3 \times 0 + 10 \times 4 + 18 \times 5) = 134\)

The satisfactory index \(= \frac{134 \times 20}{30} \approx 89.3\%\)

The minimum acceptable rate for each characteristic was set up at 60%. This "satisfaction index" was calculated in such way that "average satisfaction" is \(\frac{100+20}{2} = 60\%\)

20 is 100 divided by the maximum coefficient (in this case is 5)

As regard to the minimum acceptable standard(Satisfaction Index), this is of course a matter of judgement, but it is important to put it high. Gilbert(1985) translate the rating scale of 1, 2, 3, 4, and 5 to percentage and set a minimum acceptable at 60% as described above. I do not agree with the method of Gilbert (1985) and argue it in two points: 1) a result in terms of "percentage" can be misleading and 2) the minimum acceptable should be set at 80% as follows:
On a five point scale we have:

<table>
<thead>
<tr>
<th>scale number</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfactory</td>
<td>VS</td>
<td>2</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>S</td>
<td>1</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Neutral</td>
<td>N</td>
<td>0</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>U</td>
<td>-1</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Very unsatisfactory</td>
<td>VU</td>
<td>-2</td>
<td>1</td>
<td>21</td>
</tr>
</tbody>
</table>

The misleading can be illustrated as follows:

1. A rating scale is merely a range with equally spaced points to facilitate marking. The points can be called anything or given any symbols such as shown above. But all process two things in common, the width (4 in these cases) and the median (Neutral, 0, 3, or 23) which indicates the neutral position.

2. Talking about a result in terms of "percentage" can be misleading. For example, on scale #2, the result of 50% means +1 from the scale #2. But the best figure of 2 has no significance as it is equal to half of the range. The result of 60% on scale #3 means 3 out of 5. But 5 is not the full width of the scale. It is merely a figure at the top of the scale. Therefore, 60% means neutral. On the scale #4 the neutral position is actually at 23. But if it
was identified as percentage, it would become $\frac{23 \times 100}{25}$ it is 92%.

3. Scale #3 can be misleading. If one were to mark rating scale paper on a scale of 5, there could some papers with a score of 0 or 0.5 but the rating scale starts from 1.

4. If a satisfaction criterion is intended to be "above neutral", the criterion on scale #2 should be +ve, scale #3 should be "3", and scale #4 should be "23".

However, in this study, although I do not agree with the term "percentage" by the above reason but this term is familia with all of Faculty member who involving the workshop in presenting the satisfactory index in percentage so I decided to use "percentage" but in this study only with the condition of scale #3 and no one have been permitted to answer below 1. And the minimum acceptable standard is 80% which I define it as "satisfactory" not "neutral".

The Validity of the Six Key Characteristics

The Client Participation Characteristics The client participation characteristic refers to the desired situation wherein all participants are actively involved in all sessions of the workshop. This characteristic entails three criteria: a) attendance, b) communication, and c) satisfaction.
Attendance (desired level, 100%; minimum acceptable standard 80%)

The criterion of attendance denotes the physical presence of participants in each session of the workshop. Accordingly, in this study attendance was operationally defined as the physical presence of an individual in the workshop from the beginning to the end of each session. This criterion was measured against a time-check, and a record maintained by the workshop co-ordinators of any individual movements in or out of each session.

The minimum attendance acceptable was set up at 80%. This was a minimum requirement for the medical students classroom attendance used by Chiang Mai University as a regulation.

Communication (Desire level, 100.00%; minimum acceptable standard 80.00%)

The criterion of communication identifies the extent to which participants contribute meaningfully to the process. Although there may be a wide range of such contributions in a session, this study focused only on those that were judged to be strictly relevant and meaningful in terms of the goals of the session.

The contributions may be either verbal or non-verbal. A non-verbal contribution is expressed in the form of a "non-verbal cue" (Mortensen, 1972, p 210), and may be observed as a gesture, facial expression or other body movement. Non-verbal
contributions have two key functions:

A. to reinforce a verbal contribution, and
B. to express feelings of value, esteem, doubt, confidence, and social status.

Both verbal and non-verbal contributions are important in communication between the participants in interpersonal interactions. However, in this study, because of the difficulty of recording non-verbal contributions and the poor reliability of the techniques involved (Applbaum et al., 1974), only verbal contributions were assessed.

Accordingly, in this study communication was operationally defined as the extent to which each participant considers the verbal contribution (written or spoken) given by a participant and is satisfied with his or her involvement in a session of the workshop.

In this study, satisfaction was operationally defined as the extent to which each participant expressed his or her satisfaction with the level of his or her involvement in the workshop as measured on a five-point response scale to some items in a set of questionnaires which related to communication read to individual participants at the end of each workshop.
Satisfaction (desired level 100%; minimum acceptable standard 80%)

The criterion of satisfaction identifies the degree to which a participant is satisfied with his or her involvement in a session.

In this study, satisfaction was operationally defined as the extent to which each participant expresses his or her satisfaction with the level of his or her involvement in the workshop, as measured on a five point response scale to the items read to individual participants at the end of the session.

The results of this part were calculated from two questions read to the participants at the end of the workshop. The two questions were:
1. I am satisfied with all discussion and other communication in the workshop.
2. I found that the workshop was meaningful.

The Client Control Characteristics The characteristics of the client control refers to the desired situation in which participants exercise full control over the making of decisions in each session of the workshop. This characteristic has only one criterion—group process.

Group Process (desired level, 100.00%; minimum acceptable standard 80.00%)

In this study the group process criterion was operationally
defined as the extent to which each participant is satisfied with the level of his/her involvement in making a decision in the workshop, as measured on a five-point response scale to an item read at the end of each session.

**Democratic Process Characteristics**  
The democratic process characteristic refers to the desired condition in which the participants reach a decision in a session by a process of democratic consensus. Democratic consensus here implies the will of the majority of participants which "proceeds from democratic voting procedures" (Fisher, 1974, p128) in any decision-making process. This characteristic has three criteria, namely, client decision, client acceptance, and client freedom.

**Client Decision**(desired level,100.00%; minimum acceptable standard 80.00%)

The criterion of client decision identifies the degree to which each participant accepts the decision reached in each session of the workshop. Acceptance here implies not only agreement with but also commitment to the decision that has been reached. Although some participants may disagree with the decision, they should accept it as the product of the group's work, and acknowledge their responsibility as group members.

Accordingly, in this study the client decision criterion was operationally defined as the extent to which the participant accepts a decision made by a majority of group members in a session, as measured on a five-point response scale to an item read at the end of each session.
Client Acceptance (desired level, 100.00%; minimum acceptable standard 80.00%)

The criterion of client acceptance identifies the degree to which participants accept the objectives set for each session of the workshop. The objectives here refer to the tasks which have to be accomplished, as agreed on by participants, within the framework of each session on the workshop. To find out the objectives, participants had to analyse the guidelines (proposed by the taskforce) for each session. Each participant was told that although he or she has his or her own ideas on objectives, he or she should defer to decisions made by the group.

Accordingly, the client acceptance criterion was operationally defined as the extent to which each participant is committed to the objectives of the workshop, as measured on a five-point response scale to an item read at the end of the session.

Client Freedom (desired level, 100.00%; minimum acceptable standard 80.00%)

The criterion of the client freedom identifies the degree to which a participant is satisfied with his/her freedom to express his/her opinions, ideas and suggestions in a session of the workshop.
It was operationally defined as the extent to which each participant verbally expresses his/her satisfaction with the level of freedom to present ideas and suggestions in the workshop, as measured on a five-point response scale to an item read to individual participants at the end of the session.

**Workshop Leader Characteristics** The characteristics of workshop leader refer to the desired situation wherein workshop leaders or change agents were actively involved in the participants only as resource persons acting in response to inquiries from participants in each session of the process. This characteristic has four criteria, namely, workshop leader responsiveness, workshop leader approachability, workshop leader openness, and workshop leader interference.

In order to measure the validity of workshop leader characteristics, during the break and the social functions, the interviews were added to five point response scale items read to individuals at the end of the workshop, and the results are presented in Chapter 9, page 215 under the heading of "Workshop Leader characteristics."

**Workshop Leader Responsiveness** (desired level, 100.00%; minimum acceptable standard 80.00%).

The criterion of workshop leader responsiveness identifies the positiveness of a verbal response on the part of workshop leaders to every request for information made by participants in a session of the workshop.
Accordingly, in this study the workshop leader responsiveness criterion was operationally defined as the degree to which participants are satisfied with the responses made verbally by workshop leaders to their questions in a session. Satisfaction was measured on a five-point response scale to an item read at the end of each session.

Two special questions were asked in particular in the interview of those who participated, that is those who asked questions to the workshop leader during each session. The five point rating scale items were recorded by the researcher and some organizers during the breaks and/or social sessions next to those sessions. The two items were:

1. The workshop leader answered all of my questions.
2. I was satisfied with his answers.

Workshop Leader Approachability (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion refers to how approachable workshop leaders are seen to be by participants who seek information on discussion issues in a session of the workshop.

In this study, the workshop leader approachability criterion was operationally defined as the degree to which participants are satisfied with the extent to which workshop leaders are approachable, as measured on a five-point response scale to an item read at the end of each session.
Workshop Leader Openness (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion of workshop leader openness identifies the degree to which workshop leaders provide participants with information about decision alternatives during the workshop. The provision of such advice is expressed through verbal messages which are aimed at encouraging participants to make their own decisions without being dominated by workshop leaders.

Accordingly, the workshop leader openness criterion in this study was operationally defined as the degree to which participants were satisfied with workshop leaders' ability to provide decision alternatives in a session. This criterion was measured on a five-point scale to an item read at the end of each session.

Workshop Leader Interferences (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion of workshop leader interference identifies the degree to which workshop leaders are perceived by participants as controlling the workshop.

The workshop leader interference criterion was operationally defined as the extent to which each workshop leader was seen by each participant as exercising control in the decision-making process, as measured by items read to each participant at the end of the workshop. Some additional questions were asked to the participants during the breaks and recorded by the researcher.
Local Resources Characteristics  The characteristic of local resources refers to the desired situation in which all appropriate available local resources are used maximally as sources of information by participants in the workshop. The local resources here comprise three main groups: key knowledgeable, documents, and time.

The key knowledgeable are persons who are in a position to understand what the department's problems, resources and utilization patterns are (Warheit et al., 1974). The key knowledgeable in this study may be administrators, heads of departments, medical teachers, and other officers who engaged in teaching and learning.

Appropriate documents as possible sources of information comprise published or unpublished documents which contain information relevant to discussion issues in any session of the workshop.

Time here refers to any period spent by any of the key knowledgeable in a session of the process.

This characteristic has three criteria, namely, resource utilization, resource availability, and resource requirement.

Resource Utilization (desired level, 100.00%; minimum acceptable standard 80.00%)

The criterion of resource utilization identifies the extent to which the participants perceive the useful and relevant local
resources to have been utilized by the group.

The resource utilization criterion was operationally defined as the extent to which resources are utilized by the group, when they are needed, as sources of information in a session. This criterion was measured by a question read to each participant at the end of each workshop on a five-point response scale and also by an interview recorded by myself.

Resource Availability (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion of resource availability identifies the degree to which resources, as sources of information, are perceived by participants as available for use by them.

The resource availability criterion was operationally defined as the degree to which each participant considers the local resources to be adequate for the assessment process. This criterion was measured by a question read to each participant at the end of the workshop on a five-point response scale.

Resource Requirement (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion of resource requirement identifies the degree to which available resources are perceived by participants as desirable sources of information and are perceived by the participants as available for use by them.
The resource availability criterion was operationally defined as the degree to which each participant considers the local resources to be adequate for the assessment process. This criterion was measured by a question read to each participant at the end of the workshop on a five-point response scale and asking questions recorded by the researcher.

**The Client Commitment Characteristics** The characteristics of the client commitment refers to the desired condition in which participants feel committed to the goals, processes and outcomes of the workshop. This characteristic consists of three criteria, namely goal commitment, process commitment, and outcome commitment.

**Goal Commitment** (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion of goal commitment identifies the degree to which participants accept the goals set for the workshop. These goals identify the ends which the participants wish to achieve by the conclusion of the process.

The goal commitment criterion was operationally defined as the extent to which each participant is committed to these goals of the workshop which were established in the initial planning session. It was measured on a five-point response scale to an item read to each participant at the end of the workshop.
Process Commitment (desired level, 100.00%; minimum acceptable standard 80.00%)

The criterion of process commitment identifies the degree to which participants are committed to the need assessment processes utilized in the group sessions.

This criterion was operationally defined as the degree of satisfaction of each participant with the methods adopted for the workshop. It was measured by a question read to each participant at the end of the workshop on a five-point response scale.

Outcome commitment (desired level, 100.00%; minimum acceptable standard, 80.00%)

The criterion of outcome commitment identifies the degree to which participants accept the findings identified by the group.

The criterion was operationally defined as the degree to which each participant is satisfied with the findings of the group at the end of the process. The criterion was measured on a five-point response scale to an item read to each participant at the end of the process.

Professional Judgement of the Approach Efficacy

The efficacy of the approach identifies the extent to which the application of the approach adopted can produce the desired results.
Three criteria were used to assess the efficacy of the approach, namely, professional expert satisfaction, product utility, and absolute satisfaction.

**Professional Expert Satisfaction** (desired level, 100.00%; minimum acceptable standard, 80.00%).

The criterion of professional expert satisfaction identifies the extent to which the procedure approach is judged by professional experts to be a suitable format for the needs assessment among the medical teachers.

This criterion was measured and recorded by the researcher on a question read to each of the professional experts in the meetings at the end of the workshop, which was set up to be a period of workshop evaluation.

**Product Utility** (desired level, 100.00%; minimum acceptable standard, 80.00%).

The criterion of product utility identifies the extent to which the products from the first three workshops were used by the professional experts in planning the activities of the Professional Development Programme.

**Absolute Satisfaction** (desired level, 100%; minimum acceptable standard 80%).

The criterion of absolute satisfaction identifies the extent to which the modified procedures of the approach are judged by the professional experts to be the most suitable format for needs
assessment.

This criterion was operationally defined as the extent to which the modified procedures are seen by each professional experts as a suitable format for assessing the educational needs of potential learners, as measured by the response to a question read to each professional expert recorded by an interviewer on a favorable/non-favorable (Yes/No) response item.

The desired level on this criterion was that all professional experts be in favour of the modified approach. The minimum acceptable standard was that 80 percent of the nominated professional experts be in favour.

SELECTION OF SAMPLES AND ITS CHARACTERISTICS

Sample Selection for the First Workshop:

Special criteria were used in selecting the participants of this workshop. I worked with the workshop leader and the Dean in selecting this group of participants. The group of 36 participants consisted of 10 administrators, four delegates from the Health Ministry, four representatives from the Faculty of Health Science, six heads of departments, four potential learners, four change agents and four resource persons. This group was expected to make up a group of local experts in professional development because of their broader experiences in teaching, service, and administration when compared with medical teachers.
Characteristics of the administrator in this sample. The administrators were selected in this study because I have found by review of literature that the administrators usually bring administrative innovation to an organization while educational innovation is generally brought by the medical teachers (Becker, 1978). All of the administrators in this sample group have attended the medical educational workshop. One of them studied educational courses abroad; two of them usually participate in medical educational workshops arranged by many institutions; the others have attended medical educational workshops at least once. As for administrative experience, five have experience from administering at the Faculty for at least five years; three have 2-3 years administrative experience, and the other three have no administrative experience but already have been appointed to be administrators of the Faculty.

Characteristics of the Delegates from the Health Ministry. The four delegates from the Ministry of Health included two from Lampang and Buddhachinaraj Hospitals. These hospitals were affiliated with the Faculty of Medicine, Chiang Mai University, in the training of medical students. One was from Chiang Mai Health Office (a head officer), and the other was an expert from the planning sector of the Ministry of Health in Bangkok.

Characteristics of the Representatives from Health Science Faculties. This group was made up of representatives from the Faculties of Pharmacy, Dentistry, Associated Medical Technology, and Nursing. They were expected to be a group of resource
persons since the graduates in their faculties usually work in teams with the medical graduates.

**Characteristics of Six Heads of Departments** The six heads of departments which were selected from the 20 heads of departments of the Faculty, were interested in education and had experience in using educational technology. All of them had attended at least one medical educational workshop. Three of them had administrative experience at the Faculty level.

**Characteristics of the Potential Learners** Four representatives of the medical teachers were selected to participate in this workshop. Even though this group had never attended any medical educational workshops, they had experience in arranging teaching and learning in their own departments. I expected them to give valuable comments and express their own problems in managing education.

**Characteristics of Workshop Leader** The workshop leader was a professors from other institutions. He had broad experience in running workshops, administration at the department, faculty, and ministry levels, as well as much experience in teaching in the medical school.

**Sample Selection for the Second Workshop:**

The 32 participants in the second workshop were selected by these special criteria:
All heads of departments were selected. If they were unavailable, the next senior person was requested to participate instead. If the heads of departments had assigned other teachers to take administrative responsibilities, these persons were also selected. By this criteria 21 medical teachers were selected from all departments of this Faculty. Eight representatives from Lampang and Buddhachinaraj Hospitals were also selected. All were heads or next senior to the heads of Departments of Surgery, Medicine, Pediatrics, and Obstetric-Gynecology. This group was expected to make up the core committee.

The other three were change agents who were expected to be consultants of the Professional Development Unit.

The workshop leader from the first and the second workshops was the same person.

Selection of the participants in the test group:

Many sample groups were required in the empirical test of this study, namely the change agent, the administrator, and the potential learner. The ratio used to select three samples of potential learners, administrators, and change agents was 6:2:1. This ratio was adopted by Panyanuwat (1984) to encourage individual freedom and autonomy for potential learners over the decision-making process, and also to limit the influence that might be exerted by change agents and Faculty committee members.
Potential Learner. The potential learner was defined as a medical teacher who has no experience in attending any medical workshop in the last five years.

In the selection of potential learners, I worked with the workshop co-ordinator according to the following sequence:

1. Checking those members of all medical teachers who have not attended any medical educational workshop in the last five years.

2. Randomly selecting 72 potential learners from the resulting list of names; and

3. Dividing into 3 groups of 24 and making time available for each individual to participating in the empirical test.

Characteristics of the Potential Learners. The potential learners were the medical teachers from every department in the Faculty of Medicine, Chiang Mai University, and from Lampang and Buddhachinaraj hospitals. All volunteered to participate in the testing and they attended full time in each workshop.

The Administrators. The administrators represented the medical teachers who have been in any administrative position in this Faculty.

I worked with the task force in selecting the administrators for the test by:

1. Checking those medical teachers who have been in an
administartive position, and listing all names.

2. Randomly selecting 24 administrators and dividing them into three groups of eight and seeing to it that each individual was available to participate in the workshop.

**Characteristics of the Administrator** The administrators in this study are defined as the medical teachers who have at some time taken responsibility in an administrative position. They volunteered to participate in the test after our invitation. They attended full time for the test which lasted for three days (12 sessions). There were a few interruptions of this group since the task force decided to arrange the workshop in Chiang Mai which meant that the administrators were not completely free from their administrative tasks. However, nobody left the conference room.

**The Change Agents.** The change agents represented the medical teachers who have attended at least one medical educational workshop or have studied medical education from some institution.

In selecting the change agents, I observed the following steps:

1. Checking the list of medical teachers for those who have attended medical educational workshops or have studied medical educational courses abroad or in Thailand.

2. Randomly selecting 12 names from the list with the task force and dividing them into three groups of four and seeing to it
that each individual was available to participate in the test.

3. Personally approaching the selected change agents to check their availability and to invite them to participate in the process.

Characteristics of the Change Agent Twenty-eight percent of the medical teachers had at some time attended medical educational workshops. Approximately 60 were still working, and some of them were administrators which also meant they were classified in the group of administrators rather than with the change agents. Twenty of them participated as change agents in the workshop; five worked in the taskforce; and the rest gave very useful comments and helped solve some administrative problems. There were very few disruptions in this group while participating in the test.

Selection of the Professional Expert Group

The professional experts were selected by the suggestions from the Dean of the Faculty of Education, suggestions from the workshop leader and also suggestion from representatives of the United Nations Fund for Population Activities (UNFPA). The UNFPA sponsored the first two workshops. These professional experts were expected to be curriculum designers and trainers for teacher training workshops.
The group consisted of nine professional experts from the Faculty of Education, Chiang Mai University; three from the Medical Educational Unit, Chulalongkorn University; two from Medical Educational Studies for Rural Area Projects (MESRAP), Chulalongkorn University; and four medical teachers from the Faculty of Medicine at Chiang Mai University participated in the Professional Development Programme.

All members volunteered to cooperate in the activities of the Professional Development Unit and played the professional experts' roles of this study. All were well trained in education both in Thailand and abroad and have had adequate experience in running educational workshops.

Selection Samples of Preliminary Field Research:

At the pre-planning stage of the research, I assessed the educational needs of the medical teachers. This sample group gave valuable comments for planning steps but because of the limitation on interviewing techniques, only six medical teachers were selected randomly. Two persons from each of the potential learners, change agents, and administrators were selected and the results are summarized in this research in the next chapter.

Selection of Workshop Leader:

The leader in the first and second workshops was the same person. He was a medical professor from Chulalongkorn University and has had much experience in running workshops. He has had
experiences in teaching, administration at departmental, faculty and ministry levels and has been a head of the Medical Educational Unit of Chulalongkorn University. He selected his assistants from the groups of local and professional experts, and he closely advised me on running the workshops.

The workshop leaders of the other three workshops were the trainers of each workshop.
CHAPTER 9

RESULTS

COMPREHENSION

In reference to the main objectives of this study, I would like to assess educational needs of medical teachers and provide an appropriate professional development programme for the Professional Development Unit (PDU).

I have already defined the PDU as a special organization which I as a person who have been appointed by the Dean to take responsibility in creating such a unit would wish to initiate and implement in this Faculty. It may be created as a center, office, division, programme, project or whatever that provides services variously referred to as faculty development, teaching improvement, instructional development, learning resources, professional development or educational development. It assumes responsibility for facilitating the improvement of instruction.

It focuses on medical teachers and aims to promote their growth, help them to acquire knowledge, skill, sensitivities, and techniques related to teaching and learning. To reach these objectives, many typical activities of professional development programme such as seminars, workshops, meetings, and evaluations would be organized.

Ruscoe (1980) distilled the major proposition for change in faculty members from several leading spokespersons, such as

"Faculty members will change when: (a) they have knowledge about alternative ways of behaving such as information about alternative teaching-learning practice; (b) they have believe that change is desirable; (c) they belief that they can change in the desired ways; (d) they receive non-threatening feedback about their own behavior; (e) they are praised, recognized, and rewarded for effectiveness and for improvement" and

"All faculty members, regardless of age, experience, or effectiveness, can developed in many ways."

