THE UNIVERSITY OF HULL

DEVELOPMENTS IN THE JORDANIAN SYSTEM OF EDUCATION WITH SPECIAL REFERENCE TO IN-SERVICE EDUCATION AND TRAINING OF TEACHERS

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INTRODUCTION

The research leading to this thesis fills a gap in the examination and literature of the Jordanian education system. It has been undertaken for that purpose, and also in coincidence with recent major reforms of education in Jordan.

Before moving into an empirical study of certain aspects of the in-service education and training of teachers, the writer examines a number of important contextual and analytical areas relating to the field in question. So, after setting out the problem in question, there is an extensive but selective review of relevant literature. This includes documentation from a wide variety of national origins and hopes to provide a theoretical basis for the original fieldwork undertaken in Jordan and reported in later chapters.

Clearly, as elsewhere, the socio-economic context of education in Jordan is important to understand, and especially so in a country with few natural resources and a consequent heightened significance for the quality of its human resources. Likewise, the historical development of the total system of education within which the teacher education sector resides has to be analysed and discussed. This forms Chapter Four. After this, the sector in question is examined in some detail.

The sixth chapter comprises a discussion of the design and methodology of the empirical dimension of the thesis, dealing with such aspects as validity, reliability, sampling and other technical matters. This is followed by two chapters of empirical results, their presentation and analysis. This part of the thesis derives from field visits made to Jordan by the writer and is central to the research. The design and analysis were carried out with the supervision and advice of the Computer Centre.

The thesis concludes with a number of appendices, plus an extensive bibliography.

CHAPTER ONE

THE PROBLEM IN QUESTION

1. 1 Preamble

Education is probably one of the greatest achievements man has devised. It is a mode of diffusion of knowledge which is an essential part of any plan to move any society to new heights. [1] Progressive and dynamic societies have clearly recognised education as the most vital medium for the well-being and progress of citizens and state, as Kandel pointed out:

> "People and nations are as they are because of the educative process" [2]

Education has proved itself to be a major instrument for social and economic development. It utilises the national heritage to meet present challenges in order to promote growth and development. According to Perry:

> "Through education, men acquire knowledge of the civilisation of the past, are enabled to take part in the civilisation of the present and to make the civilisation of the future...." [3]

The importance of education is deep-rooted in the life of Jordanians, and has long assumed a high priority. It is regarded as an instrument for economical social development. By improving

the skills and capacities of individuals, education is believed to contribute to an increase in productivity, and thus accelerate the economic development of the country as a whole. In view of its sparse endowment of water and mineral resources, Jordan invested heavily in education, and it rightly considers its labour force to be its most important asset. For example, Jordan's educated labour force helped to make it possible to achieve the rapid growth performance of 12 per cent per year during the period 1975/1980. [4] Furthermore, Jordan exports a high proportion of its labour force, particularly in the high skill occupations than any of the other labour exporting countries in the region. Although the sizeable labour force outflow has led to manpower shortages in certain occupations, it has provided significant benefits to Jordan in the form of remittances. Capital inflow from this source rose from US$ 23 million in 1974 to over one billion US$ in 1981. [5]

The major educational goal in Jordan in the past three decades has been to maximise enrollment in schools to meet the demand for education from various sectors of the population. It should be emphasised that the role of education is to respond to society's needs and that the educational system is an integral part of the society within which it operates. During that period, Jordan witnessed substantial progress in the field of education. Thousands of schools, about 50 community colleges, and four universities were established. The number of post-school students rose from 240,000 in 1955 to 863,900 in 1985, while the number of teachers increased

from 6,788 to 34,119 respectively. [6]

The ratio of student enrollment in schools to total population increased from 16.6% in 1961 to 36.7% in 1980, while the illiteracy ratio declined from 68.2% to 34%. [7] It must be noted that figures before 1967 include the 'East Bank' and 'West Bank' areas. Since 1967, the figures apply to the 'East Bank' only, since the West Bank fell under Israeli occupation and remains so at the time of writing.