"Any faculty contains many different kinds of persons, each of whom is concerned with his own situation. Every program will appeal to some, and no program will appeal to all."

By the previous literature reviews and the above propositions, I believe that in initiating and implementing of the PDU, it will appeal to some medical teachers. So I decided to run two educational workshops for groups of 30-40 local experts and the heads of departments to further their knowledge of educational problems and how to solve such problems. In order to minimize the barrier and make a good start I would wish to select a group of local experts for my first workshop because they have enough experiences, they used to face various kinds of problems, and they could understand what I would like to propose to them. I expected them to have a favorable attitude towards professional development, to commit themselves in structuring the programme and its workplan and giving allowance for running the second workshop for the heads of departments and other workshops for groups of medical teachers.

In this study, the changing behaviours and preferences of the medical teachers cannot be explicitly predicted or stated,
however, a set of activities was designed for the medical teachers. I expected them to change in some ways after attending or participating in such activities. During and at the end of each activity, the evaluations were made both by themselves and by me. These evaluations were for assessment of the educational needs and resources, testing of the validity of the key characteristics of the approach, assessing the efficacy of the procedure, and testing of many assumptions.

The set of assumptions I had in my mind were as follows:

1. If I run a workshop for experienced medical teachers and get them acquainted with educational problems and how to solve such problems, they will change in some way after they have gained knowledge about alternatives.

2. If they believe that they can change in the desired ways they will make decisions and give allowance to implement the PDU in the Faculty.

3. Because they are local experts they can design the structure of the PDU or at least can give the outline of the professional development programme which leads them to commit to the activities arranged by PDU.

4. If the local experts could devise the structure or at least the outline of the PDU and its workplan in the first workshop I expected the heads of departments could consider, modify and accept it in the second workshop.
5. Finally, the structure and the workplan of PDU which was written by the consensus of the first two workshops and approved by the professional experts would be accepted and fully supported by the Faculty Board to run in the Faculty for all medical teachers.

6. If the PDU's activities can serve the educational needs of medical teachers they will volunteer to participate in such activity.

7. If the activities of the PDU can be set in proper condition and meaningful to the medical teachers they will accept some alternatives suggested in the workshop and apply them into their own teaching.

The designed activities, the format and content of the workshop, and the condition for successful educational planning are needed in this study. Since all of these would be established mostly in the first two workshops and tested in the third workshop. The validity of the key characteristics and approach efficacy were concurrently proved in all workshops.

There are many greatest successes in this study. First, the workshops met the requirements of the success key characteristics thus the comments, recommendations, and decision made in the workshops as well as the conclusion reached are valid guidelines which can be used to design the format and content of culminating educational endeavor. Second, the designed format and content were tested in the third workshop and the result showed that the
average satisfactory index was somewhat lower than the minimum acceptable. I decided to remodify and retest them in other three workshops and finally getting acceptable results. This encouraged my belief of the need of participatory based approach in planning process of every programme because this approach is more relevant and closer to the existing problems of medical teachers and representing their educational needs more precisely and accurately than the data obtained through other approaches. Third, I finally found that many meetings, conferences, and other activities those were organized as described in part 6 "sequences of events" gave a fruitful result. The formal Professional Development Unit have been announced by the Faculty on 17 September 1987 and I recognized this announcement as an important outcome of the whole process which included a series of workshops, meetings, conferences, discussion, conclusion, decision making in all steps, etc. These results will be presented in the six parts as follows:

Part 1 The scheme of the overall results
Part 2 The testing of the validity of the key characteristics of workshop 1 and 2.
Part 3 The results of the first workshop
Part 4 The results of the second workshop
Part 5 Testing of the approach efficacy by the professional experts
PART 1

SCHEME OF THE OVERALL RESULTS

In order to show the scope of this study I would like to draw the whole scheme of this study in the following diagrammes and tables.

Table 4 Details of the first workshop.

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROCESS</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>-3 preworkshop meetings</td>
<td>-workshop planning</td>
</tr>
<tr>
<td>-36 local experts</td>
<td></td>
<td>-implementation of workshop1</td>
</tr>
<tr>
<td>-1 workshop leader</td>
<td>- workshop 1</td>
<td>-structure and workplan of PD</td>
</tr>
<tr>
<td>-4 task force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5 workshop co-ordinators</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>-questionnaires and interviews</td>
<td>-feedback from participants</td>
</tr>
<tr>
<td>Budgeting</td>
<td>-2 postworkshop meetings</td>
<td>-comments from professional experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-workshop evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-analysis of workshop 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-concepts of professional development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-recommended activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-conditions for success planning in convincing of key persons</td>
</tr>
</tbody>
</table>
Table 4 and diagramme 3 show the activities arranged before, during, and after the workshop 1. The results were presented in terms of input, process, and outcome. From these activities I can prove and show the validity of the key characteristics of the workshop in Part 2 of this chapter and summarize the condition for successful planning in Part 3.

The most important were the comments, discussion, and recommendations extracted from workshop 1 which I have analysed and shown in part 3. Part 3 will reflect the viewpoints of the
key persons towards the professional development and these lead to the condition for success or failure of implementation of the professional development programme.

The results from Workshop 1 were used to be the background information for Workshop 2. In preparation of Workshop 2 the same activities as Workshop 1 were repeated. Some parts of the preparation were modified by using the feedback from the previous workshop and these resulted in a better prepared workshop. Two preworkshop meetings, questionnaires, interviews, and two postworkshop meetings were organized as shown in the Table 5 and Diagramme 4 below. The analysis of workshop 2 reflects the concepts of professional development among the groups of heads of departments, and the possibility for implementation of the PDU. Conditions for successful educational planning were also extracted from the comments and discussions during the workshops. These were presented in Part 4 of this chapter.
Table 5 Details of the second workshop.

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROCESS</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>-2 preworkshop</td>
<td>-workshop planning</td>
</tr>
<tr>
<td>-32 heads of departments</td>
<td>meetings</td>
<td>-implementation of workshop 2</td>
</tr>
<tr>
<td>-1 workshop leader</td>
<td></td>
<td>-structure and workplan of PD at departments</td>
</tr>
<tr>
<td>-4 task force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5 workshop co-ordinators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Materials

Time

Budgeting

Information from workshop 1

-2 postworkshop meetings

-2 questionnaires and interviews

-2 feedback from participants

-2 comments from professional experts

-2 workshop evaluation

-2 analysis of workshop 2

-2 concepts of professional development

-2 recommended activities

-2 possibility in implementation of PDU

-2 conditions for success planning in convincing of key persons
The format and content of the educational workshop was established after the first two workshops and implemented in workshop 3 (16–20 May, 1983). The procedural approach of workshop 3 was a modified form of the previous workshops. There were two preworkshop meetings, workshop 3, questionnaires, interviews, two postworkshop meetings and an analysis of the workshop done in order to find out the proper format and content of the educational workshop and conditions for success planning. At the
same time the recommended activities for the PDU were needed. The
details in organization of workshop 3 were shown in Table 6 and
diagramme 5.

TABLE 6 Details of the third workshop.

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROCESS</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>-2 preworkshop meetings</td>
<td>-workshop planning</td>
</tr>
<tr>
<td>-32 medical teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-4 workshop leaders</td>
<td>- workshop 3</td>
<td>-implementation of workshop 3</td>
</tr>
<tr>
<td>-4 task force</td>
<td></td>
<td>-assessment of educational needs of medical teacher</td>
</tr>
<tr>
<td>-7 workshop co-ordinators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Materials

Time | -questionnaires and interviews | -feedback from participants

Budgeting | -2 postworkshop meetings | -comments from professional experts

Information from workshop 1&2

-8 analysis of workshop 3 | -concepts of professional development

-possibility in implementation of PDU

-conditions for success in educational planning
After the third workshop and the 2 postworkshop meetings, the proper format and content of the educational workshop were designed for implementing in the Faculty. A series of workshops and other activities were arranged by a group of staff in the registrar office under the supervision of the Assistant Dean of Academic Affairs. In September 1987 the Professional Development Unit was formally set up by the Board of the Faculty. It has three full time academic supporting staff and two clerks taking responsibility in running the professional development activities under the supervision of the Assistant Dean in Staff Development. The sequences of events during 1981-1988 are presented in Part 6 of this study.
PART 2

THE TESTING OF VALIDITY OF THE KEY CHARACTERISTICS OF WORKSHOPS 1 AND 2 (DATED 16-17 SEPTEMBER, 1982 AND 27-29 DECEMBER, 1982)

The following is an analysis of the first two workshops to test the validity of the key characteristics of the procedural approach.

There were two branches of this study:
1. The testing of the validity of the key characteristics of workshops 1 and 2.
2. The testing of the efficacy of the procedural approach.

In this part only the testing of validity of the key characteristics will be presented.

In studying the validity of the key characteristics of the workshop, the six key characteristics were defined by using the model modified from Panyanuwatt (1984) as follows:
1. The client participation characteristics
2. The client control characteristics
3. The democratic process characteristics
4. The workshop leader characteristics
5. The local resources characteristics
6. The client commitment characteristics

As for the outcome of the first two workshops, which included a professional development programme and its workplan, comments and recommendations should be valid and the six characteristics of each workshop proved valid if the Programme is
to be deemed a success.

The Client Participation Characteristics

The client participation characteristics refer to the desired situation wherein all participants are actively involved in all sessions of the workshop. Three criteria are entailed in this characteristic: a) attendance, b) communication, and c) satisfaction.

**Attendance** In this study the attendance was operationally defined as the physical presence of an individual in the workshop from the beginning to the end of each session. The workshop coordinator and I measured it against a time-check and found 100% of the participants attended both workshops although some participants in the second workshop were disrupted in some sessions. The attendance was above the minimum acceptable which was set at 80% as shown in Table 7.

Table 7 The physical presence of the participants in the workshops 1 and 2.

<table>
<thead>
<tr>
<th>Workshop</th>
<th>No of Participants</th>
<th>No of attendance</th>
<th>Percentage of attendance</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>36</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>32</td>
<td>100%</td>
<td>2 were disrupted in some sessions.</td>
</tr>
</tbody>
</table>
The above results mean the local experts and the heads of departments gave full participation in the respective workshop (1 and 2). So the comments and other outcome from both works would be established by them and the result would be valid in terms of 100% attendance. However, there were a few disruptions in the second workshop. This may show that the organizer cannot fully take the participants from their regular daily work. Still, the percentage of attendance was above the minimum acceptable standard, so I am satisfied with this attendance.

**Communication:** The criterion of communication identifies the extent to which participants contribute meaningfully to the workshop. In this study, communication involves the verbal contribution (written or spoken) given by the participants who should be satisfied with their involvement in a session. A list of items was read to them on a five-point response scale and the satisfaction index on communication was calculated. The results are presented in Table 8.
Table 8  The satisfaction index of communication.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfactory Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S* I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. My comments were used in planning a PDU.</td>
<td>83.33</td>
<td>A14</td>
</tr>
<tr>
<td>2. Enough time was given for me to present my ideas.</td>
<td>83.33</td>
<td>A20</td>
</tr>
<tr>
<td>3. I enjoyed discussing issues in a small group.</td>
<td>100.00</td>
<td>A15</td>
</tr>
<tr>
<td>4. The leader gave me opportunity for critical comments.</td>
<td>86.67 81.25</td>
<td>A11,B10</td>
</tr>
<tr>
<td>5. I was satisfied with all discussion in the workshop.</td>
<td>86.25</td>
<td>A16</td>
</tr>
<tr>
<td>6. I found the discussion was meaningful.</td>
<td>92.50</td>
<td>A17</td>
</tr>
<tr>
<td>7. I was given sufficient information on the aims and the methods of</td>
<td>96.67 92.50</td>
<td>A1,B1</td>
</tr>
<tr>
<td>the workshop.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>average 90.00 88.13</td>
<td></td>
</tr>
</tbody>
</table>

The average of the satisfaction index of these items was above the minimum acceptable which was set at 80%. The above results show the satisfaction index figures of communication were higher than the minimum acceptable standard, which mean the participants in both workshops were satisfied with their involvement in the workshops.

W.S* is workshop
Satisfaction: The satisfaction was operationally defined as the extent to which each participant expressed his or her satisfaction with the level of his or her involvement in the workshop, as measured on a five point response scale to the items read to the individual at the end of the workshop.

The results are presented in Table 9.

Table 9 The satisfaction index of participants' involvement.

<table>
<thead>
<tr>
<th>Item</th>
<th>Satisfaction Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
</tr>
<tr>
<td>1. I was satisfied with all discussion and communication in the workshop.</td>
<td>100.00</td>
</tr>
<tr>
<td>2. I found the workshop was meaningful.</td>
<td>100.00</td>
</tr>
<tr>
<td>3. The workshop helped me to increase my confidence in my ability to set up the workplan of PDU.</td>
<td>87.50</td>
</tr>
<tr>
<td>average</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The average of the satisfaction index was above the minimum acceptable which was set at 80%.

All of the results from Table 7, 8, and 9 show the participants were involved in both workshops at a satisfactory rate. This may mean the selection of the participants was done well and it can be expected further that the groups' work and the other outcomes were done well. Of course, these other characteristics must also be proved to be valid.
Summary  The three criteria (attendance, communication, and satisfaction) used to measure the characteristics of client participation all gave results that were well above the minimum acceptable standards set for each criterion. All participants were judged to be actively involved in all sessions of the workshop. That is, they (1) attended all sessions of the workshop (2) were judged to have verbally contributed highly relevant and meaningful messages to the decisions of their groups, and (3) felt highly satisfied with level of their involvement in the workshop.

The Client Control Characteristics

This characteristic refers to the desired situation in which participants exercise full control over the making of decisions in each session of the workshop. It was operationally defined as the extent to which each participant was satisfied with the level of his or her involvement in making a decision in the process as measured on a five-point response scale to items read to them at the end of the workshop. The result was presented in Table 10 as follows:
Table 10 The satisfaction index of the client control characteristics

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. The leader made use of my critical comments.</td>
<td>-</td>
<td>98.75</td>
</tr>
<tr>
<td>2. The leader displayed a satisfactory opened mindness.</td>
<td>-</td>
<td>92.50</td>
</tr>
<tr>
<td>3. The workshop was conducted under circumstances of free learning.</td>
<td>94.44</td>
<td>-</td>
</tr>
<tr>
<td>4. The workshop encouraged me to put the knowledge I have gained into practice after the workshop is over.</td>
<td>-</td>
<td>91.25</td>
</tr>
<tr>
<td>5. The workshop helped me reach my objectives.</td>
<td>-</td>
<td>88.57</td>
</tr>
<tr>
<td>6. I participated in the decision making in the workshop.</td>
<td>77.65</td>
<td>-</td>
</tr>
</tbody>
</table>

average 86.05 92.77

The results were above the minimum acceptable which was set at 80%.

In running any workshop it will be effective and meaningful if such a workshop is controlled by the participants themselves. A workshop leader and workshop organizers should play the roles of workshop facilitator instead of controllers. The results in
Table 10 reveals that workshops 1 and 2 were controlled by the participants themselves. Participants were well involved in the group process of decision making. This probably led to the creation of a sense of belonging among the participants which would have boosted co-operation and commitment later.

The Democratic Process Characteristics

This characteristic refers to the desired condition in which the participants reach a decision in session by a process of democratic consensus. This characteristic entails three criteria: a) client decision, b) client acceptance and c) client freedom.

**Client Decision:** The client decision identifies the degree to which each participant accepts the decision reached in the workshop. Acceptance here implies not only agreement but also some commitment to the decision that has been reached. If there are some participants who disagree with the decision, they should accept it as the product of the group's work, and acknowledge their responsibility as group members. The result of this study was measured on a five-point response scale to items read to them at the end of the workshop as shown in Table 11 as follows:
Table 11 The satisfaction index of client decision.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. I agreed with the group's work.</td>
<td>-</td>
<td>83.17</td>
</tr>
<tr>
<td>3. I accepted the decisions made by the majority of the group.</td>
<td>80.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>average</td>
<td>80.00</td>
</tr>
</tbody>
</table>

The satisfaction index average was above the minimum acceptable which was set at 80%.

The above results mean the participants from both workshops, in general, accepted the decisions made by the majority of the group and accepted the groups' work. This made up the validity of this characteristic of client decision.

**Client Acceptance** Client acceptance identifies the degree to which participants accepted the objectives set for the workshop. The objectives here refer to the tasks which must be accomplished, as agreed on by participants within the framework of the workshop. This criterion was measured by:

1. The agreement of the participants to run a workshop by a guideline proposed by the workshop leader at the beginning of the session.
After the discussion about the objectives of the workshop and sequences of the session the participants accepted the workshop's objectives and agreed to run a workshop in suggested sequences.

2. The satisfaction index was also measured on a five-point response scale to items read to individuals at the end of the workshop. The results are shown in Table 12:

Table 12 The satisfaction index of client acceptance.

<table>
<thead>
<tr>
<th>Items</th>
<th>W.S I</th>
<th>W.S II</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I was given sufficient information on the aims and the methods of the workshop.</td>
<td>96.67</td>
<td>92.50</td>
<td>A1,B1</td>
</tr>
<tr>
<td>2. I found the workshop was conducted in line with principles it discussed.</td>
<td></td>
<td>88.75</td>
<td>-B6</td>
</tr>
<tr>
<td>3. I found the content relevant to the objectives of the workshop.</td>
<td>83.33</td>
<td>-</td>
<td>A2,-</td>
</tr>
<tr>
<td>4. I feel that the programme drawn up during the workshop was arranged in proper sequencing.</td>
<td>88.89</td>
<td>85.00</td>
<td>A3,B5</td>
</tr>
<tr>
<td>5. I agreed with the objectives of the workshop.</td>
<td>100.00</td>
<td>83.75</td>
<td>A4,B4</td>
</tr>
</tbody>
</table>

average 92.22 87.00
The satisfaction index results were above the minimum acceptable which was set at 80%.

The above results mean the participants were given enough information about the objectives of the workshops. They agreed to them and understood the methods used in the workshops so they can perform their roles in the workshop. They are satisfied and accepted the outcome of the workshop as well.

**Client Freedom**: Client freedom identifies the degree to which a participant is satisfied with his or her freedom to express his or her opinions, ideas and suggestions in a workshop. It is operationally defined as the extent to which each participant verbally expresses his or her satisfaction with the level of freedom to present ideas and suggestions in the workshops as measured on a five point response scale to items read to individual at the end of the workshops. The results were shown as follow in Table 13.

**Table 13 The satisfaction index of client freedom.**

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
</tr>
<tr>
<td>1. Enough time was given for individual work.</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
</tr>
<tr>
<td>2. Enough time was given for presentation work in</td>
<td>89.89</td>
</tr>
<tr>
<td>the plenary session.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A21, B27</td>
</tr>
<tr>
<td>average</td>
<td>89.89</td>
</tr>
</tbody>
</table>

214
The results were above the minimum acceptable which was set at 80%.

This result means the participants in both workshops have had freedom in working as individuals, and in the group, as well as being able to present their own ideas in the workshop. They were satisfied with their freedom.

The Workshop Leader Characteristic:

This criterion refers to the desired situation wherein workshop leaders or change agents are actively involved in a workshop as resource persons, acting in response to inquiries from participants in each session of the workshop. This characteristic has four criteria: a) leader responsiveness, b) leader approachability, c) leader openness, and d) leader interference.

To measure the validity of the leader characteristics, five-point response scale items were read to individuals at the end of the workshop and interviews were added during the breaks and social functions.

Leader Responsiveness: This criterion identifies the positiveness of a verbal response on the part of leaders to every request for information made by participant in the workshop. The results are shown in Table 14 as follows:
Table 14: The satisfaction index of leader responsiveness

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S. I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. The leader answered all of my questions</td>
<td>88.57</td>
<td>86.25</td>
</tr>
<tr>
<td>2. I was satisfied with his answer</td>
<td>100.00</td>
<td>88.24</td>
</tr>
<tr>
<td>average</td>
<td>94.24</td>
<td>87.25</td>
</tr>
</tbody>
</table>

The results were above the minimum acceptable which was set at 80%.

In running any workshop the abilities of the workshop leader are important to the success of the workshop. The workshop leader should have full responsiveness to the workshop, exhibit proper approachability to the participants, have open mindedness, and should not interfere with the decision-making of the participants. Furthermore, the leader should use care in keeping the workshop on track and away from failure.

The results of this characteristic show that the workshop leader was fully responsive in both workshops as his responsiveness was judged satisfactory by the participants in both workshops.

**Leader Approachability**: The criterion of leader approachability is that the leader is seen to be approachable by participants who seek information on discussion issues in
workshops. It was operationally defined as the degree to which participants were satisfied with the extent to which leaders were approachable, as measured on a five-point response scale to items read to individuals at the end of the workshop. The results were shown in Table 15 as follows:

Table 15 The satisfaction index of workshop leader responsiveness.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The leader gave me the opportunity to make critical comments.</td>
<td>88.67</td>
<td>A11,B10</td>
</tr>
<tr>
<td>2. The leader made every effort to help me reach my objective.</td>
<td>90.00</td>
<td>A12,B14</td>
</tr>
<tr>
<td>average</td>
<td>89.34</td>
<td>95.00</td>
</tr>
</tbody>
</table>

The results were well above the minimum acceptable which was set at 80%.

This result shows the workshop leader was seen to be approachable by the participants. He gave satisfactory information to participants seeking information. Apparently, he let them give critical comments and made every effort to help them reach their objectives. So they were satisfied with his approachability in both workshops.
Leader Openness: This criterion identifies the degree to which leaders provide participants with information about decision alternatives during the workshops. The provision of such advice was expressed through verbal messages which were aimed at encouraging participants to make their own decisions without being dominated by leaders.

This criterion was operationally defined as the degree to which participants were satisfied with the leader's ability to provide decision alternatives in a workshop. The criterion was measured on a five-point scale for items read to individuals at the end of the workshop.

Additionally, at the beginning of both workshops, the leader asked all participants to consider the provisional schedule of the workshops and let them change any session if they feel it was needed. I myself found a positive response from the floor, and there was, in fact, some adjustment made before the workshop went on. This initially showed a high degree of leader openness. However, data from the five point response scale for items read to individuals was also collected. The results from the questionnaire are shown in Table 16:
Table 16: The satisfaction index of leader openness.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. The leader displayed a satisfactory degree open mindedness</td>
<td>-</td>
<td>92.50</td>
</tr>
<tr>
<td>2. The leader provided me with enough decision alternatives</td>
<td>80.00</td>
<td>-</td>
</tr>
<tr>
<td>3. The leader made use of my critical comments</td>
<td>-</td>
<td>81.25</td>
</tr>
<tr>
<td>average</td>
<td>80.00</td>
<td>86.88</td>
</tr>
</tbody>
</table>

The results were above the minimum acceptable which was set at 80%.