The ratio of student enrollment in elementary education to the population of the age group (6-11) in 1984 reached 89.3%, in the preparatory cycle (age 12-14) about 91.1%, in the secondary cycle (15-17) about 68.2%, and in higher education (18-22) about 22%. [8] The number of university students in Jordan reached 83,000 in 1985, of which about 50,000 were studying in various universities abroad. The number of students studying in the community colleges in various specialities was about 33,000 in 1985. [9] This significant rise in numbers of pupils required a continuous expansion of teaching facilities. The number of schools rose from 958 to 2,022 during the period 1952-1966, and from 1,221 in the East Bank to 3,565 during the period 1966-1987. [10] During that period, the average annual growth rate in the number of students was 7%, significantly higher than the average growth of population (3.8%), and reflecting a soaring demand for education on the one hand, and successful implementation of compulsory education, as stipulated in the Education Law for 1964, on the other. In response to the increased demand, the rise in the number of teachers at rates higher than those of pupils contributed to a significant improvement

of the pupil/teacher ratio at the level from 38.4 pupils per teacher in 1952 to 25.3 pupils per teacher in 1985. [11]

The development of education in Jordan has been a continuing process. During the 1950s, the thrust in education was largely quantitative in order to provide schools for all pupils. Schools were established in any location where ten pupils were without a school, and a general examination at the end of the elementary cycle was cancelled to permit all students access to the preparatory cycle. [12] In the 1960s, the educational system witnessed several changes besides its quantitative expansion. The implementation of Education Act No.16 of 1964 established the legislative foundation for the educational philosophy and the organisational pattern for educational administration. As a result, the compulsory phase was expanded to nine years, and text books were nationalised and distributed free of charge for the compulsory cycle. Diversification in secondary education was introduced and new curricula and text books were designed to reflect the new philosophy of education. [13] During the 1970s, fundamental structural changes occurred in the educational process to make it more responsive to development requirements. The diversification of secondary vocational education was accelerated and new comprehensive schools and trade training centres were established. Life-long education was emphasised through the evening centres and home study programmes. [14] In the area of teacher-training, a number of colleges were established, in addition to an 'Educational

Qualification Centre' which was founded in 1970 for the purpose of 'on-the-job' training for unqualified teachers. [15]

Having attained high enrollment of school-age children in the compulsory stage during the 1970s, attention has shifted from quantity to quality in the 1980s. The broad social change Jordan has experienced produced various economic and social problems and challenges, and generated a range of individual and social needs. Officials and educationists in Jordan believe that education is a vital and changing process, and so the characteristics of the system should be capable of accommodating such problems as the vast expansion in compulsory and secondary education which led to deterioration of quality of education in order to improve the inputs of the educational process and develop its activities. To succeed in facing these problems, the education system requires a comprehensive and ongoing development trend that can cope with changes of inputs and outputs.

The educational system in Jordan has been subject to continuous evaluation and review in order to be developed quantitatively and qualitatively to meet the changing needs of the society. A special conference "The Educational Process in a Changing Jordanian Society" was held in Amman in 1980 to review the educational system. The conference emphasised the responsibilities of all formal and non-formal bodies (public and private sectors) to co-operate in achieving improvement in the quality of education. [16] New policies and procedures were introduced, steps were taken towards the decen-

tralisation of administration in the Ministry of Education, and attempts were made to link education with real life by increasing the efficiency and vitality of vocational education in the secondary cycle. But change is difficult to implement and after four years of trying to achieve the goal of improving the quality of education, problems and constraints were still emerging: unsuitable schools buildings; unqualified teachers; over theoretical curricula; school graduates who were neither ready for college, nor for work; these were some examples.[17] In spite of the previous reforms, the education system in Jordan was not fully achieving its aims.

Acknowledging the need for change to deal with the problems, the Royal Address delivered on the Anniversary of Independence in 1984, included the following passage:

> "In our determination to preserve and update our culture and identity to cope with future challenges, we trust our educational institution to launch the qualitative innovation in a dynamic educational process to promote analysis, pragmatism and objectivity in its activities, and to introduce change in its content in order to promote teaching/learning situations, depth in knowledge, criticism in learning (open-mindedness) in discussion; rather than preserving the educational process in its static form, shallow knowledge, passive and narrow-mindedness"[18]

Looking upon education as a national concern and as a dynamic process

necessary for the country's economic and social development, the King pressed the subject further and called for launching a national programme to reassess the educational process as a whole. Addressing the National Assembly in 1985, the King pointed out that:

> "It is necessary to develop the educational system to cope with the rapid change and development in the field of knowledge and sciences, and to adapt with the cultural and social changes and to bridge the gap between the social and individual needs" [19]

Accordingly, a national team was established to undertake a comprehensive evaluation of the educational system. The evaluation plan led to the opening of the National Conference for Educational Development in 1987 in Amman. The conference formulated a comprehensive set of recommendations to reform the education system and various committees were established to translate the recommendations into action plans to be implemented over the coming decade. Details of the recommendations and plans are dealt with in Chapter Four below.

1.2 Educational Change and Teacher Education

To cope with accelerating change and to meet social and individual needs, educationists in Jordan are taking a more critical look at the role of education within the context of overall national development. The new comprehensive development plans emphasise the relationship between education and development, thus making the

development of education one of the major activities that contribute to achieving the overall developments requirements and objectives of the country.

New concepts of education have evolved and new national goals have been formulated which cannot be achieved by an educational system that has grown up in response to earlier objectives. The Ministry of Education is now implementing new policies and introducing change within the educational system in a manner that has not been seen before. Teachers have been asked to adjust to the new directions that education is being asked to take, and it is well accepted that the quality of the teaching force is a vital factor to the achievement of such aims. Educationists and officials believe that teachers in Jordan need assistance to help them to adapt to their new roles. This can only be achieved through improved in-service education and training.

The last thirty years has been characterised by rapid growth in science and technology, which resulted in a wide dissemination of information, knowledge and new ideas. The new technological developments (e.g. satellites, computers, organ transplants) are altering our lives in a significant way. Never before has progress been so rapid and countries all over the world are trying to cope with change in part by modifying their educational systems. Education has an essential contribution to make in helping people to cope with change and to prepare for their occupations and careers.[20] Change is not new, it is inevitable, and human beings,

unlike other species, will continue to change as knowledge changes. The main problem is how to meet change and to develop new ways in which individuals and institutions can cope with it. The main answer is continuous learning; that is, to say, 'lifelong education'.[21]

Schools by their purpose and nature are deeply involved in and affected by changes in the society. Their teachers and pupils are members of the society and bring with them its beliefs, values and attitudes. In the last few decades, there have been substantial changes in the structure and organisation of schools.[22] Clearly, teacher education has to change, too.[23] One response in dealing with difficulties facing education as a result of accelerating change has been the progressive extension of teacher training. There is a common belief in almost every country that teachers should receive the maximum possible period of initial training. In the U.S.A., all States require a Bachelor's degree as the minimum qualification for entry to the profession, and some require a Master's degree.[24] In the U.K., a two-year course of initial training was extended to a three-year programme in 1960 and in 1968, the Bachelor of Education degree was introduced, based on a three or four-year course.[25] In most Western countries, authorities were turning towards a University level training for teachers.[26] In the Soviet Union, teachers receive five years of post-secondary education while in many developing countries, many primary school teachers receive only four or five years of secondary education.[27] In one African country, the majority of teachers had got no

further qualifications than the level for which they were preparing their pupils. [28] The challenge to the developing countries is great where the demand for qualified teachers is exceeding the output of training institutions.

In Jordan, the Act of Education No.16 of 1964, requires a two-year Diploma of Post-Secondary Education for primary school teachers and a first degree, plus one-year Post-Graduate Diploma of Education for secondary school teachers. Nonetheless, the Ministry of Education was forced to recruit large numbers of teachers without these qualifications, due to the shortage of qualified candidates.

Teacher education systems experienced at least two decades of rapid and continuous change in many countries of the world though demographic downturns in some countries have caused a contraction since. However, while the development in teacher-training may prove to be valuable to the teaching profession and education, it is still doubtful whether any initial training can fully prepare a teacher for a life career. It has been recognised that teachers should be involved in a continual learning process throughout their careers. [29]

Teaching is stressful, hectic and imperfect. Teachers roles and careers are becoming increasingly difficult to define as the profession declines in status and as opportunities for promotion diminish. [30] The role of the teacher is changing and will continue

to change and in the current period of educational developments teachers occupy a contradictory position. They are frequently being portrayed as being responsible for the poor academic achievement of their pupils; for indiscipline; for the failure of the education system as a whole. At the same time, they are also being required to accept all kinds of extensions and modifications to their role, often without consultation or appreciation of the cost to teachers of the proposed role changes. Burke portrays the dilemma of the *teacher difficulty* thus:

> "The teacher is expected to be knowledgeable and skillful, even though (i) *students are diverse in capacity to learn;* (ii) school systems are variable in programmes and organisations; (iii) societal characteristics often are unpredictable; (iv) governmental controls are inflexible and (v) educational expectations of the people are unstable. Yet, in the presence of these conditions, the teacher must accomplish the goals and purposes of education" [31]

To succeed in combating these compelling forces, teachers need continuous professional development. Teacher education has expanded beyond the scope of two-four years of pre-service training, followed by thirty years of teaching. Educationists, generally, view pre-service training as the first stage in a professional career. It should be organised to prepare teachers to continue to learn from their teaching situation and to obtain maximum benefit from in-service education opportunities. Both the challenge and diffi-

culty facing teachers lie in the fact that:

> "Schools are made up of people living in particular communities at certain times within a constantly changing scene" [32]

One focus of the educational reform has been the "teacher change".