This result means the workshop leader was seen by the participants to have open mindedness. They were satisfied with the opportunities for making critical comments in both workshops, at the beginning sessions and in the small and large group discussions. They also felt that they were given enough alternatives which helped them to make their own decision in the workshop.

**The Leader Interferences:** This criterion identifies the degree to which leaders were perceived by the participants as controlling the workshop. It was operationally defined as the extent to which each leader was seen by each participant as exercising control in the decision making process, as measured by
items read to individuals at the end of the workshops and some questions asked to some participants additionally during the breaks. The result is shown in Table 17:

Table 17 The satisfaction index of the leader interference.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The way the workshop was conducted in line with the educational principles it discussed.</td>
<td>88.89 88.75 A6,B6</td>
<td></td>
</tr>
</tbody>
</table>

The result was above the minimum acceptable which was set at 80%.

The question was posed to three participants: one was the one who kept quiet, and the other two were participants who gave some critical comments during the workshop. The question was "Are you satisfied with the ways the workshop was organized?". All respondents gave a positive answer.

The workshop leader should exercise some control over the workshop and try to keep it in line with the desired principles; otherwise the participants of the workshop could get side tracked because of the lack of experience in attending workshops. However, if the control is over exercised by the workshop leader it could cause a general dissatisfaction among the participants and the results and conclusion reached may not be accepted by them.
The result of the present study shows that a constructive level of satisfaction among the participants towards the workshop leadership most likely existed.

**Summary** Four criteria—leader responsiveness, leader approachability, leader openness, and leader interference—were used to measure the characteristics of the workshop leader. All results gathered were well above the minimum acceptable standard set for each criterion. The workshop leader was judged to be approachable, co-operative and considerate in the workshop. This implies that the participants found that the leader (1) was helpful and approachable, (2) encouraged participants to make their own decisions, (3) exerted reasonable control over participants in decision making, and (4) was not overly influential in the decision making process.

The Local Resources Characteristic

The local resources characteristic refers to the desired situation in which all appropriate available local resources are used systematically as sources of information by participants in the workshop. It comprises three main groups: a) key knowledgeable, b) documents, and c) time.

The key knowledgeable were persons in a position to understand what the Faculty's and departments' problem and resource utilization patterns are.
In the first workshop, the participants were experienced persons; they were themselves key persons who knew most of the needed information. Many were previous deans, present deans or upcoming deans. Nearly half of the participants were the group of administrators, heads of departments, medical teachers, Recter and vice Rector and the representatives from the Public Health Administration, so there was no doubt about the appropriateness of key knowledgeable available for that workshop.

In the second workshop, the leader was the same person as in the first workshop. The other participants were heads of departments and a group of administrators who had attended the first workshop. So there was also no doubt about key knowledgeable available.

Appropriate documents selected as possible sources of information included published and unpublished documents which contained information relevant to discussion issues in the workshop.

Time referred to any period of time spent by any of the key knowledgeable in conducting or participating in the workshop.

The local resources characteristic has three criteria: a) resource utilization, b) resource availability, and c) resource requirement.

Resource Utilization: This criterion identifies the extent to which the participants perceived that useful and relevant local resources were utilized effectively by the group.
It was operationally defined as the extent to which resources were utilized by the group when they needed sources of information in a session. It was measured by a five-point response scale of items read to individuals at the end of the workshop. The results are shown in Table 18 as follows.

Table 18 The satisfaction index of resource utilization.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. The workshop encouraged me</td>
<td>-</td>
<td>91.25</td>
</tr>
<tr>
<td>to put the knowledge I have gained into practice now that the workshop is over.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I found that the audio-visual aids provided were of acceptable quality.</td>
<td>81.25</td>
<td>98.75</td>
</tr>
<tr>
<td>3. I found that the documents provided were of acceptable quality.</td>
<td>-</td>
<td>92.50</td>
</tr>
<tr>
<td>4. I found the given information was relevant to the objectives of the workshops.</td>
<td>88.89</td>
<td>86.15</td>
</tr>
<tr>
<td>average</td>
<td>85.07</td>
<td>91.91</td>
</tr>
</tbody>
</table>

The results were above the minimum acceptable which was set at 80%.

The participants in any workshop can make good decisions when they have enough and qualified knowledge. In these
workshops a number of the key knowledgables were participants themselves, and the other essential information was provided effectively by the workshop leader, the workshop organizers, and other resource persons, through used of audiovisuals, documents, discussion, and other techniques. The feedback gathered shows that the participants were satisfied with the resource utilization in both workshops.

**Resource Availability:** Resource availability is the degree to which resources, as sources of information, are perceived by participants as available for use by the group.

It was operationally defined as the degree to which each participant considered the local resources to be adequate for the group. It was measured on a five-point response scale of items read to individuals at the end of the workshop. The results are shown in Table 19 as follows.
Table 19 The satisfaction index of resource availability.

<table>
<thead>
<tr>
<th>Items</th>
<th>W.S I</th>
<th>W.S II</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I found that the documents provided were adequate.</td>
<td></td>
<td>90.00</td>
<td>-,B25</td>
</tr>
<tr>
<td>2. Enough time was given for practice exercises.</td>
<td></td>
<td>86.25</td>
<td>-,B21</td>
</tr>
<tr>
<td>3. Enough time was given for individual work.</td>
<td></td>
<td>98.75</td>
<td>-,B20</td>
</tr>
<tr>
<td>4. Enough time was given for presentation work in the plenary session.</td>
<td>88.89</td>
<td></td>
<td>A21,-</td>
</tr>
<tr>
<td>5. I found the given information was adequate and relevant to the objectives of the workshop.</td>
<td>88.89</td>
<td>86.15</td>
<td>A1,B24</td>
</tr>
</tbody>
</table>

average 88.89 90.29

The results were above the minimum acceptable which was set at 80%.

This result means the participants were satisfied with the resources available in both workshops. The documents, time, and information given to them was adequate.

The Resource Requirement: This criterion identifies the degree to which available resources are perceived by participants as (1) desirable sources of information, and (2) available for
use by groups.
It was operationally defined as the degree to which each participant considered the resource to be adequate. This criterion was measured on a five-point response scale of items read to individuals at the end of the workshop. The results are shown in Table 20:

Table 20 The satisfaction index of resource requirement.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
<td>W.S II</td>
</tr>
<tr>
<td>1. I found the documents available were useful for the workshop.</td>
<td>100.00</td>
<td>92.50</td>
</tr>
<tr>
<td>2. I found the documents available were adequate.</td>
<td>-</td>
<td>90.00</td>
</tr>
<tr>
<td>average</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.00</td>
<td>91.25</td>
</tr>
</tbody>
</table>

The results were above the minimum acceptable which was set at 80%.

The results show that participants were satisfied with the resource requirement.

The Client Commitment Characteristics

This characteristic refers to the desired condition in which participants feel committed to the goals, the processes and the outcome of the workshop. This characteristic consists of three criteria: goal commitment, process commitment, and outcome commitment.
The Goal Commitment: This criterion identifies the degree to which participants accept the goals set for the workshop. These goals identify the ends which the participants wish to achieve by the end of the process. Goal commitment is operationally defined as the extent to which each participant was committed to these goals which were established at the initial planning session.

In the first two workshops, the workshop leader asked all participants to consider the tentative goals of the workshop at the outset. These were discussed together, then modified and/or accepted as final goals before the workshop actually began. The fact that such a session occurred suggests that participants were committed to the goals of the workshop. However, it was also measured on a five-point response scale of items read to each participant at the end of the workshop. The results are shown in Table 21 as follows.

Table 21 The satisfaction index of goal commitment.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W.S I</td>
<td></td>
</tr>
<tr>
<td>1. I was given sufficient information on the aims and the methods of the workshop.</td>
<td>96.67</td>
<td>A1,B1</td>
</tr>
<tr>
<td>2. I agreed with objectives of the workshop.</td>
<td>100.00</td>
<td>A4,B4</td>
</tr>
<tr>
<td></td>
<td>average</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98.33</td>
<td>88.13</td>
</tr>
</tbody>
</table>
The results were above the minimum acceptable which was set at 80%.

In general, the participants will commit themselves to the goals of the workshop if they understand and realize the goals as being worthwhile. They will be even more committed if they have participated in setting the objectives or if at least they have been given enough information related to the goals, the methods used in the workshop, and their expected roles in the workshop.

In the cases of these workshops, the participants had the opportunities to discuss and reach agreement on the objectives of the workshops at the beginning, so there is little doubt about the goal commitment. The feedback collected later from the questionnaires confirmed the goal commitment as well.

The Process Commitment: This criterion identifies the degree to which participants were committed to the process utilized in the workshop. It was operationally defined as the degree of satisfaction of each participant with the methods adopted for the workshop. It was measured by items read to individuals at the end of the workshop on a five-point response scale. The results are shown in Table 22 as follows:
Table 22 The satisfaction index of process commitment.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that the programme drawn up during the workshops was arranged in proper sequencing.</td>
<td>88.89</td>
<td>85.00</td>
</tr>
<tr>
<td>2. The way the workshop was conducted was in line with the educational principles it discussed.</td>
<td>88.89</td>
<td>88.75</td>
</tr>
<tr>
<td>3. I am satisfied with the methods used in the workshop.</td>
<td>81.25</td>
<td>92.50</td>
</tr>
</tbody>
</table>

average 86.34 88.75

The results were above the minimum acceptable which was set at 80%.

The success of a workshop depends on the co-operation of the participants during the whole process of the workshop. The process commitment was proved to be valid in these workshops. According to the data collected, the participants found the workshops were arranged in proper sequencing. They were satisfied with the ways the workshops were conducted. Moreover, they found it in line with the principles it discussed and were also satisfied with the methods used in both workshops.

**The Outcome Commitment** This criterion identifies the degree to which participants accept the conclusions identified
by the group. It was operationally defined as the degree to which each participant was satisfied with the conclusions at the end of the workshop process.

In the first two workshops the outcome was the structure and the workplan for the PDU. It was accepted by the whole group in the concluding session of each workshop. However, one question was asked to all participants and a five-point response scale was used to collect data.

As Table 23 shows, the results were above the minimum acceptable standard which was set at 80%.

Table 23 The satisfaction index of the outcome commitment.

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfaction Index</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>W.S I I accepted the outcome of the workshop</td>
<td>80.00</td>
<td></td>
</tr>
<tr>
<td>W.S II</td>
<td>91.88</td>
<td>A19,B8</td>
</tr>
</tbody>
</table>

It was clear that the participants were committed to the outcome of the workshop. There was even a group of representatives who volunteered to process further work from the first workshop, and these persons accepted the outcome of both workshops as well.

In conclusion, the workshops met the requirements of the six characteristics of a successful workshop. Thus, the comments, recommendations, and decisions made in the workshops, as well as the conclusions reached, are valid guidelines which can be used
to design the format and content of a culminating educational endeavor, the Professional Development Programme.

All comments, recommendations, conclusions and other outcomes of both workshops are analyzed and presented in the next part of this study.
PART 3

RESULTS OF THE FIRST WORKSHOP

COMMENTS, DISCUSSION, AND RECOMMENDATION FROM THE FIRST WORKSHOP

The comments from the first workshop are based on the three main questions:

1. Does the Faculty need the professional development programme?
2. If so, what strategies should be used to implement the professional development programme in terms of
   2.1 main strategies, and
   2.2 supportive strategies
3. What types of activities will be the most appropriate for the Professional Development?

The expectation of this workshop was for the participants to:

1. Get new ideas/concepts for reorientation of medical education with reference to
   - its direction
   - specific aspects requiring change
2. Give ideas on the planning and management of systematic change in medical education.
3. Give ideas on how does professional development support change.
Background Issues and Concepts of Professional Development.

In order to provide a uniform and rational platform for the deliberations, the workshop leader attempted to clarify some of the issues and concepts which have relationships and implications to the total process of implementation of professional development activities. So he asked some resource persons in the group to discuss the broad ideas related to the national health needs and medical education.

As I have already described in chapter 3, page 35, a flexible medical curriculum might be one of the possible ways to train the physicians for rural area of Thailand. Chapters 4 and 5 also provided many references backing up the fact that there was a need for reorientation of medical education. Two of the appropriate areas for change in the medical school are the creation of better attitudes of the medical teachers toward teaching and learning and also increasing the capability of the medical teachers in management of education.

To meet the above needs I believe the Faculty needs a professional development programme. It may be created as a programme, a unit, a center or whatever that can take responsibility in supporting of educational activities in the medical school. At this Faculty there has been no professional development unit; however, there are many senior teachers who could contribute much if a professional development programme can be organized systemically.
At the first session the essential information provided to the participants was related to national health needs and roles of the university in social and economic national planning.

The discussion from this workshop was concluded as follows:
In 1977, the World Health Assembly decided that a main social target of government and other organizations and communities should be "the attainment by all people of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life". The moral basis of this decision was the principle of social justice.

The strategy for health for all is based on the primary health care approach which operates at all levels. In this sense, it is attainable if there is political will to do so, if the right technology is applied, and if the strategy for attaining it is widely supported.

In this endeavour, it was envisioned that the health sector will undertake specific responsibilities in developing and implementing social and health policy. The health sector, moreover, should play a major role in the development of the national policy, in particular through its most highly trained workers in the medical profession.

The present and future health developments provide the rationale and direction of the future reorientation of the educational process. The health manpower management system and its influence on performance, in addition to the conventional and newer roles of the medical education system itself, direct the
type and intensity of the strategies that must be employed to achieve the desired optimal performance of graduates.

The need for reorientation becomes apparent when some of the following factors and their effects were considered at the end of the workshop:

1. The movement of medical science from the clinical science era towards public health science.

2. The priority need to prepare medical graduates who are able to assume responsibilities in the direction of health for all. Thus medical schools have to demonstrate their social responsibility in this phase of people-oriented health development.

3. The current system of medical education, with a few specific exceptions, tends to prepare doctors for conventional roles, predominantly through disease-orientation, hospital-based approach and emphasis on technical skills, to the relative exclusion of formation of desirable attitudes. The newer roles naturally demand change in educational strategies.

4. The changes being introduced in the health systems and the approaches adopted for health development in Thailand require on-going reciprocal and active responses from the medical educational system.

5. In spite of the improvements and changes that have been introduced from time to time in the medical educational
system, the health problems of communities still persist to varying degrees and the public is beginning to wonder if the medical education system has lived up to its social responsibility of concentration on educational practices relevant to the real health needs and demands of the populations relevant.

6. A significantly compelling reason for change is derived from the observation that the adjustments and the reorientation process employed hitherto have not resulted in any durable change in the products themselves, i.e the medical graduates.

After consideration of these factors, the participants had three hours for discussion about whether the Faculty should reorientate the medical education and how.

The overall consensus was that the changes have to orient medical education towards the community and to prepare the medical graduates to accept the newer roles of doctors in the health field for all contexts.

Another three hours was given to the participants to discuss educational problems in the Faculty, and participants were asked to define the strategies for solving such problems.

The leader suggested that participants review the past efforts in reorientation of medical education in this Faculty by broadly discussing the following issues:
- The philosophy and the overall goals of the medical school.
- The objectives and competencies of the graduates.
- Teaching and learning activities.
- The student assessment system
- Involvement of teachers in community-oriented activities
- Reward system for the teachers:
- Attitude of teachers and students
- Willingness of the graduates to live and work in rural areas.
- Opinion of the community.
- Feedback from the graduates themselves and the consumers.
- Change in health status of the community

However, as members of a medical school, after discussion on the above issues, the participants were needed to define the educational problems in the Faculty and to suggest some strategies for solving such problems.

Some essential information was given to the participants by large group discussion among the local experts, the representatives from the Ministry of Public Health, other Health Science Faculties and some of the key factors were extracted as a part of causes of educational problems. These were:

1. The absence of adequate recognition within the medical schools that the requirements of the health system should indicate the quality of the manpower that is produced, particularly the medical personnel. The medical educational system has tended to isolate itself from the health service system.

2. The medical educators have not internalized fully the newer
roles medical graduates will be expected to play in the health for all contexts. The changes in the people's expectations have not been taken into account sufficiently by the medical schools in the development of medical personnel.

3. The strategies adopted by medical schools have been almost exclusively internal within the medical schools themselves, and thus the external variables which play upon and influence the performance of the medical graduates in the field have been overlooked.

According to the three main causes of problems, the participants discussed what strategies should be used in solving such problems which I would like to summarize all comments under the followings headings and subheadings.

The two main strategies were suggested and discussed among the participants. These were:

1. Strategies within the medical schools which include
   1.1 convincing the medical school of the need for change
   1.2 professional development to support change
      1.2.1 development of educational objectives
      1.2.2 development of teaching and learning strategies
      1.2.3 assessment and evaluation
      1.2.4 educational research
      1.2.5 curriculum development and adjustment
      1.2.6 adjustment of the educational management process
         - Entry qualification of students
         - Selection of teachers
- Continuing the change
- Organization development
- The reward system
- The environment within the school

2. The external strategies which include
   2.1 convincing decision-makers and managers of related agencies
   2.2 coordinated government action in health care and education
   2.3 increased participation of staff of medical school and health
       service in joint activities
   2.4 collaboration between the medical schools and the medical
       profession
   2.5 motivation for service in rural areas

I will leave the external strategies to the final chapter
but present here only strategies within the medical school
because it relates directly to this study as follows:

STRATEGIES WITHIN THE MEDICAL SCHOOL

Convincing the Medical School of the Need for Change:

Before a change is possible the leadership and the medical
teachers must perceive the need for change and believe in its
usefulness.

First, the role of the Dean of the medical school is
paramount in the process, for a strongly supportive dean could
achieve a great deal in developing the support and conviction of
his staff.

Second, valid information on the need for change and the multiple deficiencies that could result in the absence of a reorientation could influence an academic or scientific group such as a medical teacher.

Third, the insufficient attention in gaining the support and involvement of the medical teachers for the reorientation of medical education.

This has a number of potential advantages, but in a situation where the medical school departments, particularly the preclinical one, are finding it increasingly difficult to recruit staff, this may not be a practical solution.

With the above considerations, the arrangement of the first workshop in this study was aimed to convince the coming dean, his staff and other key persons in the Faculty, of the need for change. The related information such as the status of the Faculty and the difficulties that could result in the absence of a reorientation were partly presented to the participants by the workshop leader and the resource persons. However, most information on the need for change would be derived from the deliberation of all participants. This was necessary for the developing of a strong nucleus.

Professional Development to Support Change.

It is reasonable to state that, in general, professional
development has received the most attention in the medical schools and training in education pedagogy has been the dominant feature. However, the teaching development committee of the Faculty in a meeting 2/1988 dated 17 February 1988 reported the three main weaknesses of professional development activities.

1. These activities have been unsystematic and have not been a part of a concerted attempt to reorient medical education to serve the community needs.

   The stress has been only on educational methodology in general and the application of this to the different aspects pertaining to community orientation has not been carefully adopted and pursued.

2. The professional development efforts have not been able to support attempts to develop a critical mass of faculty members who would be able to maintain the momentum on an ongoing basis.

3. Few medical schools have established mechanisms for the follow-up of medical teachers who have participated in educational training programmes by way of supporting, monitoring or evaluating their activities subsequent to these training sessions. Where there is no momentum it is easy to understand how these medical teachers revert back to their original position and the activities undergo refreezing at the status quo level.
Therefore, the professional development in medical schools has to be more systematic and pragmatic if it is to contribute in significant measure to the process of reorientation. It should include the development of expertise among the medical teachers in the following components:

**Development of Educational Objectives:** the overall educational objectives have to be based on the job descriptions and the functions expected of the general physicians to ensure their competence in meeting the real health needs and demands of the community.

Thus the objectives that are developed by the individual departments would follow logically from these overall objectives. To achieve this consistency the professional development programmes would have to ensure that the medical teachers are able to ensure this relationship in a logical, scientific manner. For the medical teachers to be able to relate their objectives to the actual service needs they must be made aware of these needs and the community's expectations, and this brings in the need for their involvement in services and in research activities.

What happened at the Faculty is that the medical curriculum objectives were already written based on the job descriptions of the general practitioners for the Thai community. What is lacking are the objectives developed by departments. So the medical teachers teach what they would like to teach, and this created a problem of overlapping of the contents and also an
absence of some essential content. These problems need to be dealt with by the medical teachers. If they are to contribute to the re-orientation of medical education, at least the medical teachers should interpret the main objectives of the medical curriculum appropriately.

This leads to the consensus by the participants in the first workshop to strengthen and build up a systematic professional development programme at the Faculty.

**Development of Teaching and Learning Strategies:** As a minimum the teaching/learning strategies must follow the principles of education and must be developed to ensure student achievement based on the objectives set for them at appropriate levels. This depends on the educational philosophy of the Faculty, and, for example, in a community oriented context, the Faculty might direct the teaching and learning as follows:

1. The field practice experiences for the students have to be geared towards the student achievement of not only cognitive and psychomotor competencies but also must ensure that the attitudinal changes, that are desired, come about. Various models have been experimented with such as one incorporating (1) early introduction and longer exposure to the community; (2) the involvement of medical teachers in different capacities at different times; (3) the involvement of the entire health team in the training and the implementation of the health service executed in complete coordination with the medical teachers plan and
conducted the field trip; and (4) the increased emphasis given to the student's field work in the assessment system.

2. Different models could be adopted for increased integration of teaching and learning experiences for the students. Thus, problem-oriented approaches, and competency models are already being used by various medical schools.

At this Faculty the teaching and learning is still done under a didactic system. The laboratory work is aimed at confirming theory rather than searching for new knowledge. The bedside teaching is not a discussion among the students but it is a lecture given by the teacher to a small group of students. In order to solve these educational problems, it was found that there was a need to introduce process-oriented teaching instead of content-oriented. Many effective teaching methods such as problem-based learning should be introduced. The introduction of appropriate educational technology to the medical teachers is also needed, and these innovations need support from the professional development unit.

Assessment and Evaluation: The medical teachers need to develop expertise in the different areas of student assessment and programme evaluation. In particular, they need to be able to develop and implement valid, reliable methods of assessing the students in the community-oriented competencies. These would include the assessment of the learning in field, practice training, the affective domain and the clinical performance. Even
though the appropriate assessment method have not explicitly indicated, however some methods is being developed, and gain wider recognition and application.

Know-how in programme evaluation is also a requisite as this would enable the staff to examine their own activities and make necessary improvements in their own teaching and learning programmes. The total assessment and evaluation system in any medical school has to be built up as an integrated whole and educational research could be used to validate and cement the different activities that are involved. The assessment and evaluation process should involve all the medical teachers, and in certain cases, the students and the service providers.

To develop expertise in student assessment, medical teachers have to acquire knowledge and skill in assessment, and the professional development unit should assume the vital role of educating the teachers.

Educational Research: Sufficient use has not been made in medical schools of educational research in promoting, activating and maintaining the curriculum development, implementation adjustment and monitoring process. There is a body of knowledge that is medical education research which influences the educational establishment, the institution, and the researchers themselves. With respect to the establishment, often the administrators and the heads of departments are not yet fully convinced that educational research in medicine merits serious
consideration in the determination of policy.

In some medical schools there has been greater movement. Workers in fields such as student selection, evaluation and instructional technology, have been figuring more prominently in the decision making inside medical schools. But a keen observer of the scene may be tempted to note that this steadily accelerating effort in educational research has exhibited more promise than direct influence on the educational programmes themselves.

The educational researchers themselves, with many significant exceptions, still seem to be more interested in probing little things that can be easily controlled than with the study of large things that have meaning and substance.

Therefore the educational researchers making efforts towards reorienting medical education should themselves be reoriented towards action, not merely study. Just as we judge and declare instruction that does not influence the behaviour of the learners to be unsuccessful, so must we regard research as such among medical educators. Educational research therefore must, in the ultimate analysis, strengthen medical education and not merely satisfy individual intents nor enrich individual disciplines.

For this Faculty there has been little or no educational research at all. Most of the research projects in this Faculty are conducted in individual disciplines. This may be because no medical teachers are interested in doing educational research, there is no reward for educational research, and there was no
full time medical educators in the Faculty. However, the participants in the workshop recognized that it is necessary to convince people to do educational research. The professional development unit could take responsibility for this job.

Curriculum Development and Adjustment: One of the processes of reorienting medical education to serve community needs is to develop the relevant needs based and competency-based rather than time-bound curricula that aim at producing the required type of medical graduate who will respond positively to the needs of the community and the time.

This brings into focus one of the needs for the curriculum developers within the medical schools, which is to interact with the service managers so that the job responsibilities and function of the graduates who will be produced correspond to the roles that are expected of them. Therefore, the curriculum committee within the medical schools should have representation from the service providers and the managers, and the latter should be involved from the initial planning stage onwards. This way, not only will the institutional goals and objectives reflect the real needs and expectations but they will facilitate the organization and implementation of field learning experiences as well as the system of assessment and evaluation.

The curriculum development and adjustment process must be maintained as a viable process in the medical schools and continuous review and adjustment must form a regular feature of
the educational management system. For this it would be necessary to have the appropriate infrastructure that will enable this process to be put in motion. The need to have a professional development unit or bureau becomes apparent here.

At this Faculty, the medical curriculum was dominated by an American style which emphasized quality of medical care. In 1972, this curriculum was adjusted by giving more credit for community medicine and more clinical experiences. As described in Chapter 5, even when the curriculum was fully supported in the planning process it was not fully implemented for various reasons. One of the various reasons might be the teachers had not acquire enough knowledge and skill in fundamental or advanced educational technology which are needed in preparing the proper lesson plan.

The participants in the first workshop agreed that the Faculty needs an effective professional development unit for continuous review and adjustment of curricula.

Adjustment of the educational management process: The participants paid much attention to discussing on the adjustment of the educational management process and I summarized it as follows:

The educational management process within the medical schools could help or hinder the reorientation process moving in the desired direction at the anticipated and planned pace. The following key points require attention:
1. Entry qualifications for students.

The selection of students to enter medical schools requires review in light of the roles expected of them in the health care system. Most of the present systems of selection place most emphasis on academic performance in identified subjects, and more educators are questioning the validity of this emphasis. While this may be valid in terms of students capacity and capability for completing the academic programmes within the medical school, it is to be seriously doubted if they are also the valid criteria for selection of a "community-oriented" doctor and the need for the country.

The Faculty has experimented with modified selection schemes which attach weight to certain other criteria such as letting the committee of rural areas select some of the students who can take the quota examination. However, in these efforts, educational research could also form available support to improve the student selection procedures.

Most of the selection process has been organized by the University Bureau and at the moment there are three ways for selecting medical students: the national entrance exam, the quota examination for 17 provinces in the North, and the cooperative project between the Ministry of Health and the Ministry of University Affairs, as described in chapter 4, page 43. However, all programmes are based solely or almost solely on academic performance.
2. Selection of Teachers:

The possibility of adjusting the staff recruitment policies in medical schools could emphasis the importance placed on the re-orientation process and therefore attempt to select these who are from the beginning supportive and responsive to community-oriented medical education from the beginning. However, this is not compatible with the established school such as the Faculty of Medicine at Chiang Mai University.

3. Continuing the change:

For reorientation to be a dynamic process the educational process has to be viewed as a dynamic system. The management structure and functions have to be developed in light of this need. The adjustment of the curriculum and the monitoring and evaluation mechanisms together with the professional development programme must form the very elements to be served by the system. The management structure and functions have to be developed in regard to the need for change and continued the change, and thus the management structure and functions have to be flexible enough to make change possible and at the same time strong enough to sustain the change.

The adjustment of the curriculum, its monitoring and evaluation, together with the need to implement the professional development programmes, must form the very basic elements of this subsystem.

4. Organizational Development:

The educational process in general and the orientation
process in particular could be organized around one educational unit or a bureau within the medical school. There are a variety of possible organizational patterns for such a unit. A number of models and the lessons from their functioning could be used by the medical schools to initiate and improve this unit. The medical education unit could form the key support unit for re-orientation efforts and could serve all the process-oriented professional development activities in the school. Additionally, it would promote and undertake educational research activities that could be used to improve the educational process.

Certain schools have formal medical education units while others have opted for more functional programme committees. Some others which started off using committee mechanisms have, in keeping with expanding needs and functions, have developed into more formal units.

A few medical schools have developed full-fledged departments or "schools" of medical education, such as the School of Medical Education at the University of New South Wales, Australia. The actual structure of such a unit should be determined by each school as the functions are similar in nature, but the structure could determine the amount of weight the decisions of the educational group is accorded in the decision-making within the overall school. The unit requires the inclusion of individuals or groups with educational expertise in areas such as curriculum development, objectives setting, teaching and learning strategy development and implementation, assessment and evaluation, and educational management. It is critical that
members of the unit exhibit leadership qualities and the ability to function as change agents.

At this Faculty although there has been no formal professional development unit, the curriculum committee has tried to cope with these functions. The basic limitation of the Faculty in structuring the unit has been that there is a lack of educational expertise. However, some individuals or groups were interested so the educational workshops were arranged occasionally under the supervision of the Assistant Dean in Academic Affairs. In September 1987, the professional development unit was established formally with three full time academic supportive staff and two clerks under the supervision of the Assistant Dean in Staff Development. Even though it is a new unit, a series of educational workshops have run continuously. The setting up and maintaining of this unit can be said to be a result of the discussion and decision making in the first three workshops, the trial of a series of workshops which I present on page 291, and activities arranged by the Faculty during 1981-1988 (presented in Part 6, page 293-306).

5. The reward system:

Presently the built-in reward and recognition systems for teachers in most medical schools do not reflect the importance that should be accorded to contributions made to the educational process. While it can be argued that the primary function of a teacher in medical school is the education of the student, the reward and recognition systems are weighted in other directions,
particularly contributions to research. This has to be reviewed in the context of the urgency for reorientation of the educational process as it calls for innovation, extra efforts and greater involvement in areas other than one's discipline. A reward and recognition system for this purpose need not be viewed only from the point of view of material gain, for many other "non-material" reward schemes could be developed to credit the teachers' contribution toward educational leadership, innovation and participation.

The changed situation of medical schools has complicated the matter, and there now appear to be forces operating in different directions. On the one hand, the medical teachers have greatly increased research and publication efforts. On the other hand, there is a feeling that there is no longer any point in over-commitment to research, and that the individual may as well make the best use he can of whatever academic interests and talents he possesses.

Those who take the latter view are on the way to accepting a diminished or vanished prospect of material reward, and they are moving in the direction of seeking job satisfaction. They may come to accept, even if reluctantly, that there are intrinsic rewards in the life of a scholar, researcher, teacher, or administrator. Here, then, is the richest possible field for professional development, in helping such staff to fulfil themselves, to make the most of their talents, and to derive satisfaction from doing so.
If the reward systems of medical schools remain unchanged, we may have a situation in which a small minority of dedicated researchers pursue advancement, while the remainder more or less happily find satisfaction in the broadening or deepening of their academic roles and their competence in them. If, however, the reward systems change so that other areas of responsibility, other than research, are recognized through promotion, staff will have an added incentive to do what they are best at and to profit from professional development towards that end.

6. The environment within the school.

The need to develop and sustain within the medical school, in an environment and atmosphere that would favour change and reorientation, is crucial for many reasons. The students sense and respond to an environment that they perceive to be relevant during their formative years as medical graduates. The teachers, particularly the younger staff, are influenced by this. While it is difficult to identify specifically what elements constitute such an environment, certain common features could be mentioned. It is the responsibility of the administrators to help in the development of such an environment.

Teachers' model: Students often model themselves on the teachers they respect and by whom they derive inspirations. Often it has been the clinicians who have usually been cure or hospital oriented that have had the major influences. This is critical to ensure that such teachers emphasize and set the examples for the students in line with the changing expectations from the medical graduates.
Educational Process: The educational process in the school must be kept "live" by constant dialogue, innovation, research and other professional development activities. This requires perceptible effort by both medical teachers and the students.

Team Work: Medical education, which is so vital to the development of primary health care teamwork, is still an autonomous activity outside the formal system of health care and often out of touch with its needs. In order to change this situation it is vital that the medical schools assume the leadership in implementing models of training that will stimulate the medical graduates to realize the need and the benefits of teamwork. The teaching and learning methods should include active participation by the learners, maximal use of field work and joint projects, priority of development of skills, attitudes and knowledge required in primary health care and community development, and cross fertilization from other disciplines. Teaching and learning methods should also include involvement with other workers, not only with health workers, but workers and students from other sectors and other levels, particularly in the field situation.

After discussion on strategies for reorientation of medical education the participants realized the benefits of discussing further on ways to design an effective professional development programme for the Faculty.

Based on the above discussion they left the external strategies with the administrators, encouraging administrators to
get in touch with the other related institutions. They paid much attention to thinking further about the appropriate model of Professional Development Programme. So I will discuss the external strategies in the final chapter. Below is a discussion of groups' works, recommended activities, and conclusion.

GROUPS' WORKS

The workshop leader, the Dean, and other resource persons gave more information on how to plan and implement the educational innovation and current situation of the Faculty. The participants were divided into four small groups. Two groups designed the main strategies which could help the establishment of professional development programme and the other two groups designed the supportive strategies which could help maintaining the professional development.

The results are summarized as follows:

RECOMMENDED ACTIVITIES

To serve the objectives of the professional development programme, the activities were set as follows.

1. The main activities were
   1.1. Arranging of workshops, seminars, conferences, and meetings for the staff.
   1.2. Supporting as well as advising in organization of subjects and introducing new teaching techniques.
   1.3. Assessment of teaching.
1.4. Supporting research activities, acquisition of new knowledge and techniques, and discussion of common problems.

1.5. Setting up a professional development unit which is supposed to play a vital role in various educational activities such as supply and distribution of educational materials or other related services.

2. The supportative strategies

Many supportative strategies were devised such as establishing effective public relations, distributing workshop reports to all medical teachers, promoting continuing education, and providing welfare to organizing staff.

In the last session, the groups' works were presented to all participants and conclusions and recommendations were then made. The three representatives were selected to edit and process the tentative Professional Development Programme to the second workshop and the Faculty Board.

CONCLUSION

In conclusion, it was found by the participants that there was a need for the Faculty to build up a professional development unit in order to facilitate a reorientation of medical education. This unit might be started on a programme basis and then develop to be a formal unit later. The participants have suggested some appropriate activities and proposed them to the Faculty Board for making decisions and allocating the budget.
PART 4

THE RESULTS OF THE SECOND WORKSHOP

In organizing the second workshop two preworkshop meetings were arranged in order to find out the appropriate procedures for participant selection, scheduling, timing, budgeting, and also providing all resources (persons and materials). Finally, 32 persons were selected from heads of departments and the next seniors. The workshop leader was the same person as the first workshop. Four task force and five workshop co-ordinators were involved in running the workshop.

The last draft of the professional development programme was presented to the Faculty Board in the Faculty Meeting of 11/1982. It was considered in detail and accepted by the Board in the Faculty Meeting of 12/1982. The members of the Board gave allowance to run the professional development programme in the Faculty on 17 September 1982 and the budget was allocated for running a series of workshops.

In order to gain acceptance from all heads of departments the completed professional development programme was presented to them in the second workshop in which the aim was for the heads of departments to:

1. identify and solve teaching problems arising in their own departments,
2. draw a structure and workplan for professional development in their own departments,
3. consider a suitable approach to professional development of
each department.

THE RECOMMENDATION AND CONCLUSIONS

The recommendations and conclusions from the second workshop were as follows:

At the Faculty Level:

In order to facilitate the re-orientation of medical education and create co-operation among the departments, faculties, and universities the professional development programme had to be set up and aimed at enhancing the teaching role of the medical teachers.

Teaching involves a complex change of attitudes, knowledge, skills motivations and values. The improvement of teaching and learning requires an awareness of the complexities involved in students, teachers and institution, and hence the avoidance of simplistic solutions. Effective teaching involves helping students to attain desired learning objectives. Medical teachers can be assisted in specifying learning objectives, choosing learning experiences designed to achieve those objectives and evaluating their attainment. These procedures can make instruction more systematic, thereby increasing the probability that desired competencies will come about.

There is no single model of effective teaching or learning, however any proposal or approach which is doubtful should be avoided. There is a great diversity among students. Their various learning styles, which are based on differences in ability, interest, educational background, future aspirations and
personality orientations, call for different kinds of learning experiences.

Medical teachers, too, are a diverse lot. They vary on such key factors as age, field of specialization, teaching experience, and educational philosophy. Because diversity is one of the greatest strengths of faculties, every effort should be made to assist individual medical teachers to develop, using ways consistent with their diverse values, needs and personal styles.

Professional development focuses on members and seeks to promote their individual growth and development. Because the instructional role is a major contribution to the medical teachers' professional lives, most programmes help them to explore their own attitudes about teaching and learning, acquiring more knowledge about educational matters, developing additional skills, enhancing their sensitivities, improving their relationships with students and colleagues, and considering their teaching roles in relation to other professional responsibilities.

Seminars, workshops and retreats are common mechanisms for medical teachers to work on aspects of their professional or personal development. A series of workshops was suggested for the professional development programme.

The Factors Affect the Workshop I myself studied the workshop and found a workshop is a kind of meeting which is comprised of experienced people, who are in responsible positions, to share knowledge with experts and consultants, in
order to solve problems that have been identified during the course of their work.

An essential feature of the workshop is to ensure active involvement of participants. Participants plan the agenda. The whole point of attendance is to work and to learn from individual practical experience.

It is erroneous for someone to believe that a workshop will either change everything or change nothing. It is obvious that a successful workshop will depend on several factors such as the objectives of workshop, background of participants, procedures used in the workshop, etc. However, it is expected that these workshops have a great impact on the faculty as a whole.

From the second workshop, I found that there were at least two factors affecting its success: the creation of senses of belonging among the participants and sensitizing them to be aware of discrepancies.

The aims of the second workshop was to convince the participants to accept the Professional Development Programme. This programme involves many people; therefore co-operation, financial and other resources are needed. The programme involves a dynamic process and it has to be shaped in accordance with the needs of medical teachers.

Letting the heads of departments participate in the workshop is one of the best ways to create senses of belonging and to sensitize them to aware the discrepancies. Initially, the
participants have to be guided in order to learn how to participate and present their ideas in a constructive way. Later, they create their own methods of development, and hence a positive change in the department occurs. This can be observed by: 1) there was a good relationship among the participants themselves, and between the participant and the workshop organizers. 2) The participants can systematically diagnose the educational problems at faculty, departmental, and individual levels. 3) They have acquired relevant resources by discussion among themselves in the workshop. 4) They can choose proper alternatives and finally they have gained acceptance in implementing of the professional development programme. Additionally, they suggested the administrators the ways to stabilize the Programme by running some other activities such as circulation of a workshop report and newsletter to all medical teachers, and inviting contributions from special guests either from other institution or aboard.

At the Departmental Level:

At the department level, professional development programme should be developed so as to create a constructive attitude among medical teachers towards the teaching profession and also to improve their teaching capabilities. The heads of departments considered all information and suggested that in order to gain acceptance and cooperation from most medical teachers, the participants have to reach agreement and make clear the following aspects:
The objectives of the curriculum  
Although the medical curriculum (1978) used at present has wide range of objectives covering many areas, improvement is still needed in order to integrate the curriculum with the requirements of the medical board, public health system and society. In doing so, the details of every subject and course should, therefore, emphasize application to suit the needs of rural hospitals and primary health care in rural areas. These should be regarded collectively as an important goal.

In general, graduates of medical schools are good. Nevertheless, there are some aspects, such as good manners and good leadership qualities, as well as skills in public health service and adaptation to the community that need to be better learned and put into practice so that a model of the ideal medical student can be realized.

The process of teaching and learning  
This is also an important point which needs to be promoted. It should be oriented to "active learning" so that medical students are capable of playing important roles, namely:

1. To have good knowledge, skill and attitude towards solving public health problems.
2. To have the capability to arrange health education.
3. To have knowledge in social science such as human culture and rural customs.
4. To know about administration.
Method of development of teaching ability

The participants found the need to develop teaching abilities of the medical teachers so that they would be able to:

1. write a lesson plan which consists of activities following from objectives in teaching and an assessment of every subject so as to be:
   1.1 a set of guidelines
   1.2 a record of work which has been done
   1.3 a reference for further improvement
   1.4 a means of feedback for comparison with the main objectives of medical curriculum.

2. acquire knowledge of teaching methods by attending the activities arranged by the Programme.

Summary

The participants in the second workshop reached agreement on the reorientation of medical education and found the Programme can support the reorientation as well. They suggested running a series of workshops at the faculty level. At the department level, the heads of departments made clear the objectives of the curriculum. They found these worthwhile to use as guidelines in the management of medical education. I expected them to give allowance and encourage the medical teachers in their own departments to participate in the Programme activities.
PART 5

TESTING OF APPROACH EFFICACY

PROFESSIONAL JUDGEMENT OF APPROACH EFFICACY

In this part the efficacy of the procedural approach was examined, based upon professional expert judgement. The professional experts were groups of professors from the Faculty of Education, Chiang Mai University; professors from the Medical Educational Unit of Chulalongkorn University and some of the local experts who have had experienced in running workshop in the Faculty. These groups were invited to design the workshop curriculum, the format and outcomes, and be trainers in the workshop arranged by the Programme.

I arranged a few meetings among the group of professional experts and asked them to consider all information about the first two workshops. The information included the provisional programme for the workshop, the workshop’s reports, the responses of questionnaires, and the outcomes of both workshops. We discussed about the content, the procedural, the environment, timing and the building up of a tentative professional development programme for the Faculty and the curriculum for the third workshop.

A set of questions was asked to them and measured on a five point response scale and then the satisfaction index was calculated against all questions.
For testing of approach efficacy which identified the extent to which the application of the approach adopted can produce the desired results. Three criteria used were a) expert satisfaction b) product utility c) absolute satisfaction.

Expert Satisfaction

This criterion was defined as the extent to which each professional expert expressed satisfaction with the workshops within his or her special fields of professional interests.

The results as shown in Table 24 are responses from all experts to the five points response scale item read to them. The result of the first workshop was well above the minimum acceptable standard but the result of the second workshop was somewhat below.

<table>
<thead>
<tr>
<th>Table 24</th>
<th>The satisfaction index of experts satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>W.S.1</td>
</tr>
<tr>
<td>I satisfied with the procedural approach of the workshop</td>
<td>80.00</td>
</tr>
</tbody>
</table>

It indicated that they felt satisfied with the procedural approach of the first workshop but did not satisfy the second workshop because there was the disruption of some participant in some session. So the satisfaction rate was somewhat lower than minimum acceptable. One expert from the Faculty of Education gave remarkable that ideally both workshops should arranged outside Chiang Mai and all participants should have more time in
the evening to participate in social functions. The local experts from this Faculty expressed by their experiences that a large number of medical teachers do not like to attend the outcampus workshop they do not like to stay overnight in other places because many of them have engaged with the part time job in every evening. However, although almost all experts involved were satisfied with the workshops, three questions were asked to them in order to seek further information. The three questions were:

1. If the procedures used in workshops 1 and 2 was to be the most appropriate format for the needs assessment workshop, how would you wish to modify the approach?
2. To what extent did you see this approach to be acceptable?
3. If this approach is acceptable, what type(s) of needs assessment programmes would you employ such approach for its (their) programme planning process?

The professional experts made various comments on further modification of the approach which can be summarized as follows:

1. Duration of the workshop should be expanded to 5 days (the initial approach required 2 and 3 days for respective local experts and heads of departments). The reason for expanding were: first, the difference of client characteristic—the participants in the first two workshop were experienced persons. They used to face problems in administration, teaching, and services at departmental and/or faculty levels. Second, difference of content—the content of the teacher training workshop contains more details. The medical teachers
must know the objectives of the professional development programme and they have to learn more on how to manage the medical education and apply it to their own subject.

2 The ratio of change agent: administrator: potential learner should be 1:2:6. The professional expert agreed that this is an appropriate one because by this ratio the change agent can play the helper role and administrators can give some information if there was a request. The learner will feel comfortable enough in getting essential information from the group.

3. The training approach should be process orientation rather than content orientation.

4. Time: the appropriate time available should be the weekday and in the office hour. Even though the organizer cannot fully distract the participant from some disruption but it is more convenient for the medical teachers otherwise they cannot participate the workshop. The organizer must ask for permission from the heads of departments to free all of participants in such period from service and other kinds of routine work.

5. Place: in terms of cost effectiveness it was decided to run a series of workshops at Sujinno Building instead of going outside or to a hotel.

These professional experts were asked to design a curriculum for needs assessment workshop as guided by the participants from
the first two workshops. As curriculum designers, they responded to the second question "To what extent did you see this particularly approach to be acceptable? as follows:

1. The approach encouraged a high degree of involvement for the local experts and the heads of departments in determining the educational needs and setting the Programme as shown in Part 2, it expected to encourage the high involvement for the medical teachers in determining their educational needs and setting them in order priority too.

2. It had relative and sequential steps which were easy enough for any officer (especially the registrar which is expected to support this programme) to understand and implement.

3. The application of the approach could be highly appropriate for assessing the educational needs of medical teachers. The procedures of the approach were adjustable to the structure of the Faculty and culture of medical teachers. In terms of cost effectiveness, the conduct of the approach was inexpensive and satisfactory, timing available for all medical teachers to attend the course.

4. The needs identified from the approach could be considered to be the real and immediate needs of the medical teachers. And, in consequence, the assessment was likely to result in significant individual and faculty development.

5. The approach was based on a democratic process and appropriate for programme planning in professional development.
For the third question "If the approach is acceptable, what type(s) of needs assessment programme would employ such an approach for its (their) programme planning process?", they responded that with the observation that the approach should be used for programme planning in all types of developmental needs, that it is, in the medical teachers.

The curriculum designers suggested, too, that they would require 5 days to use the approach to conduct a workshop for fundamental educational workshop. However, the length of the time might vary according to the group size and objectives of each workshop.

In sum, it was clear that the main procedures of the participatory based approach were acceptable to professional experts. Their views indicated that the approach might also be used in identification of other types of developmental needs, given the modifications which they had proposed.

Product Utility

The criterion was defined as the extent to which the outcomes identified by the participants from the first two workshops were seen by each professional expert as valuable to programme planning in expert's field of work.

The results for all professional experts indicated high satisfaction with the outcomes. All results were well above the minimum acceptable standard. Thus, the products of the approach,
arising from the groups of local experts and heads of departments, were judged by professional experts in the field of education to be the best available data for their programme planning.

The professional experts were interviewed, a further question was asked: "To what extent do you regard the outcomes as valuable?" In responses, the professional experts suggested that the outcomes:

1. might be used as issues for discussion in Curriculum Committee and/or Faculty Board;
2. could be used as a guideline and information for teacher training courses for medical teachers;
3. could be applied in programming, planning and organization of the curricular of the inservice training courses for the medical teachers in area of education.
4. could be applied to evaluate some existing programmes in medical education, professional development; and
5. could be applied to formulate some inservice training courses for change agents, administrators, heads of departments and other committees at the policy making level in the Faculty.

Further comments which were made by the professional experts may be summarized and classified under the categories of "format" and "outcomes":

**Format**

1. There should be a joint project, involving all departments, in
application of the participatory based approach to assess educational needs of medical teachers. This would give the departments an opportunity to (1) share their managerial resources in conducting medical education and (2) integrate the data obtained on Faculty development in teaching and administrative areas.

2. All departments concerned with professional development should be strongly encouraged to apply this participatory based approach in conducting workshop for assessment of educational needs, as an integral part of their instructional improvement. Otherwise the large number of the medical teachers in the department were encouraged to participate in the workshops arranged by the Faculty.

3. Heads of departments should be trained to apply the approach in their programme planning and urged to do so.

4. To follow this format would make the medical teachers aware of: (1) the important of the role of departments in conducting their own needs assessment and other aspects of programme planning, and (2) the needs to assist them in doing so.

Outcomes

1. The outcomes of the workshop should be provided to all departments concerned with professional development. This would enable them to plan, programme and organize some immediate activities in response to the needs of the medical teachers in area where the assessment was conducted.
2. There should be another follow-up programme based on the outcomes of such workshop.
3. The outcomes should be classified and arranged in order of priority to accord with the feeling of medical teachers.
4. Since the outcomes are relevant to policy at the national, university, and faculty levels, they should be made available to the implementation of the professional development programme.

After having the format and the outcome the professional experts have designed and implemented the workshop 3 in the sample group of medical teachers on 16–20 May, 1983. The educational needs were assessed at the end of the workshop. The suggested format and outcome were applied in setting up of a series of workshops for professional development using the configuration model of Bagnall (1980).

THE DESIGNED SERIES OF WORKSHOPS

I will present it in 3 main headings— the basic components, the procedure, and the workshop curriculum as follows:

Basic Component of the Workshops

The change agents: The change agents represent the roles of an individual or group who participate in the workshops. The change agents may be medical teachers, local experts, professional expert, workshop leader, administrators, etc who play the roles of workshops facilitators and provides information
required by the learners.

The recommended ratio of change agent: administrator: potential learner is 1:2:6. In running educational workshop in the Faculty, the list of change agent was made before hand by the criteria described in chapter 8 page 185. A fix number of change agent will be selected in each workshop when we found their names in the list of volunteer. In some workshop if there was not enough number of change agent in the list of volunteer the workshop co-ordinator will contact them personally.

The learners: The learner referred to the group of medical teachers who participated in the workshop. The workshop co-ordinator made a list of volunteers from every departments and also from Lampang and Buddhachinaraj Hospitals.

The 24 places were given to them and the first priority was given to the department which has a highest number of volunteers. This criteria implied that all departments concern with professional development encouraged a large number of medical teachers to participate in the workshop arranged by the Faculty or otherwise the department conduct the workshop themselves. This criteria was approved in the Faculty Meeting 2/1983. There were 117 volunteers from 20 departments in the first round. The 24 were selected first and the rest were divided into other 4 workshops.

By the above selection of the participants in each workshop it implied that the workshop was a joint project involving all departments. They have the opportunities to share ideas and
resources and also can integrate the data obtaining on faculty and professional development as well. Since there was a limit number of participants in each workshop so 4 to 5 departments were selected first. For instance, in the workshop 3, 5 from Radiology, 5 from Othropedic, 5 from Obstetric and gynecology, 7 from Community medicine, 3 from Lampang Hospital, 3 from Buddhachinaraj Hospital, 2 from Hod Hospital, 1 from Mae Sai, 2 from Chiang Khong were selected.

The content The content was arranged in two main levels: fundamental and advance courses. The special workshop was also arranged in any topics that do not directly related with education but support the professional development activities and suit the needs of medical teachers. It was classified into the group of miscellaneous.

The curriculum used in each workshop was based on the educational needs spelt out by the first three workshops and modified by using of suggestions and comments from previous workshops.

The goals The goal referred to the objectives of the workshop. These objectives must be agreed upon by all participants, and described in measurable terms. The objectives were written specifically in each workshop both in terms of conceptual objectives and behavioural objectives. However, for the main objectives for professional development were to assist individual medical teacher to develop, using ways consistant with
his or her diverse values, needs and personal styles.

The programme help them to explore their own attitudes about teaching and learning, acquire more knowledge about educational matter, develop additional skills, enhance their sensitivities, improve their relationships with students and colleagues and consider the teaching role in relation to other professional responsibilities.

The hardware element These elements referred to the media by means of the content is transmitted between participants in the process. The list of standard media, for instance, stationery, overhead projector, flip chart, etc were prepared by the workshop co-ordinator to be qualified, adequate, and ready to use in every workshop. The other media such as handout, special materials, etc were written by the workshop leader and filed beforehand in each workshop.

The Procedural Used

The procedural units refer to the set of tasks which the participants need to undertake in order to achieve the goals. The tasks were divided into academic and managerial tasks.

The academic task, the workshop organizer prepared these tasks with the workshop leaders as early as possible. The tasks included:
1. deciding on the objectives
2. selecting learning experiences that will contribute to the objective
3. organizing the learning experiences to maximize their curative effect; and
4. evaluating the effectiveness of the workshop.

The managerial tasks were carried mostly by the workshop coordinator before, during, and after the workshop. The procedure for organization of workshop was made and always keeps it up to date as shown in appendix VI page 380.

The Workshop Curriculum

The curriculum used in the workshops will be presented in three forms:

1. The fundamental education,
2. The advance courses, and
3. The miscellaneous workshops.

To make clearly understanding, the three curricular are presented in detail as follows:

The Fundamental Educational Workshop The workshops were organized to serve a general or conceptual objective: to increase the level of competence of medical teachers in educational programme design using as a theme the educational circle (or the educational spiral) of objectives – curriculum – evaluation – objectives .... This highlighted the principle that no element of educational process is an independent entity: all are interrelated. The specific or behavioural objectives were for the medical teachers to be able to:
1. define the educational problems and solve such problems systematically,
2. realize the worthwhilility of the objectives of medical curriculum,
3. write the objectives of their own subject and in line with the main objectives of the curriculum,
4. apply the appropriated teaching methods for their own course,
5. apply the appropriated evaluation for their own course.

Curriculum planning is a matter of setting the different elements in relation to one another; curriculum management is concerned with making these relationships function to achieve predetermined educational goals; the educational goals, in turn, are to be derived from the prospective professional roles and functions of the medical teacher in training. This motif generated the objectives of the entire series of workshops. It also determined the methodology, for the workshops were also designed to provide a model application of the educational principles they taught. It was this conceptual orientation that made the workshop difficult for many. First-time participants, from their backgrounds as passive students and directive teachers had rarely been required to contribute so much; they had to experience it to gain real understanding at the emotional as well as the intellectual level. As "second-time" participants often pointed out, they also had difficulty in selling the technique to colleagues.

Nonetheless, there was a consistent effort to enable
participants to communicate to, and stimulate in, peers at department an interest in improving their teaching competence. This reflected the inescapable truth that there could be little progress in applying and reinforcing what they had begun to learn without a sympathetic and cooperative attitude on the part of those colleagues who had not benefited from the same training opportunity. If the effort was successful, then as medical teachers and administrators became aware of the need and value of such training they would - it was hoped - make resources available for more teachers to be trained and for the corresponding changes in educational programmes once a critical mass had been reached.

From a frequent initial concern with evaluation, participants were led to consider not only the definition of objectives and of methods of teaching and learning but also the process of deriving the objectives from the tasks to be performed in the health services. The insistence on framing objectives explicitly in terms of performance was intended to integrate health-care functions and tasks in curricular planning and evaluation, but since few teachers or medical schools had established the necessary operational links with health service systems the importance of this relationship was often poorly understood.

The professional experts have found a need in training as much number as possible in a fundamental course to form a critical mass which could influence all medical teachers for re-orientation of medical education.
Advance Courses A few workshops focused on specific aspects of educational methodology. The main theme, evaluation, was to have been the first step in a series which would cover the full range of educational processes. The objectives in this case were: to make the participants aware of the need to deal with evaluation problems according to an experimental method; to be able to share better this attitude with their colleagues, thanks to gain knowledge about the objectives, types, and methods of evaluation; to acquire basic skills in the construction and analysis of examination test-items; and to gain sufficient knowledge to permit them to put into operation in their department a programme of evaluation. In reality, as most of the participants had not participated in a general workshop, the programme was not very different from the fundamental type. It was then decided that participants in the advance course programmes focusing on a specific theme (e.g. evaluation or self learning packages) must have participated earlier in a fundamental educational workshop.

The curriculum of the advance courses were prepared by using the suggestions, comments, and expressed needs from all participants. There were workshops on: writing objectives, teaching methods, evaluation, clinical performance assessment, computer assist instruction, psychology of learning, Inquiry learning, problem based learning, process oriented teaching, etc.

The other examples of advance courses are: construction of performance assessment instruments, self-learning modules,
and problem based learning.

**Miscellaneous Workshop** It was happened here in the Faculty, the medical teachers would need to participate in other kind of workshop such as basic principle in management, consultation techniques, etc. These workshops were also provided to them because although they do not deal directly with teaching and learning they support the teaching competence as well.

After having format and content of three groups of workshop, a fundamental course was designed and modified approach was then test in the workshop 3. The results of testing of validity of the key characteristics are presented as follows:

**TESTING OF THE MODIFIED APPROACH**

Testing of validity of the key characteristics of workshop

The workshop was evaluated against the 6 key characteristics as the same as the first two workshops. The results were summarized on Table 25 as follows:
Table 25  The satisfaction index of the 6 key characteristics of the third workshop (on 16-20 May, 1983).

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>SI</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The client participation characteristic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- attendance</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>- communication</td>
<td>74.00</td>
<td>C 12 13 21</td>
</tr>
<tr>
<td>- satisfaction</td>
<td>75.57</td>
<td>C7,8,11,12,15</td>
</tr>
<tr>
<td>2. The Client control characteristic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- group process</td>
<td>76.00</td>
<td>C 14 15</td>
</tr>
<tr>
<td>3. The democratic characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- client decision</td>
<td>74.11</td>
<td>C13</td>
</tr>
<tr>
<td>- client acceptance</td>
<td>75.09</td>
<td>C4,7,14</td>
</tr>
<tr>
<td>- client freedom</td>
<td>81.53</td>
<td>C18,20</td>
</tr>
<tr>
<td>4. The workshop leaders' characteristic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- responsiveness</td>
<td>78.00</td>
<td>C 12</td>
</tr>
<tr>
<td>- approachability</td>
<td>76.00</td>
<td>C 17</td>
</tr>
<tr>
<td>- openness</td>
<td>79.33</td>
<td>C 16 19 20</td>
</tr>
<tr>
<td>- Interferences</td>
<td>83.00</td>
<td>C 18,19</td>
</tr>
<tr>
<td>5. The local resource characteristic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- resource utilization</td>
<td>72.00</td>
<td>C 21</td>
</tr>
<tr>
<td>- resource availability</td>
<td>63.05</td>
<td>C21, 22,23, 24</td>
</tr>
<tr>
<td>- resource requirement</td>
<td>71.76</td>
<td>C21</td>
</tr>
<tr>
<td>6. The client commitment characteristic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- goal commitment</td>
<td>74.00</td>
<td>C 1,2,3,4,5</td>
</tr>
<tr>
<td>- process commitment</td>
<td>75.20</td>
<td>C 6,7,8,9,10</td>
</tr>
</tbody>
</table>

average satisfaction index 76.79
The above result was not satisfied because the average satisfaction index was less than a minimum acceptable standard which was set at 80.00%. The participants satisfied with the freedom and the workshop leader interference but did not satisfy with resource available. By the open end questions I have found that the place (Sujinno Building) was not in a good condition for running workshop. The weather was hot, audio-visual was not well prepared and the most important was there was no telephone in that floor (at that time the building was not in work). The participants cannot get in touch with their office which this annoyed some of them so much so they complained with a long duration. However, the building was well set up in a few months later and I can used the same place effectively later.

By the feedback of the workshop 3, I have found that the format and the content of the workshop have to remodify. So the postworkshop meetings were arranged among the groups of professional experts and the remodified approach was then test in the other 3 fundamental educational workshops.

The modified procedures

Using the results from workshop 1, 2, 3 and the professional judgement approach efficacy, the initial approach was modified. The initial and modified approaches each had six sequential steps. These are:

1. developing of workshop key characteristics
2. testing of the developed key characteristics of the workshop
3. study of approach efficacy by expert judgement and
modification of the approach

4. format design and conducting workshop
5. testing of the modified approach
6. setting up of the workshop forum and its workplan.

**Absolute satisfaction** The modified approach was tested to determine whether or not its procedures were acceptable to the professional experts in the workshop. This determination was based upon the evaluation criterion of absolute satisfaction, which was defined as the extent to which the modified procedures of the approach were judged by the professional expert that the designed format should be the most suitable for implementing in the Faculty. However, because the most satisfaction index of the key characteristics were lower than minimum acceptable standard they suggested to improve the method used in the workshop especially the place and audio-visual and then retest the remodify format in a few more workshop.

Each expert was requested to answer six questions after studying the modified procedures of the participatory approach.

The questions were:

1. Please identify any part or parts of the approach that you think could be improved and how?"
2. Please identify any limitations that you foresee in the implementing of this set of workshops in the Faculty?"
3. Please identify any approaches that in your judgement are better than this approach for undertaking the educational

284
needs assessment from medical teachers.

4. Please identify in what way the approach(es) that you may have mentioned in the answer to the preceding item are better.

5. Is it necessary to publish or distribute the results of the workshops to all medical teachers?

6. How do you think about the acceptability of the methods used in the workshop?

All experts were in favour of the modified approach. However, there was some response to the question, "Please identify any part or parts of the approach that you think could be improved and how?"

The duration of the workshop was suggested to cut down to 3-4 days and the session "educational problems" was suggested to cut down or set up in the advance course. The reasons are generally, the unexperienced medical teachers do not interested in discussion in this issues but they are interesting in the theory of education and practice in those matter. They found 5 days is too long for them to leave their own duties. They prefer to attend 2 of three days workshop rather one of the longer one.

The professional experts suggested to change the place for running the workshop. Sujinno building was not ready to use and caused unsatisfactory to most participants. However, the administrators took action on this point by equiping the conference rooms of Sujinno Building so we can use this place in 4-5 months later.
From this it was concluded that all experts satisfied with the remodified procedural approach. They agreed to cut down the duration to 4 days and move the session of "educational problems" to the advance course. In this fundamental education the workshop leader might introduce some part of educational problems but not more than 20 minutes. The place and audio-visual was improved by the administrators.

In addition, the expert opinions on the possible limitations to the approach, and on its perceived value in implementing of these workshops were as follows:

Limitation of the Application of the Approach

In reply to the question on the modified approach, "Please identify any limitations that you foresee in the implementing of this set of workshops in the Faculty?"

The individuals noted the following limitations:

1. This approach is a new practical approach in the Faculty. The application of the approach may therefore take considerable time before it is accepted and adopted by the medical teachers and the administrators. The potential resistance to such innovation may derive from two sources: (1) the administrators may lack the opportunity to understand the benefit and effectiveness of this approach, and (2) the medical teachers may be dependent on the administrators and mistrust the approach.
2. The application of this approach for a whole faculty may be expensive and time-consuming. In practice, the opportunity would be given to the group of volunteer as much as possible.

3. If the approach is applied at the department level, it may difficult for each department to programme appropriate learning activities in response to the various immediate educational needs of the medical teachers. The approach could create demands which cannot be met because of limitation of finance and other resources at each department.

4. It was suggested to apply this approach at the faculty level and setting the series of workshops to fulfill the needs of every department. The Faculty may set up a new unit to take responsible in this job if human or other resources are available. Otherwise, the faculty may assign some existing unit to expand their responsibility to take care this job.

Value of the modified approach

To the item "Please identify any approaches that in your judgement are better than this approach for undertaking the educational needs assessment from medical teachers." It is reasonable, therefore, to assume that all experts saw the modified approach to be the best format available to them.

All experts responded to the items asking "Please identify in what way the approach(es) that you may have mentioned in the answer to the preceding item are better." Responses indicated that this modified approach:
1. allow medical teachers to be involved in discovering their needs and problems in their departments;
2. provided encouragement and guideline for the administrators and change agents in accepting the involvement of medical teachers in programme planning;
3. appeared, by reason of the contents of steps 2 to 5 of the process, to develop feeling of trust, credibility, activeness and a democratic way of thinking and problem solving;
4. may be regarded as an integral part of the programme planning process for professional development.
5. would be suitable for a short-term programme and planning process in professional development at the faculty level; and
6. might be used, in other fields of development, to obtain data about immediate needs and problems of medical teachers.

All experts agreed with the necessity to publish and distribute the results of this study and the modified procedural approach among the medical teachers, the Faculty Board, and every departments and units concerned with professional development.

Acceptability

Acceptability of the method may depend on participants having experienced it at the hands of a skilful teacher. The problem that have arisen, especially among the first-time participants, seem to derive from difficulty in comprehending a rationale and a method differs to so fundamentally from what previous experience as students and teachers has led them
expect. Former participants have reported the same difficulty in persuading colleagues in their departments to adopt the methods of educational planning and teaching learned in the workshops. The workshop method seems acceptable once it has been experienced in skilful hands, but it may be that departments will not adapt the techniques until a critical mass of staff have themselves been through the experience.

Overall, the remodified approach was found to be satisfactory to all professional experts and acceptable to them for use in planning of professional development programme for the Faculty.

For contribution to the design of activities of the PDU the professional experts gave added suggestions as follows:

1. A series of workshop should be the main activity of the PDU. The topics of the workshops should vary depended on the interesting of the medical teachers.

2. The results or any suggestion from the workshop should be reported to the Faculty Board, departments, and medical teacher as individual.

3. Seminar, conferences, retreat should also be organized oftenly to expose the medical teachers with broad ideas in educational innovation.

Retesting of the Modified Approach

The fundamental course was remodified as suggested by the professional experts as described above. The series of
fundamental educational workshops were testing while implementing and improving on 4-7 October 1983, 13-16 December 1983, and 3-6 July 1984. The advance courses were also arranged by the same format but different content on 6-8 August 1984, 17-19 December 1984, 25-28 February 1985 and 25-27 November 1985. The validity of key characteristics were assessed and found most of them were gradually improved and were above the minimum acceptable standard.

The workshop organizer gave feedback to all characteristics which was not reach minimum acceptable standard in the postworkshop meeting and made improvement in the later workshop as shown in Table 26. This format of the workshop still be followed as describe in the next part.
Table 25 The satisfaction index of the 6 key characteristics of the workshop 4, 5, and 6 on 4-7 October 1983, 13-16 December 1983, and 3-6 July 1984, respectively.

<table>
<thead>
<tr>
<th>characteristics</th>
<th>SI</th>
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<tbody>
<tr>
<td></td>
<td>WS4</td>
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<tr>
<td>1. The client participation characteristic</td>
<td></td>
</tr>
<tr>
<td>- attendance</td>
<td>100</td>
</tr>
<tr>
<td>- communication</td>
<td>80.00</td>
</tr>
<tr>
<td>- satisfaction</td>
<td>78.00</td>
</tr>
<tr>
<td>2. The Client control characteristic</td>
<td></td>
</tr>
<tr>
<td>- group process</td>
<td>86.00</td>
</tr>
<tr>
<td>3. The democratic characteristics</td>
<td></td>
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<tr>
<td>- client decision</td>
<td>74.11</td>
</tr>
<tr>
<td>- client acceptance</td>
<td>82.00</td>
</tr>
<tr>
<td>- client freedom</td>
<td>86.00</td>
</tr>
<tr>
<td>4. The workshop leaders' characteristic</td>
<td></td>
</tr>
<tr>
<td>- responsiveness</td>
<td>90.00</td>
</tr>
<tr>
<td>- approachability</td>
<td>86.00</td>
</tr>
<tr>
<td>- openness</td>
<td>80.00</td>
</tr>
<tr>
<td>- Interferences</td>
<td>86.00</td>
</tr>
<tr>
<td>5. The local resource characteristic</td>
<td></td>
</tr>
<tr>
<td>- resource utilization</td>
<td>78.00</td>
</tr>
<tr>
<td>- resource availability</td>
<td>72.00</td>
</tr>
<tr>
<td>- resource requirement</td>
<td>90.00</td>
</tr>
<tr>
<td>6. The client commitment characteristic</td>
<td></td>
</tr>
<tr>
<td>- goal commitment</td>
<td>80.00</td>
</tr>
<tr>
<td>- process commitment</td>
<td>82.00</td>
</tr>
<tr>
<td>average satisfaction index</td>
<td>82.50</td>
</tr>
</tbody>
</table>

The above results mean the format and the content of these workshops were proved to be a most appropriate model for the Faculty.
After improvement of the method used the satisfaction index of the key characteristics were higher than the minimum acceptable standard. It means almost all participants satisfied with the format, content, and approach used in these workshops. The satisfaction index were very high in terms of attendance, leader responsiveness, and client freedom. In the other hand, some satisfaction index were somewhat low, for instance, resource availability, however, these can be improved in other workshops.

At this moment, a series of workshops confirmed that the participatory based approach is a most appropriate method for assessing the educational needs of medical teachers especially at the Faculty of Medicine, Chiang Mai University. Since I organized a testing while implementing the Programme so I recognized this series of workshops as an important part of setting and maintaining the professional development programme and they resulted a successful Professional Development Unit.

As it was suggested by the professional experts that this format could be used in identification of other types of development needs. So I applied it to formulate the one day seminar for 20 heads of departments, 12 administrators, a group of curriculum committee, and the teaching and learning development committee on 1 July 1988 to consider the appropriateness of PDU's programme and make agreement on the policy for teaching and learning. The other application was a seminar on "Consideration of the Workplan of the Professional Development Unit" (5 September 1988). The results were presented in page 302 and 305, respectively.
PART 6

SEQUENCES OF EVENTS (1981-1988)

Before presenting the results of two one day workshops on the policy for teaching and learning and setting up the action plan for the PDU I would like to review activities related to teaching and learning in the Faculty and present in form of sequences of events. I expected these events could reflect overall activities and view the appropriate ways in setting up the policy and action plan for the PDU as well.

SEQUENCES OF EVENTS

The activities arranged during 1982-1988 were as follows:

6-11 June 1982: Five medical teachers from the Faculty of Medicine at Chiang Mai University attended the workshop at Khon Khan Hotel, Khon Khan. The workshop was arranged by the MESRAP of Chulalongkorn University for the medical teachers from all medical faculties. It was a fundamental educational workshop (Faculty meeting report 6/1982).

16-18 June 1982: The Faculty arranged the workshop on "Psychology of learning and team planning" for the 2 year medical students. The workshop aimed for the students to know how to learn by active ways and how to build up effective teamwork for study (Faculty meeting report 6/1982). The result of this workshop was reported to the Faculty Board on 24 June
24 June 1982: The Faculty Board assigned the Assistant Dean in Academic Affair to design the teacher training programme for training all teachers in the Faculty (Faculty meeting report 6/1982).

29 July 1982: The Assistant Dean in Academic Affair proposed the tentative teacher training programme to the Faculty Board. The programme was divided into 3 main parts—introductory, training of the trainner, and teacher training parts. The member of the Board suggested the Faculty to build up a specific unit for taking care of these activities and working continuously. However, in setting such unit, there was a need to assess the educational needs from all medical teachers. Since the unit consumes much money the Board suggested the Dean and his team to consider it carefully before the implementation. Finally, the Board advised the Dean to plan for the establishment of a professional development unit.

16-17 September 1982: The Faculty arranged the workshop on "Professional Development Programme" for 36 local experts. This group comprise of the present and coming administrators, some heads of departments, some medical teachers who were interesting in teaching and learning, the representatives from related institution. Prof. Dr. Prapont Piyarat was invited to be a workshop leader. The workshop hold at Chiang Inn Hotel and was sponsored by UNFPA via MESRAP of Chulalongkorn University (Faculty meeting report 10/1982).
19-24 September 1982: Eight medical teachers from the Faculty of Medicine, 8 from Lampang Hospital, and 8 from Buddhachinaraj attended the medical educational workshop arranged by the cooperation of Chulalongkorn University and Chiang Mai University at Tak (Faculty meeting report 10/1982).

30 September 1982: Assistant Prof. Buasabong Chamreondararasami reported the result of the workshop on 16-17 September to the Faculty Board as follow:

The 32 participants were local experts, representatives from Ministry of Health, the Rector of Chiang Mai University, heads of departments, medical teachers from the Faculty of Medicine, Lampang and Buddhachinaraj Hospitals, and representatives from Faculties of health Sciences. The outcome from the workshop was an agreement on:

- direction for designing of teacher training courses,
- direction for training of the trainers for the Faculty,
- main and supportive strategies for professional development programme,
- direction for establishment of professional development unit, and
- action plan for running professional development programme.

The report said that the participant from the workshop assigned three representatives who were Associate Prof. Dr. Chalee Pornpatkul, Assistant Prof. Dr. Pachon Wongtrangan, and Assistant Prof. Buasabong Chamreondararasami to write and present the tentative programme of Professional Development Programme to
the Faculty Board (Faculty meeting report 11/1982).

10 October 1982: Assistant Prof. Busabong Chamreondararasami, presented the tentative professional development programme to the Faculty Board. The detail was shown in appendix IV.

After the wide discussion the Faculty Board have accepted the professional development programme principally and suggested all members to study the programme in detail. Comments and recommendation were collected on 2 November 1982. It was found that after a short discussion and corrected the programme by some comments from the member of the Board the professional development programme was formally accepted by the Board (Faculty meeting report 12/1982).

27-29 December 1982: The Faculty arranged the workshop on "Writing the Professional Development Programme at the Faculty Level" at Chiang Mai Hill Hotel for all heads of departments and the next senior to them (Faculty meeting report 13/1982).

2 February 1983: The Faculty Board reported that the Faculty will organized the series of fundamental educational workshop for all medical teachers. Because there is a limited places in each workshop so a criteria for selection of participants was established as follow:

The first priority would be given to the departments which:
- have highest number of volunteer,
- repeat the same department in order to give opportunity to all
staff in some departments,
- the Faculty will ask for a number of volunteer from every departments before running every workshops.

16-20 May 1983: The workshop on fundamental education was arranged for 35 medical teachers at Sujinno building (Faculty meeting report 2/1983).

4-7 October 1983: The workshop on fundamental education was arranged for 32 medical teachers at Sujinno Building (Faculty meeting report 8/1983). The result of this workshop was presented to the Board and found that most of participants were highly satisfied with the outcome of workshop (Faculty meeting report 9/1983).

13-16 December 1983: The fundamental education workshop was arranged for 31 medical teachers at Sujinno Building and the participants were highly satisfied to the workshop (Faculty meeting report 10/1983).

3-6 July 1984: The workshop on fundamental education was arranged for 32 medical teachers at Sujinno Building (Faculty meeting report 7/1984).

6-8 August 1984: The advance course on evaluation of skill was arranged for 32 the medical teachers who had ever attended the fundamental course at Sujinno Building (Faculty meeting report 7/1984).

17-19 December 1984: The advance course on Evaluation of attitude was arranged for 32 medical teachers at Sujinno
Two observation sheets were established for using as a guide line in evaluation of attitude for medical students in all preclinical and clinical departments (Faculty meeting report 9/1984). These observation sheets were accepted and recommended to use as a guide line in all departments by the Faculty Board (Faculty meeting report 10/1984).

25-28 February 1985: The Faculty arranged the workshop on "Clinical performance assessment" for 33 medical teachers in departments of Surgery of the Faculty of Medicine, Lampang, and Buddhachinaraj Hospitals. The workshop was held at Sujinno Building (Report of PDU, 1988).


30-31 March 1986: The Faculty arranged the workshop on "Production of effective transpalencies and slides for teaching and learning" for 100 medical teachers (Report of PDU, 1988).

1April- 31 May 1986: The PDU provided facilities for all medical teachers to produce transpalencies and slides. The 2000 transpalencies were produced by the 204 medical teachers in various departments (Report of PDU, 1988).

27-29 October 1986: The Faculty arranged the seminar on "Direction of Educational Administration" for 103 participants. This group included all heads of departments and all heads of
officers. Many policies were established by the consensus of the participants. This was a first meeting among the new administrators (there was a changing of administrative team on 2nd October 1986) and heads of departments and officers. Various action plans were made after this seminar and carried on during 1986-1988.

14-15 June 1987: The Faculty arranged the seminar on "Process Oriented Teaching". Prof. Dr. Raja Bandaranyake was invited from School of Medical Education, University of New South Wales, Australia to be a leader. Forty seven medical teachers from the Faculty of Medicine at Chiang Mai University, Khon Khan University, and Songkla Nakarin University attended this seminar. The participant made agreement on the definition of Process Oriented Teaching (Faculty meeting report 9/1987).

3 October 1987: Prof. Dr. Rosaline, the Dean of the Faculty of Medicine, University of Saines, Malaysia was invited to discuss on problem based learning and new medical curriculum of Saines with all heads of departments, administrators and Curriculum committee of the Faculty (Report of PDU,1988).

8 October 1987: Dr. Dan Benor from Ben Gaureon University, Israel was invited to meet the Teaching Development Committee for discussion about problem based learning (Report of PDU,1988).

17 September 1987: The Faculty announced the establishment of Professional Development Unit (PDU)" as a new unit with three academic supportive staff and 2 clerks (Faculty announcement 251/1987).
6-8 January 1988: The PDU arranged the workshop on "Problem Based Learning" for 31 medical teachers at Sujinno Building (Faculty meeting report 17/1987).

11-12 February 1988: The PDU arranged the workshop on "Clinical performance assessment" for 32 medical teachers from department of Surgery of the Faculty of Medicine at Chiang Mai University, Lampang, and Buddhachinaraj Hospitals (Report of PDU, 1988).

21-23 March 1988: The PDU arranged the workshop on "Problem Based Learning" for 32 medical teachers at Sujinno Building (Faculty meeting report 17/1987).

9-10 March 1988: The PDU arranged the workshop on "Production of Effective tranpalencies" for 32 secretarians from all departments and some offices (Report of PDU, 1988).

1 April - 31 July 1988: The PDU provided the facilities for all medical teachers to improve their tranpalencies (Report of PDU, 1988).

1 July 1988: The PDU arranged the seminar on "The Direction of Re-orientation of Medical Education"

5 September 1988: The seminar was arranged among the administrators, the heads of departments, and the representatives from Lampang and Buddhachinaraj Hospitals. The action plan of PDU was reconsidered. The new workplan was resulted as shown in the last heading of this chapter.

Many activities were arranged during 1981-1988 mostly by the office of registrar. Many problems arose because these activities consumed money, time, and effort. They caused much workload and interfere the routine work of the officers so the administrators have reconsidered the infrastructure of the Faculty and agreed to set up a new unit for taking responsible in professional development. The formal announcement was made on 17 September 1987 staff and budget have been allocated. The unit was assigned to taking responsibility in running of professional development and other activities for the Faculty and also giving co-operation to other departments in improvement of teaching and learning.

At the moment, even though the PDU can run many activities effectively as shown in sequences of events I still need to arrange seminar among the heads of departments and teaching development committee to review all activities and set up the appropriate direction for the unit. So the seminar on "Direction of Re-orientation of Medical Education" was arranged on 1 July 1988 among the heads of departments, administrators, and teaching development committee at Sujinno Building. The results was presented as follow:
The Result of the Seminar on 1 July 1988

The seminar was arranged on 1 July 1988 for 20 heads of departments, 12 administrators, and 9 member of teaching development committee, 3 leader and resource persons, and 7 organizers at Sujinno Building. Four sessions were designed as follow:

- Re-orientation of medical education,
- teaching development,
- evaluation of medical students in:
  - preclinical departments,
  - clinical departments,
  - academic environment in the Faculty,

In every session, a brief introduction was made by a leader and the rest of time were used for discussion in each topic. The information about the re-orientation of medical education were gave to all participant to study before the seminar. One medical educationist was invited from Chulalongkorn University to lead discussion, participate in the seminar, be a resource person and give comments and recommendation.

All participants attended the seminar for all day. There was no absentee. The prepared questionnaires did not use because the group satisfied discussion in the seminar quite well and had verbal committed to outcome of the seminar which presented below. They have agreed for the PDU to arrange the series of workshop continuously, however, they suggested the teaching development committee to present the new workplan of the PDU and arrange
another seminar for reconsideration of PDU's workplan. Fortunately, the seminar was arranged on 5 September 1988, the group can consider the PDU's workplan and the results are presented next to the next heading.

The recommendation made from the seminar on "Direction on Re-orientation of Medical Education"

The recommendation are as follows:

1. They found that the present medical curriculum covers wide range of objectives which in line with the graduate's job. The curriculum change may not necessary now, however, the re-orientation might need. Teaching and learning should be directed to more "SPICES" (student centered, process oriented, integration, community based or community oriented, electives, and systematic approach). In order to implement the Process Oriented Teaching the PDU should introduce various methods of teaching to the medical teachers continuously.

   Since the problem based learning is recognized as an effective method and Chulalongkorn University have used it concurrently with the traditional medical curriculum so the participants took time in discussion on the appropriateness of problem based learning to the current situation of this Faculty and found three proper strategies can be followed:

   1.1. initiating of new curriculum and applied problem based learning like the medical curriculum of McMaster University
in canada,

1.2. running problem based learning curriculum concurrently with the traditional one like Chulalongkorn University, and

1.3. improvement of teaching and learning by introduce various teaching methods to the medical teachers and apply problem based learning as a technology in some topics, courses, or departments.

The participants prefered the third strategies at the mean time. However, they suggested the administrators to design some new curriculum which suit for the Faculty it is not necessary to be same with any university.

2. There is a need to improve teaching and learning. The improvement should be a continuous process and it should directed to support process oriented teaching rather content oriented teaching.

3. There is a need to strengthen the PDU in order for the unit to be able to provide more facilities for medical teachers in improving their teaching. The participant suggested to run the series of workshops, continuously. The other activities might be designed such as newsletter, seminar, advise in educational problem, etc. More budget and personnel should be allocated to the PDU. One senior staff volunteered to work as a part time adviser of the PDU.

4. There was a need for all clinical and preclinical
departments to design the assessment tool for effective evaluation of medical student. The heads of three clinical departments—Surgery, Obstetric and Gynecology, and Pediatric—have agreed to run another workshop on "Clinical Performance Assessment" on 15-16 September 1988. The other departments may participate after this workshop.

5. Departments of Biochemistry and Obstetric Gynecology reported that the teacher in both departments have applied the problem based learning to some topics and found highly satisfaction from both students and teachers.

The Results of the Seminar on "Consideration of the Workplan of the Professional Development Unit" (5 September 1988)

The PDU arranged the seminar among the heads of departments, the representatives from Lampang, Buddhachinaraj, and Chiang Rai Hospitals. These groups of medical teachers discussed about instructional improvement in each department. There were 4 sessions and one of them was the consideration of the workplan of the PDU.

It was concluded that they accepted the workplan of the PDU and suggested to run the following activities during 1988-1990.

1. Organization of workshops continuously in various topics especially on methods of evaluation.
2. The PDU should take responsible for at least 4 projects:
   2.1 Running the workshops for the Faculty continuously.
   2.2 Join with department in providing facilities for running the special workshop for each department.
2.3 Join with other medical faculties in running educational workshops.

2.4 Acting as educational resource center for all medical teachers.

Post seminar meeting was arranged among the resource persons and organizers. They concluded from the discussion of both seminars that there were some changes in teaching and learning in many departments. They found all activities arranged by the PDU were helpful and created educational innovation among the medical teachers of the Faculty.

The last conclusion was these activities could innovate the medical teachers in the Faculty as well. Even though it took time however, it was one of the best ways to innovate medical teachers in the Faculty of Medicine at Chiang Mai University.
The purpose of this chapter is to discuss the appropriateness of a participatory based approach to assessment of the educational needs of medical teachers in the Faculty of Medicine, Chiang Mai University. The development of this approach and the major findings from this study are reviewed. The research methodology used is then discussed, and recommendations arising from the findings and the implications for further research are presented.

The procedural framework that has been developed in this study is termed "The studying of the appropriateness of participatory based approach to assess the educational needs of medical teachers in the Faculty of Medicine, Chiang Mai University in order to design and run the Professional Development Unit (PDU) effectively." The major factors led to this research were: (1) a lack of empirical knowledge as to appropriateness of the participatory based approach to assess the educational needs of medical teachers at the Faculty, and (2) a lack of appropriate knowledge as to the most appropriate forms that such a participatory based approach would take.

These deficiencies may explained in terms of lack of any previously existing, well conceptualised, procedural approach to the assessment of educational needs suitable for the situation of
Consequently, the development, empirical testing and refinement of such approach became the aims of this thesis. These aims were expressed as follows:

1. to ascertain the appropriateness of a participatory based approach in assessment of the educational needs of medical teachers at the Faculty of Medicine, Chiang Mai University; and

2. to develop and test empirically a participatory-based needs assessment model for possible use in Professional Development Programme as a whole.

DEVELOPMENT OF A PARTICIPATORY BASED APPROACH

The approach developed in this study was a product of a conceptual integration of the principles of humanistic adult education, self-development philosophy and the configurational model (Bagnall, 1980) within the context of professional development and the constraints of the Faculty of Medicine at Chiang Mai University situations.

During the development of conceptual framework, it was desired to involve medical teachers directly, simply, economically and in a practical manner, within their own subjects, in the determination of their educational needs. Accordingly, three major concepts—Bagnall's (1980) component framework of his configurational model, self-development philosophy and the humanistic adult education philosophy (Elias and Merriam, 1980)—were selected and adapted to develop the
component and characteristics of the approach.

Within the component framework, five steps of model components modified from Bagnall (1980) were adopted to identify the conceptual components of the participatory based approach in this study. The adoption was based on the context of professional development and the constraints of the Faculty of Medicine at Chiang Mai University.

Within the framework of self-development and humanistic adult educational philosophies and the conceptual context of the professional development in the Faculty, the approach assumed different dimensional forms (refer chapter 7) to integrate its components (namely, basic units, a procedural unit, a timing unit and an environmental unit) to form a practical whole. Following Bagnall (1980), Boyle (1981) and Brundage and Makeracher (1980), each dimension was used to develop the key characteristics of the approach. These characteristics related to: (1) participation in and control over the decision-making process by the potential learners; (2) involvement of change agents and administrators; (3) utilization of local resources; (4) participant interaction; and (5) a sense of ownership and commitment on the part of potential learners.

These characteristics were then applied in structuring the procedural tasks of the initial approach. The approach was designed as an integral part of a programme planning process, and consisted of seven sequential steps: (1) pre-planning, (2) planning the needs assessment, (3) determining the current
situation, (4) determining the desired situation, (5) determining the discrepancies between the current and desired situations, (6) placing educational needs in order of priority, and (7) conducting a workshop.

Based on the comments given by the local experts, the heads of the departments, other participants, workshop organizers, and professional experts, the specific procedures of the initial approach were later slightly modified (refer chapter 9). The modified procedural approach was evaluated and remodified, giving as a result the most suitable available format for programme planning in assessment of educational needs of medical teachers in professional development.

The development of both the initial and the modified approaches involved empirical research conducted in the actual situations of the Faculty. The research was used to measure the validity and efficacy of the initial and the modified approaches respectively.

**RESEARCH METHODOLOGY**

The research procedures consisted of five sequential steps (refer chapter 8), as follows: (1) development of the procedural approach, (2) empirical testing of the validity of the approach characteristics, (3) professional judgement of the approach efficacy, (4) modification and remodification of the procedural approach, and (5) testing of the modified approach.
The null hypothesis was stated in accordance with the characteristics and criteria of the approach, and then used as a guide in designing the research instruments (such as attendance checklist, questionnaires, and interviewing schedules). The null hypothesis, based on the criterion of each characteristic, was that "the group mean responses do not significantly differ from the minimum acceptable standard set for each criterion."

The methodology designed to carry out the study was adaptable to the actual situations in the Faculty. The design consisted of three important variables: (1) sample selection, (2) timing, and (3) training schedule.

Sample Selection

For the practical reasons, the validity of this participatory based approach to educational needs assessment could not be tested empirically in every topic and in a large number of medical teachers. The sample selection was, nevertheless, designed to cover the whole members.

Accordingly, three groups of medical teachers were divided using a predetermined set of criteria. Then a random sample was taken to enable the selection of a test groups. In selecting the samples of each group the ratio between the representative groups in each sample (potential learners, administrators, and change agents) was set at 6:2:1. The aims in selecting this ratio were: (1) to increase a degree of freedom and autonomy for the
potential learners in their decision-making processes, and (2) to limit the potential control of the administrators and the change agents in the processes.

Timing

Timing was another important variable which allowed the organizer to adjust the methodology in actual situations. When the trial design of this study was initially planned, it was planned to arrange one week workshop outside the campus. The workshop leader and the organizer believed it was a suitable period for all participants to assess their needs after considering the desired and current situations of the Faculty before making a decision in implementing the Professional Development Programme.

In that event, some of participants cannot leave home to join the workshop, most of them were engaged during most of the day working in their departments. Therefore, a one week workshop was shortened and periods of 2, 3, and 5 days were tested in the respective workshops 1, 2, and 3.

Without the modification, the medical teachers would not have been able to participate in the workshop procedures. This arrangement was clearly to the advantage of the participants and, at the same time, could be accommodated without undue difficulty to the research plan.

It was also clear to me that, a suitable timing for medical teachers to join any kind of workshops was a short period and in a working day. Most of them were engaged with their practice in
the evening and cannot leave the day working in their own department for a long period of time. So by this finding, a series of workshop setting by the Professional Development Unit were not longer than four days and only in an office hours.

The Training Scheme

Training scheme consisted of three kinds of workshops: one at the faculty, others at the departments and the individuals. The two day workshop was organized at the faculty level. Its purposes were to assess the educational needs of the medical teachers through the group of local experts, to establish the provisional Professional Development Programme, and to obtaining permission in implementing the Professional Development Programme in the Faculty. At the end of the workshop, three members were selected to write a provisional Professional Development Programme by the guide line given by the consensus of all participants. The comments and suggestion were reported and used in designing the workshop curriculum and the training schedule for the second workshop. The feedback from the workshop was also used to modified the procedure of the workshop for the later one.

In the second workshop, it was extended to three days by the suggestion from the first workshop, and with the agreement of the participants. The purposes of this workshop were to assess the educational needs of medical teachers and to justify the suitability of the provisional Professional Development Programme which was established by the local experts. The workshops also
gave an opportunity for me to practice the knowledge and skills in directing the process of needs assessment and the collection of data.

Ideally, these workshops were planned to organized outside the campus and for one or two weeks, however, two constraints in particular made the design of such an ideal activity impracticable.

The Constraints

The *Economic Factor*. In organization of a single workshop, it would be necessary to provide the participants, the workshop leaders, and invited resource persons the town-rate expenses to cover accommodation and lodging, sustenance and travelling cost as they would be attending the workshop outside their own working areas. If the workshop were organized within their areas, there would be no necessity to pay higher accommodation and sustenance rates. This was an important factor for the organizer to organize the workshop for the medical teachers in Chiang Mai because there was no expense for accommodation, lodging, and transportation. However, the expenses for meeting rooms, break, lunch, and other services of the hotel were quite high, so the organizer expected to run the series of workshop inside the Faculty instead the hotel. At the mean time the Sujinno Building was constructing and the meeting rooms in the 15th floor cannot be used for running the workshop yet.
The Administrative Factor. There would have been a need to obtain special permission from the heads of departments or the director of institution to bring the trainees, workshop leaders, and other resource persons out of their operating areas (their routine work) for a single workshop. To obtain such permission, the Dean would have had to apply the heads of department or the director of each trainee's institution. To deal with the bureaucratic system, as elsewhere in Thailand, the application would have had to be made through different institutional channels: a time and energy consuming matter inconsistent with the time-limited research situation.

Accordingly, the first two workshops for the local experts and the heads of departments were organized at the hotels in Chiang Mai. This strategy enabled the organizer to minimize disruption of the participants from their routine works, and to create the comfortable and favourable environment. The workshop were organized in Chiang Mai, so there was no expense for accommodation for most participants. However, there was no plan to run a further workshop at the hotel because Sujinno Building would be more economically place without too much disruption for the medical teachers if the heads of departments free them from their routines' works. The additional advantage of arranging workshop at the hotel was the workshop organizer had been freed from heavy service load such as fixing the rooms, arrange meals and breaks. This enabled me and the workshop organizer had much more time in preparing and paying attention to the content and conduction of each session in the workshop. However, in running
the series of workshop the workshop co-ordinator would take most of managerial task I was able to attend all workshops and paying attention to the content and the directing of workshop process.

For the needs assessment workshops were each conducted and close supervised by the workshop leader. The workshops aimed to enable participants to determine their existing educational needs and establish their priorities. Ideally, the workshop would have been directly conducted by the participants themselves without supervision from the workshop leader. However, since there were no established guidelines and no experienced medical teacher to give leadership, the workshop leader was still be necessary to guide the participants through the workshops. The workshop leader was, however, careful not to become involved in the decision-making process. I have found that at the beginning the leader from other university was need for assure the acceptability from the participants. Later, the local workshop leader was used and there was no difference in term of acceptability.

APPROPRIATENESS OF A PARTICIPATORY BASED APPROACH

The very high acceptance of the participatory approach which is evident from this study indicates that it is appropriate to the situation of the Faculty. This confirms hypotheses formulated from the review of literature that the approach components and characteristics are appropriate for the Faculty. This section initially discusses the approach components and then proceeds to discuss the characteristics of the approach.
Approach Component

The participatory based approach adopted in this study consists of a number of components (namely, basic units, a procedural unit, a timing unit, and an environmental unit—refer Chapter 7). The results from the trial design and the professional expert judgement of the efficacy of the approach illustrate the utility of these approach components in three ways:

Firstly, the components as a whole can, as the conceptual framework of the approach, be applied to serve as a model for participatory needs assessment in professional development in the Faculty. It could be regarded as a type of normative-re-educative approach (refer Chapter 7) designed, on the one hand, to change the passive teaching attitudes of the medical teachers to an active one since the active teaching style plus a basic knowledge in educational technology were given by the workshop leaders in all workshops. On the other hand, to encourage those in authority to recognize the capabilities, freedom and autonomy of the medical teachers as a decision-makers. Following Boyle (1981), it would be resonable to conclude that this change of attitudes would result in changes, the teaching styles and, thus establish a basis for a self analysis and self-developmental situation.

Even though this study do not examine the result of changing in the medical teachers explicitly but the mean group responses of each workshop do not significantly differ from the minimum
acceptable standard set for each criterion indicated their satisfaction in this approach as well.

Moreover, views expressed during the study by local experts, the heads of departments, and medical teachers who were involved in testing the efficacy of the approach, indicated that the approach was not only well accepted, but was considered to be the best available format for application in the programme planning processes for which they were responsible.

Secondly, the procedural unit of the participatory based approach alone may seem as a realistic way of enabling medical teachers to perform appropriately and effectively as problem-solving groups. The results from the workshop showed that all three groups of participants—potential learners, change agents and administrators—were highly satisfied with their levels of involvement in the workshop. This satisfaction led them to accept the method of group's work, and subsequently to commit themselves to the process, goals and outcomes of the workshop process served not only to reduce their resistance to change but also to develop them a positive awareness of the need for innovative action. There were special reasons for this:

1. The participants were given every possible opportunity to contribute their knowledge, skills and experiences with a maximum degree of democratic freedom in the workshop process. As a result, feeling of self-distrust, social insecurity, over-dependence on authority and intolerance of other people's opinions were reduced, and the degree of self-confidence and
independence of thought and judgement on issues of common concern were increased.

2. Taking Roger's and Shoemaker's (1971) innovation-decision process into account, the results of the workshop and my observations during the workshop indicated that the participants: (1) had gained a clear understanding of how the participatory based approach process functioned and of the extent that they could benefit from it; (2) had formed favourable attitudes toward the process as a whole; (3) had tried the process procedures and become deeply involved in them before having to make a choice to adopt or reject them; and (4) had had several opportunities throughout the process to reconsider their adoption or rejection of each decision alternative.

3. The results from the questionnaire, used to interview all participants at the end of each workshop indicated that they felt very highly satisfied with the objectives, methods and content of the workshops. This satisfaction could derive from the extent to which: (1) the complexity of ideas and procedures and of participatory based approach was reduced and made easily understandable and practicable, and (2) the procedures of the approach were found to be relevant to the participants' interest, and useful in their daily lives.

Thirdly, recognizing a time unit and environmental unit as the two other components of this approach. The findings indicated that there was a different in the most convenient time between
the medical teachers from pre-clinical and clinical departments because the medical teachers in a pre-clinical departments tend to have a fix lecture schedules during the whole semester and cannot made available time for attending the workshop in a long period. However, during the student holidays they can spend there time for attending workshop more easily. The medical teachers from the clinical departments usually have a bedside teaching and service for all year round but if they were permed by their heads of departments and their colleague could cope the extra service load they can free from their routine work quite well. It was therefore the workshops should be arranged at the different time intervals and make available for both groups of medical teachers to attend and had the frame of mind necessary to take part in the workshop. So at the beginning, a series of four workshops a year were planned to arrange at different time intervals. Later, after the Professional Development Unit was set up in September 1987, it can offer more workshops so the frequency was change from 4 workshops per year to once a month and in various topics.

Above all, the appropriateness of the workshop components in the research project must be emphasized. It was found during the research that the medical teachers as groups and as individuals, became actively involved when given the opportunity to discuss their problems and determine their learning needs. The workshop also gave the medical teachers abundant an unusual opportunities to meet and exchange ideas with administrators, heads of other departments, other medical teachers, and some resource persons as
they became involved in the workshop process, while successful participation gave all participants confidence in the process and their ability to contribute to it. The high degree of cooperation given by all participants and concerned departments and authorities not only contributed to the success of the workshop, the research or the tests, but also convincing evidence that the participatory based approach was acceptable to various participating groups of medical teachers, and was appropriate to their needs.

Characteristics

A set of key characteristics of this approach was identified to measure its appropriateness with various participatory groups of medical teachers in the Faculty (Chapter 7). Criteria were developed to measure the characteristics in the actual situations.

Apart from the characteristics of the client commitment, the characteristics were found to be highly acceptable and satisfactory to the participants on the following key characteristics:

1. Potential learner participation in the workshop process. The recorded high level of potential learner participation not only provides the Teaching Development Committee with the better and more precise information about the wishes and needs of the potential learners, but also makes the administrators accept that the potential learners have a basic right to determine their own educational needs.
2. Potential learner control over decision-making process. The recorded high level of potential learner control over decision-making indicates that they are not only well respected by the administrators, but also respect themselves as a group of capable, competent and experienced people. These qualities of self-reliance and self-respect are encouraged during the workshop process by an emphasis on trust-relationships among the potential learners and between them and other participants, and on activities designed to enable the potential learners to develop a capacity to determine their own needs. Moreover, the change agents and administrators encourage potential learners to understand the relevance of their individual experiences and knowledge to the needs assessment concepts and procedures and the process of group discussion.

3. The involvement of change agents and administrators as resource persons and sources of local information. This situation provides all potential learners not only with opportunity to clarify their own perceptions of any discussion issue prior to making a decision, but also with the opportunity for feedback from resource persons as an aid to such clarification. The aim of this learning process is not simply the acquisition of factual knowledge, but, more importantly, the development of a capacity for judgement. And in this process the help and guidance of the leaders is likely to be essential.
4. The use of local resources in the workshop process. All participants have not only valued their own and other people's experiences as a rich resource of relevant information, but also used other sources of information available in the workshop and in their departments in decision-making process.

5. The high degree of interactive communication among the potential learners and between the potential learners and other resource persons. The situation reflects that the potential learners have developed more self-confidence and reacted to the information as they have perceived it, and not as they have been directed by any participant or leader. This interactive communication helps them to organize and integrate new information into their self-concepts and, thus, to develop the confidence necessary for further interactive and trusting relationships.

6. The sense of ownership and commitment to the workshop process felt by the potential learners. Since the participatory based approach is new to them, they are likely to consider its procedures as a learning experiences as an important set of tasks which is their special responsibility. They may conceptualize their own capabilities to manage these tasks, and request assistance from their colleagues and leaders when necessary. Their sense of ownership of and commitment to the goals, the process and the outcomes of this approach became apparent when the workshop is completed with satisfactory and successful results.
In measuring the efficacy of this approach, professional experts accepted that this approach was the best available and most suitable format for the assessment of educational needs of medical teachers. The professional experts also agreed that the finding arising from the research were the best available data for their existing programme planning processes.

The conclusions arising from the professional expert judgement of the approach efficacy (step 3) indicated that the participatory based approach could be applied not only in the professional development programme but also in other kinds of development programme. Furthermore, the modified procedures of this approach, modified after the trial design, readily satisfied the professional experts.

In sum, the empirical evidence resulting from this research indicates the internal and external validity of the approach characteristics. This finding implies that the components and characteristics of this approach can be applied as the most appropriate practicable model available for the identification of educational needs of medical teachers. The general literature on programme planning and needs assessment in nonformal education (Beatty, 1976; Boyle, 1981; Brundage and Makeracher, 1980; Houle, 1973; Knowles, 1980) suggests that the participatory based approach is appropriate for any programme planning education, and that unless potential learners are involved and have the freedom and autonomy to make their own decisions in the programme planning process, the programme is likely to be based on
inaccurate assumptions about the learning desires and needs of adult learners. This, it is suggested, is likely to result in ineffective programming, and to generate barriers to the involvement of potential learners in any kind of nonformal education. The empirical knowledge, which is the major outcome of this thesis, confirms this contention of the authorities cited above as it applies in Professional Development Programme at the Faculty of Medicine, Chiang Mai University.

An indirect result of the workshop was the establishment of some special guidelines to enable the medical teachers to initiate assessment procedures in their own departments. They also established a clear understanding of, and new attitudes towards the roles of change agents and administrators. These people are now regarded not as the representatives of authority, but rather as friends, counsellors and development facilitators. It may, therefore, be assumed that the general adoption of the participatory based approach would be an effective means of breaking down the traditional beliefs and status attitudes of medical teachers toward the traditional teaching.

Even though the trianing scheme was organized many years ago, the sequences of events show there was a continuous series of educational workshop in the Faculty from 1981 to 1988. The results from 3 kinds of educational workshops—fundamental education, advance courses, and miscellaneous showed there was not significantly differences in mean group responses of each workshop and the minimum acceptable standard set for each criterion. This implies that the format and content of the
workshop found from the research were appropriated for the Faculty. However, to assure the right direction of professional development the seminar on "The Direction on Reorientation of Medical Education of the Faculty of Medicine, Chiang Mai University" was arranged on July the first of 1988. The seminar was aimed to: 1) review all activities of professional development in the Faculty, and 2) discuss about the direction for arrangement of professional development activities in the Faculty. The results of the seminar confirms the appropriateness of participatory approach to assess the educational needs of medical teachers. The participants (the administrators, the heads of departments, and the teaching development committee) have encouraged to continue the series of workshop and also suggested to add up some other activities such as providing services in preparation of effective teaching materials and giving special advices to the medical teachers in area of educational technology. Moreover, the responses from the administrators after the seminar in allocating two more personnel to the Professional Development Unit-1 secretarian and 1 academic supervisor (Professor from Department of Medicine who is accepted by the medical teachers to be a medical educationist volunteer to be a full time adviser of the PDU) confirm the appropriateness of the participatory based approach to assess the educational needs of medical teachers and using as one of appropriate ways for running the PDU effectively.

The special seminar was arranged on 5 September 1988, one of the four sessions in the Seminar was consideration of the
workplan during 1988-1990 of the PDU and it was found that the workplan was accepted by the administrators, the heads of departments, and representatives of Lampang, Buddhachinaraj, and Chiang Rai Hospitals as well.

RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations are presented in relation to development of professional development programme and further research.

The development of Professional Development Programme.

In development of professional development programme in the Faculty of Medicine, Chiang Mai University, the most important factor is roles of medical teachers.

1. Every educators should be made aware that needs assessment is an integral part of the programme planning process. This process is, in essence, an attempt to ensure that programme is really concerned meeting the learner needs. The identification and classification of educational needs by medical teachers should be central to the process.

2. A participatory needs assessment programme, in general, should be designed to be free from excessive time constraints for its participants, and represent a variety of different techniques for processing the same information derived from different individuals.
3. A participatory needs assessment programme should be locally designed to provide its participants with activities at the beginning session in order to reduce the participants' anxiety or sense of threat; with activities throughout the programme to cope with individual frustration and stress as they arise; and at all times, with activities designed to assure satisfactory and successful achievement of the programme objectives.

4. Medical teachers should be encouraged to determine their existing, immediate and long-term needs and encouraged to reach their learning goals. Thus, the role of programmers should be to facilitate the implementation of the entire learning programme on the basis of the needs identified by the medical teachers.

5. Educators should apply the participatory based approach developed in this study to strengthen the quality of problem solving and to encourage the development of self development skills among the medical teachers.

An Improved Strategy for Professional Development

It is recommended that, to tackle the main problems in professional development confronting the Faculty, they should be identified and then acted upon. It would appear that these problems are, particularly: (1) a lack of inter-departmental coordination in planning, programming and organizing the professional development programme, and (2) at the department level, a lack of institutional trust and confusion which develops
when various departments try to solve teaching problem by recommending opposing solutions.

To address these problems, it is recommended that the Faculty should establish a joint committee. The terms reference of the committee should reflect the following purposes pertinent to the finding of this study:

1. To identify the core-problems which are the main barriers to professional development.

2. To establish a programme planning process, as part of the managerial system of the existing unit such as PDU which entails a series of actions and judgement, through which representatives of all departments affected by the potential plan are directly involved in: (1) assessing existing and potential needs, resources and problems, (2) establishing developmental objectives, (3) designing and implementing a professional development plan, and (4) assessing and reporting the outcome.

3. To investigate the participatory based approach to needs assessment developed in this study, and to make a recommendation regarding its use in the programme planning process.

4. In the event that the participatory based approach is endorsed, to recommend to the Faculty that a needs assessment committee be formed as a working group of medical teachers from each department where the participatory based approach
to needs assessment will be conducted. This working group would then be responsible for an integrated needs assessment programme covering all educational and developmental needs at the department and individual levels. The members of working group should include a number heads of departments, and it would be essential that they should be accorded a high degree of freedom and autonomy in the decision-making process by the local authorities. Technical help from administrative members should be part of the process. The needs and problems determined by the assessment committee should then be submitted to the authorities responsible for the programme planning.

5. To consider the possibility of establishing a participatory based approach as part of the programme planning process at the faculty level. This could be undertaken by the faculty board which is the highest policy-making and programme planning.

The Faculty Board should consider encouraging various departments concerned with professional development to adopt this participatory based approach within their planning system. Instead of each department determining the needs of medical teachers at different times, it should make use of the outcomes arising from the integrated needs assessment programme already prepared by each department. Knowledge and skills in conducting a participatory based approach to needs assessment should be provided, as necessary, by the Faculty by means of orientation.
and/or training courses. And in order to run the professional development programme effectively, the formal organization such as PDU should be established budget and personnel should also be enough allocated.

All I have presented previously was the discussion on appropriateness of a participatory based approach to assess the educational needs of medical teachers. The development of the approach and the major findings from the study were presented. The recommendations arising from the findings were already made and most of them were strategies for re-orientation of medical education within the medical school. However, as I have already mentioned that the Faculty is an organization which surrounded by environment and we cannot change one unit in the system without changing others. Zaltman (1973, p87) stated that organizational goals change for three major reasons. The first is direct pressure from external forces, which leads to a deflect from the original goals. Second is pressure from internal sources. This may leads the organization to emphasize quite different activities than those originally intended. The third factor is changed environmental and technological demands that lead the organization to redefine its goals. At this stage, the internal pressure is the forcing to reorientation of medical education by medical educators, the changing of environmental and technological demands have been introduced to the medical teachers by many activities of the PDU, the rest is the external forces which were expected to affect the changing processes. So I would like to take this opportunity to give comment on the
external strategies. However, it is beyond my study and I would like to leave it to the administrators and/or other who involve in medical education and responsible for "health for all".

The External Strategies

One of the consistant weaknesses of most of the attempts at reorienting medical education was the intrinsic nature of reorientation efforts in that they were confined to the medical schools themselves. While intrinsic changes are of paramount importance, they have had limited success in bringing about the desired changes at the all important operational level of the health delivery system. Analysis of this situation warrents the conclusion that the management system has not adjusted itself to the changing needs within the education and training system. Consequently, even in those instances when the medical schools have enabled their graduates to develop the competencies required for the changing roles and community needs, their motivation to perform appropriately has been thwarted by what they encounter in the service sector itself. It has become increasingly clear, therefore, that the medical education system needs to reach out and move beyond the confines of its own environment and stimulate and initiate the complementary change that must occur in the management system in Thailand. The exercise of this social responsibility of the medical educators will help to ensure that all their efforts at reorienting medical education will not be in vain. It will also mobilize some of the support required towards meeting the goals of achieving health for all by the year 2000.
Medical educators will have to involve themselves in some or most of the following sectors and activities if their intrinsic strategies and efforts are to achieve the maximal impact in the total system.

**Convincing Decision-makers and Managers** Problems arise when the decision-makers and managers in the government, particularly in the ministries and departments of health, are not fully committed to the development of community oriented medical education as a priority. This results in the improper allocation of budgets owing to a lack of information and conviction about the benefits and multiple effects of community-oriented medical education on the medical graduates, and it causes the attendant diminution of the graduates' significance. This lack of commitment also results in the changes of policies, practices and priorities in the field of health care delivery before a community oriented medical education programme can be fully implemented, and it leads to a breakdown in the coordination between the planning and implementation of such programmes.

**Coordinated Government Action in Health Care Education:** If the medical schools are to ensure the maximal effectiveness of their own contribution to this movement, they would have to ensure that such policies are developed in a continuing and comprehensive fashion as only such a permanent vehicle can provide continuing guidance and support to the educational efforts.
Increased Participation of Medical Teachers and Health Services in Joint Activities

The medical teachers and the health services should be encouraged to participate routinely in joint activities alongside the officials of the department of health. Such collaboration could take place in most of the following areas:

- Health planning at the national and regional levels
- Policy-formulation at the national and regional or provincial levels.
- Provision of services to the community.
- Conduct of research, particularly health services research, and evaluation activities.
- Planning and implementing continuing education and upgraded programmes.

Collaboration Between the Medical Schools and the Medical Profession. In many countries including Thailand the medical profession and the professional bodies either oppose the reorientation of medical education, overtly or covertly, or only provide lukewarm support and co-operation.

This response results from:

- Inbuilt bias against community orientation and community medicine;
- Year of a "lowering" resulting in the production of "second class" doctors;
- Inherent resistance to change due to vested and conflicting interests;
- reluctance to accept "community physicians" as equal partners in the profession;
- lack of awareness of the national strategies for health care delivery and the health problems of the community; and
- inadequate representation and involvement of professional bodies in medical school programmes and in the related decision-making bodies.

The effects all of these have on the medical undergraduate and the young graduates could be profound, as the professionalization process has strong influences on their attitudes and aspirations. Just as certain medical teachers will constitute the role models for the medical undergraduate, the leaders in the profession will serve as strong models that will influence both the undergraduates and the younger graduates in their formative professional years.

Some of the possible efforts that could ameliorate this adverse situation are:

- to motivate the professional association and convince them of the need for a reorientation of medical education by involving them in the planning and implementation of medical education programmes;
- to make statutory obligations, if possible, for professional associations to be involved in community health;
- to take steps to accord due recognition and representation to the community physicians in the national professional
associations; and
- to develop formal relationships between professional bodies, schools, and health care managers.

Motivation for Service in Rural Areas: It is clear by now that identifying and instituting ways and means to increase the motivation of medical graduates to serve in rural areas is a key issue with which health manpower management has to contend. The managers should develop realistic schemes of incentives to enhance the willingness of the young graduates for rural service. Students would have to realize that the process that was initiated while the students were under this tutelage within the medical school itself would reach fruition. Such a scheme of incentives could include:

1. Improvement of the salaries and related conditions of service such as support in auxiliary services and supplies;
2. Provision of preferential access to post-graduate study and continuing education for those doctors who have opted for and were sent to rural areas;
3. Development of career prospects and promotion in service that takes into account the recognition of rural service;
4. Ensuring the availability of basic facilities for living and childrens' education at the place of posting; and
5. National awards or a system of recognition of merit in rural service so that qualitative efforts in service and research could be taken into account under the impartial application of assessment systems in such decision-making.
CONCLUSION

Many strategies are required to re-orientation of medical education. I have already discuss the strategies within the medical school and external stategies. However, the most important is in order to make a change within the medical schools all medical teachers have to rethink that health maintenance and recovery depend on many things other than hospitals and physicians. Self care, family and community support, spiritual beliefs, etc., are all important. Medical teachers must understand the learning process of students to be able to be correctly supportive.

The present situation is complex, both because of the nature of problems involved and because of the resources and management of resources required to solve them. Also, the situation is continually changing. Fixed ideas and skills on the part of medical teachers have led to gaps and conflicts. What is needed is medical education that will expand students' vision. It must foster in students the capability for critical thought and for the creation of new knowledge. This is require both clinical and community services. Tradition one-to-one-care teaching is not adequate. The physicians must be trained to understand health services from the perspective of the system.

There is a clear need of a new type of physician. These new physicians must be wise men. They must have the wisdom to see and to understand things as they are, with the ability to acquire accurate and relevant information for analysis and synthesis, to
solve problems and to make appropriate interventions.

It is not possible for medical education as it exists now to produce this new physician. The current education is content-oriented and content congested. Faced with a fixed amount of time and ever greater amounts of information, the content-oriented education runs into conflicts. It is simply not possible to pile more material, however desirable, onto the congestion of material already to be mastered in a medical education; yet teaching in ethics, health services research, etc, is critical. What is needed is a restructuring that will change the emphasis of medical education from mastery of content to mastery of process. With the right learning process, the learning environment can be arranged in more desirable proportions, in hospitals and in communities. In addition, while content learning is by nature fragmented and static process learning can create a blending of knowledge and foster a dynamic approach to continued learning. With this approach, science, humanity and community can be judiciously integrated.

As new medical schools are built, innovative curricular must be introduced. It is more difficult to reform the curriculum in an established medical school. However, some school have changed. How about the Faculty of Medicine at Chiang Mai University, the medical profession and the medical education faces a historical challenge. Medical schools must prepare for change. Medical teachers must be trained in teaching the process of learning and of thinking critically as well as in teaching
Suggestion from this study would be one of various strategies in producing changes among the medical teachers. The professional development must provide the innovative medical education necessary for the Faculty to graduate a new type of physician.

In summary, the participatory based approach, its procedures, components and characteristics have now been developed, tested, refined, and re-tested through empirical research within a precise theoretical framework.

The major conclusions of this study may be summarized as follows:

1. The area of professional development in general has been characterized by diversity, in that it has various definitions, techniques and strategies and there can be no definitive set of practice which suit it at any time.

2. Prior to this study, the formulation of a definition, conceptual framework, and procedures of a participatory based approach to assess the educational needs have been imprecise, and based upon a dearth of empirical knowledge.

3. In the few instance where participatory procedural models have been developed and applied in this Faculty, the empirical knowledge and practical skills used have not been systematically recorded.
4. The conceptual principles of self-development and humanistic adult education philosophies (Elias and Merriam, 1980) may be integrated with the components of the configurational model (Bagnall, 1980) and successfully applied in using the participatory based approach to assess the educational needs of medical teachers in the Faculty of Medicine, Chiang Mai University.

5. In the application of the approach in the Faculty, the participation of the medical teachers should regarded as the most important factor, with the involvement of administrators as an important supportive factor, and it must be accepted that differences status of the participants can affect the validity and efficacy of the approach.

6. Before this participatory based approach is applied in any society beyond the Faculty of Medicine, Chiang Mai University, its appropriateness should be evaluated with any indicated adjustments made to its format or procedures.

7. Given such evaluations, the characteristics and components of this approach could be applicable to the identification of the educational needs of medical teachers in the Faculty.

8. Similarly, the approach should be applicable within the context of other programme, such as development in management skills of medical teachers, improvement of leaderships of administrators, etc.
9. At this point in time the participatory based approach appears to be the most suitable available format for use as an integral part of the programme planning process in professional development and other fields, but in the Faculty of Medicine, Chiang Mai University as a whole.

To this end, this study attempts to reinforce the appropriateness of participatory based approach in assessment of educational needs of medical teachers: it does suggest however, that every educators should be made aware that needs assessment is an integral part of programme planning process. To ensure the successfulness of implementation of any programme, the programme must be concerned meeting the learner needs and the learner centered process should be used. Finally my study outlines some possible strategies which could be considered if the Faculty wishes to truly implement the professional development programme.

I am strongly of the opinion that changes are rarely successful if forced upon the people, but that opportunities have to be created to allow problems to be identified and remedial actions to be planned. This study is not intended to be a blueprint or prescription for what should be done. Rather it presents a number of opinions intended to provoke thought and stimulate discussions in the belief that all medical teachers want to continually improve the quality of medical education at the Faculty of Medicine, Chiang Mai University.


Barrows, H. S. (1973, June). Problem based learning in Medicine M.D. Programme (Educational Monograph No. 4). Ontario, Canada: McMaster University, Faculty of Medicine.


Conrad, J. (1979). Denmark—the state of the art and the need for a change. In D. C. Teather (Ed.), Staff Development in Higher Education: an International Review and Bibliography (pp. 87-105). London and Tonbrige: BrownKnight & Truscott Ltd.


Johnson, E. L. (1972). *Chiang Mai Project: A report of a Thai-American Cooperative venture carried out*. Unpublished manuscript. The University of Illinois College of Medicine under the terms of a contact involving the Agency for
International Development and Royal Thai Government.


Medical Curriculum. (1978). Chiang Mai, Thailand: Faculty of Medicine, Chiang mai University.


Nisbet, J. and McAleese, R. (1979). Britain (universities) - growth, consolidation, and now a new phase? In D. C. Teather (Ed.), *Staff Development in Higher Education: an International Review and Bibliography* (pp 38). London and...


Tonbridge: BrownKnight & Truscott Ltd.


Report of Faculty of Medicine, Chiang Mai University. (1982). Faculty Meeting 6/1982. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1982). Faculty Meeting 8/1982. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.
Report of Faculty of Medicine, Chiang Mai University. (1984).
Faculty Meeting 7/1984. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1984).
Faculty Meeting 10/1984. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1987).
Faculty Meeting 9/1987. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1987).
Faculty Meeting 17/1987. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1987).
Faculty Announcement 251/1987. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1988).
Faculty Meeting 2/1988. Chiang Mai, Thailand: Faculty of Medicine, Chiang Mai University.

Report of Faculty of Medicine, Chiang Mai University. (1988).

City, Cholburi.


Report of the workshop. (1982, September and December). on Teaching Development Program 16-17 at Chiang Inn Hotel, Chiang Mai and 27-29 December at Chiang Mai Hill, Chiang Mai Organized by the Faculty of Medicine, Chiang Mai University sponsored by the United Nation Fund for Population Activities via MESRAP.


APPENDIX 1

The Questionnaire Used in the First Workshop

Instruction for the question 1-25
Use the following code to indicate the extent to which you agree or disagree with each of the statements made below:

Code
1  Strongly disagree
2  Disagree
3  Neutral
4  Agree
5  Agree strongly

The difference between 1 and 2 or 4 and 5 is one of the degree only.

Example:

If you want to express your complete disagree with the statement, circle the figure 1 as follows 1 2 3 4 5

Please feel free to make any comments you think necessary (making reference to the number of the question) in the space reserved for the purpose on the last page.

1. I was given sufficient information on the aims and the methods of the workshop.
2. I found the content is relevant to the objectives of the workshop.

3. I feel that the programme drawn up during the workshop was arranged in proper sequencing.

4. I agreed with the objectives of the workshop.

5. I satisfied with the methods used in the workshop.

6. The way the workshop was conducted was in line with the educational principles it discussed.

7. I found the given information was relevant to the objectives of the workshop and adequately.

8. The workshop was conducted to free learning.

9. The leader answered all of my questions.

10. I satisfied with his answer.

11. The leader gave me the opportunity for critical comments.

12. The leader made every effort to help me reach my objective.

13. The leader provided me enough decision alternatives.
14. My comments were used in planning a workshop.
15. I enjoyed discussing in a small group.
16. I satisfied with all discussion and communication in the workshop.
17. I participated in the decision making in the workshop.
18. I accepted the decision made by the majority of the group.
19. I accepted the outcome of the workshop.
20. Enough time was given for me to present my idea.
21. Enough time was given for presentation work in plenary.
22. I found audio-visual aids provided of an acceptable quality.
23. I found the document available was useful for the workshop.
24. I found a workshop was meaningful.
25. I found the given information was relevant to the objective of the workshops.
26. The factors which impressed you most favourably
APPENDIX 2

The Questionnaire Used in the Second Workshop

Instruction for the question 1-28

Use the following code to indicate the extent to which you agree or disagree with each of the statements made below:

Code

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Agree strongly

The difference between 1 and 2 or 4 and 5 is one of the degree only.

Example:

If you want to express your complete disagree with the statement, circle the figure 1 as follows 1 2 3 4 5

Please feel free to make any comments you think necessary (making reference to the number of the question) in the space reserved for the purpose on the last page.

1. I was given sufficient information 1 2 3 4 5 on the aims and the methods of the workshop.
2. The workshop helped me reach my objectives. 1 2 3 4 5
3. I agreed with the group's work. 1 2 3 4 5
4. I agreed with the objectives of the workshop. 1 2 3 4 5
5. I feel that the programme drawn up during the workshop was arranged in proper sequencing. 1 2 3 4 5
6. The way the workshop was conducted was in line with the educational principles it discussed. 1 2 3 4 5
7. I satisfied with the methods used in the workshop. 1 2 3 4 5
8. I accepted the outcome of the workshop. 1 2 3 4 5
9. The workshop encouraged me to put the knowledge I have gained into practice after the workshop is over. 1 2 3 4 5
10. The leader gave me the opportunity for critical comments. 1 2 3 4 5
11. The leader made use of my critical comment. 1 2 3 4 5
12. The leader answered all of my questions. 1 2 3 4 5
13. I satisfied with his answer. 1 2 3 4 5
14. The leader made every effort to help me reach my objective. 1 2 3 4 5
15. The leader displayed a satisfactory open mindedness.
16. I satisfied with all discussion and communication in the workshop. 1 2 3 4 5
17. I found a discussion was meaningful. 1 2 3 4 5
18. I found a workshop was meaningful. 1 2 3 4 5
19. The workshop helped me to increase my confidence in my ability to set up the workplan of professional development. 1 2 3 4 5
20. Enough time was given for individual work. 1 2 3 4 5
21. Enough time was given for practice exercise. 1 2 3 4 5
22. I found audio-visual aids provided of an acceptable quality. 1 2 3 4 5
23. I found audio-visual aids provided of an acceptable quality. 1 2 3 4 5
24. I found the given information was relevant to the objectives of the workshop and adequately. 1 2 3 4 5
25. I found the document provided of an acceptable quality. 1 2 3 4 5
26. I found the document provided was adequately. 1 2 3 4 5
27. Enough time was given for presentation work in plenary. 1 2 3 4 5
28. I found the document availabled was useful for the workshop. 1 2 3 4 5
APPENDIX 3

The Questionnaire Used in the Third Workshop

Instruction for the question 1-28
Use the following code to indicate the extent to which you agree or disagree with each of the statements made below:

Code

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Agree strongly

The difference between 1 and 2 or 4 and 5 is one of the degree only.

Example:

If you want to express your complete disagree with the statement, circle the figure 1 as follows 1 2 3 4 5

Please feel free to make any comments you think necessary (making reference to the number of the question) in the space reserved for the purpose on the last page.

1. I was given sufficient information 1 2 3 4 5
   on the aims and the methods of the workshop.
2. The workshop helped me reach my objectives.
3. I agreed with the group's work.
4. I agreed with the objectives of the workshop.
5. I feel that the programme drawn up during the workshop was arranged in proper sequencing.
6. The way the workshop was conducted was in line with the educational principles it discussed.
7. I satisfied with the methods used in the workshop.
8. I accepted the outcome of the workshop.
9. The workshop encouraged me to put the knowledge I have gained into practice after the workshop is over.
10. The leader gave me the opportunity for critical comments.
11. The leader made use of my critical comment.
12. The leader answered all of my questions.
13. I satisfied with his answer.
14. The leader made every effort to help me reach my objective.
15. The leader displayed a satisfactory open mindedness.
16. I was satisfied with all discussion and communication in the workshop.

17. I found a discussion was meaningful.

18. I found a workshop was meaningful.

19. The workshop helped me to increase my confidence in my ability to set up the workplan of professional development.

20. Enough time was given for individual work.

21. Enough time was given for practice exercise.

22. I found audio-visual aids provided of an acceptable quality.

24. I found the given information was relevant to the objectives of the workshop and adequately.

25. I found the document provided of an acceptable quality.

26. I found the document provided was adequately.

27. Enough time was given for presentation work in plenary.

28. I found the document available was useful for the workshop.
Three open ended questions are asked, the results are as follows:

Results

The other open ended questions

1. What impressed you in this workshop:
   - content of the workshop
   - Educational technology and its application
   - small group discussion
   - self learning
   - objective writing
   - the approachability of the leaders
   - grouping
   - the leaders' responsiveness
   - the organizer's responsiveness
   - communication and discussion
   - document available
   - time management
   - audio visual aids

Frequency


table

2. Suggestion for improvement
   - place
   - it will be better to split into two-three days workshop

3. What topics would you like to learn more?
   - motivation
   - How to teach attitude
   - assessment of attitude
- item analysis  
- assessment methods  
- Task analysis  
- teamwork  
- presentation technique  
- educational package  
- instructional design  
- teaching methods  
- application of educational technology  
  to medical education

14. Any suggestion ?
- The follow up programme should be organized  
- all medical teachers should attend the workshop  
- the workshop should be organized regulary  
- it was very useful to all medical teachers  
- it should be a must not volunteer for medical  
  teachers to attend the workshop
APPENDIX 4

WORKSHOP 3

The professional experts prepared workshop III by using the recommendation from workshop I and II. After a few meeting the provisional programme of workshop 3 was written as follows:

Objective In order to reach the objectives of the Professional Development Programme which state that:

"to increase capability of medical teachers in management of medical education effectively, and to increase the better attitude of medical teacher towards teaching"

The educational workshop was arranged for the medical teacher to be able to

1. state and solve the educational problems systematically.
2. interprete the objectives of medical curriculum correctly.
3. write the educational objectives of their own subject correctly and in line with the objectives of the medical curriculum.
4. select the appropriate evaluation for their own subject.

Date 16 - 20 May 1983

Place Sujinno Building

Workshop leaders:

- one from the medical educational unit of Chulalongkorn University
- one from the MESRAP
- one from the Faculty of Education, Chiang Mai University
Workshop Organizers
- Dean
- Assistant Dean in Academic affair
- Assistant Dean in Student affair
- Myself as a head of a professional development unit
- a group of workshop co-ordinator.

Participants: 34 Totally.
- 4 change agents
- 8 administrators
- 22 potential learners

Content of the Workshop

The 20 sessions of the workshop included:
- Characteristic of required medical graduates (What should be)
- Characteristic of present medical graduates (What is)
- Performance Gap and how to solve the educational problems.
- Theory of Education
- 2 sessions of educational objectives.
- Task analysis and lesson plan
- Presentation of group's work
- Educational Media (2 sessions)
- Teaching methods (3 sessions)
- Evaluation (3 sessions)
- Small and Large group discussion (4 sessions)

Workshop analysis

The workshop was evaluated against the 6 key characteristics as the same as the first two workshops.
APPENDIX 5

PROFESSIONAL DEVELOPMENT PROGRAMME

OF

THE FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY

RATIONALE

This programme was conducted in accordance with a proposal resulting from the faculty meetings of 9/1982, 29 July 1982 and also from the workshops at Chiang Inn Hotel, dated of 16-17 September, 1982 and at Chiang Mai Hill Hotel, dated of 27-29 December, 1982. The two workshops were held in order to assess the needs of running Professional Development Programme in Faculty of Medicine, Chiang Mai University and to determine the policy and method of development of medical education. The objectives of this policy were: increasing teaching capability of medical teachers, producing medical students according to the objective of the medical curriculum 1979, and implementing as well as improving the curriculum 1979 which has been approved.

OBJECTIVES

There were objectives designed for Professional Development Programme which are listed as follows:

1. To increase a better attitudes of being a medical teacher rather than a medical practitioner.

2. To increase capability of medical teachers in order to manage the educational programme with high efficiency and retains its objectives.
ACTIVITIES

To serve the objectives of this programme, the activities were set as follows:

The main activities were
1. arranging of workshops, seminars, conferences, and meeting for the staff,
2. supporting as well as advising in organization of subjects and introducing new techniques,
3. assessment of teaching
4. supporting research activities, acquiring new knowledge, techniques and discussing of common problems.
5. setting up a medical educational unit for supply and distribution of educational material or other related services.

The suppotative Strategies

Many supportative strategies were set such as establishing the effective public relation, distribution of the workshop report to all medical teachers, promoting continuing education, and provide the welfare to organizing staff.

PERSONNEL

The personnel from registrar office and a group of volunteered medical teachers were required for running the Professional Development Unit.
BUDGET

The programme must be fully supported by the Faculty.

WORKPLAN

1. Arrange workshops twice a year or otherwise depending on the need of medical teachers and facility available.

2. Arranging seminars or conferences twice a year or otherwise depending on the feasibility.

3. Help analysing of test items and building up a test item bank.

4. Produce textbooks, leaflets or newsletters.

5. Retain educational information so that a further development can be made.

6. Share information or resources with medical educational units of other universities.
APPENDIX 6

PROCEDURES FOR ORGANIZATION OF WORKSHOP

Since there were many groups of people and also many tasks involved in planning, conducting, and evaluating the workshop, the procedures for organization of workshop can be classified into two dimensions. First, looking at the nature of the tasks, it can be divided into two subtasks—the academic and the managerial tasks. Second, looking at the group of people involved in the workshop, it can be further classified the tasks into two subtasks—those carried out by the people responsible for the organization of the workshop and those carried out by the participants or the people who attended the workshop.

Nature of the Tasks

Considering the nature of the tasks, two tasks can be explained more as follows:

The academic tasks involved in planning and conducting the workshop are directly related to the success of the workshop. It is possible to classify academic tasks into four major types (Educational Handbook for Health Personnel, 1981) which are:

1. deciding on the objectives;
2. selecting learning experiences that will contribute to the objectives;
3. organizing the learning experiences to maximise their curative effect; and
4. evaluating the effectiveness of the educational programme in attaining its objectives through appraising the educational progress of the participants.

As stated before, the academic task was very important to the success of the workshop. Both organizer and participant were needed to perform their own tasks in the workshop.

The managerial tasks seemed to indirectly affect the success of the workshop. These were carried out by both the people responsible for the organization of the workshop (organizers) and the people who attended the workshop (participants). However, most of the tasks were prepared by the organizers before, during and after the workshop.

The Group of People Involving the Workshop

These people can be divided into 4 groups, and each group carried out the following tasks:

People responsible for organization of the workshop The tasks involved can be classified into three tasks — for the task force and workshop coordinator, for the workshop coordinator, and for the task force. Each step was sequentially arranged as follows:

1. for task force and workshop coordinator responsible for administration This task includes:
   1.1 The Dean negotiates with the task force for a particular workshop according to the topic and in consultation with the group appointed the workshop convener.
1.2 The Dean and the task force select the appropriate place for running the workshop. The coordinator arranges the booking of the selected place for all participants and prepares a workshop master file for all correspondence, handout material, etc.

1.3 The task force writes workshop objectives and submits them to the Dean, together with suggested criteria for selection of participants. It is imperative that this be done at the earliest possible opportunity.

1.4 The Dean approves objectives and selection criteria.

1.5 The task force selects the participants by selected criteria and sends their names to the workshop coordinator for preparing the list and letters of invitation.

1.6 The task force meets to discuss a general programme outline for the workshop. This may include consideration of:
   a) choice of local consultants and session leaders;
   b) outline of evaluation plan;
   c) decision as to whether a preworkshop questionnaire is needed; discussion of expectations, background and special needs (e.g. religious, dietary) which will be required;
   d) determine time for initial meeting with coordinator.

1.7 Task force and coordinator meet to develop a schedule of regular meetings for workshop planning. Each meeting should cover administrative as well as academic aspects of the planning and may include consideration of:
a) social programme, which forms a component of the information necessary for preparation of the Information Bulletin for participants;
b) consideration of budget items;
c) role definition of task force and coordinator, and agreement on communication channels that should be established between them before, during and after the workshop;
d) outline of administrative programme Coordinator intends to undertake before and during the workshop;
e) discussion of pre-workshop questionnaire if required.

At this meeting the coordinator provides background information that will help the task force make decisions, e.g. details of items necessary for inclusion in Information Bulletin, a "sample budget", a checklist of equipment for workshops, and any other information that helps the task force ascertain the resources available within the Faculty, and details of past social programmes.

1.8 The coordinator drafts the Information Bulletin to be referred to the task force for emendation when further clarification of workshop programme is reached.

Pre-workshop questionnaire is finalized and sent with Information Bulletin to participants.

1.9 Task force proceeds with regular planning meetings, between which convener liaises with coordinator on progress of administrative aspects.
2 for workshop coordinator.

2.1 Before the Workshop: More than one month in advance (ideally as soon as possible) coordinator proceeds to organize the workshop as follows:

a) Prepares a check list of materials, handouts, books and equipment necessary to the workshop in conjunction with the task force.

b) Prepares budget in close negotiation with convener and administrative officer for approval by the Dean and the Rector.

c) Make arrangements for the administrative support staff.

d) Arranges social programme as devised by task force:
   - determines (with task force) additional guest lists for social events; the invitation list for the opening function in particular should be approved by the Dean

 e) Notifies associates of the workshop, perhaps through items in the newsletter.

f) With assistance from the clerk, begins ordering of materials and stationery.

g) Arranges embossing of workshop folders.

2.2 During week preceeding workshop:

a) Coordinator prepares participants' workshop folders to be handed out at time of registration.

b) Meets with task force to finalize arrangements, e.g. greeting of participants as they arrive at accommodation.
c) Ensures that workshop accommodation is ready, setting up flip charts, laying out stationery and checking that equipment is available and in working order.

2.3 Procedure on-side at workshop:

At commencement of workshop:

a) Registration of participants, including signing of visitors' book;

b) Distribution of folders and information.

During the workshop the coordinator with the help of the workshop officer assistant does the following:

a) oversees arrangements and supplies for lunches and coffee break, ensuring that the facilities are kept tidy;

b) ensures that the master file and extra copies of handout material are being kept up to date;

c) ensures that supplies of pens, butcher's paper, etc are replenished as required in the discussion rooms;

d) ensures that audio-video tapes are adequately labelled;

e) codes butcher's paper if necessary;

f) oversees secretarial work flow;

g) prepares certificates of attendance for handing to participants at conclusion of workshop;

h) notes for future workshops any suggestions for improved procedures.

2.4 After workshop has concluded:

a) Ensures that accommodation used for workshop is returned to normal state.

b) Writes thank you letters to all those who have assisted
in the running of the workshop.

c) Checks all accounts and passes to Administrative Officer to arrange payment.
d) Sends final workshop documentation to participants as required.
e) Completes master file.
f) Modifies "Procedure for Organization of Workshops" as result of experience gained so that the document is entirely up to date.

3 For Task Force.

Responsibilities following workshop:

a) preparation of workshop forum.
b) post-workshop evaluation.
c) Follow-up of progress in implementing projects.

4. For the participants or people who attended the workshop:

The participants were expected to perform their own tasks such as to be physically present at all sessions of the workshop, to participate in both academic and social activities which were arranged for them, and also to give feedback or to do self evaluation when needed. The expected performance of the participants was observed and evaluated by the participants themselves, workshop co-ordinator, and myself as a head of professional development programme and a head of task force. These were included in setting up of criteria used to test the validity and efficiency of the characteristics of the participatory based approach in this study.