Many educationists ask under what condition does it occur? How it may be encouraged and what factors discourage its progress? The literature reveals that the individual behaviour within a social system is determined by the role which is prescribed by that system, and the most significant barrier to institutional change is the resistance which persons express when such changes seem threatening to roles in which they have developed considerable security. It is now commonly agreed that the effective implementation of change at school level necessitates a school-wide focus. There is a need for educational change efforts to operate at both system and personal levels, and involve both task and process elements. [33] This implies that the role of the teachers and in-service education in school change is not secondary. Bolam, [34] argues that teachers within their schools are the most effective vehicle for improving the educational process, while Eraut believes INSET is arising from the situation in which the rationale is based on the need for the educational system to keep abreast of, if not anticipate, changes in wider society and for schools to relate to changes in their local community. He argues:

> "Because education is an inherently difficult and complex process and because circumstances are constantly changing, problems will inevitably arise in individual schools and classrooms. These problems are best diagnosed by the teachers most closely concerned because only they know the students and the context sufficiently well. INSET activities should be closely geared to the study and solution of these problems" [35]

Many countries, pushed by declining enrollment and tightening budgets, have recently devoted increasing attention to INSET, as did other developing countries with higher rates of enrollment. There was a significant upsurge of interest in INSET during the 1970s and early 1980s, with many national and international conferences which have served to stimulate debate and provide platforms for new ideas.

The change of attitudes towards INSET is evident in the literature of teacher education. [36] Many educationists today argue that pre-service training is often too theoretical and reflects more the personal views of the faculty members, rather than dealing with the practical situation that arises in the classroom which must be faced by the teacher. Borg, [37] emphasised that pre-service training suffered mainly from the following deficiencies:

i) emphasis is usually on telling rather than doing and instruction is largely divorced from actual classroom behaviour;

ii) instruction is general rather than specific and most teacher-training programmes deal with vague generalities;

iii) effective models are not provided;

iv) effective feedback is not provided.

Some African educationists point out that, pre-service courses are run on more traditional lines and their prescribed syllabuses and procedures are not readily amenable to change. So, INSET organisers find themselves in the position of having to be more practical. [38]

Stiles, et al, [39] listed four reasons for the necessity of continuing professional development for teachers:

i) the low level of preparation with which teachers begin;
ii) the differences in educational programmes that prevail from school to school;
iii) the multiplicity of unsolved professional problems that confront teachers;
iv) the impact of new knowledge upon individual courses and school curricula.

Advocates of in-service education and training argue that, even in countries with a teacher surplus, there is an opportunity to focus on quality rather than quantity. The innovations that have been introduced in some countries as a result of curriculum development have left many teachers ill-equipped to implement them without further training, especially in subjects like modern mathematics and science. A report of the meeting of international experts in mathematics in Hamburg, in 1968, pointed out clearly that the initial training of mathematics teachers is, at best, only a basis for future work. The report pointed out the importance of INSET and professional growth to the changing role of teachers:

> "The work of the teacher of mathematics has undergone a complete revolution during the last decade. In this technological age, the demands of science and industry, and the world in general, have fallen very heavily on the teacher of mathematics. This bewildered teacher has found that what he has been teaching with satisfaction for many years, what he himself learned in his own university days, has become traditional and out modelled" [40]

Given the complexity of the teaching task in a rapidly changing world, it is evident that many teachers are poorly prepared for their tasks, even in the developed countries. A survey conducted by the National Educational Association in U.S.A, revealed that large numbers of classroom teachers had received too little preparation in using instructional materials and equipment. Brown, [41] described this as a serious deficiency in a professionally important area of the educational process. If this was the case in one of the most developed countries, it is easy to imagine the situation in the developing countries. UNESCO summarised the situation as follows:

> "As far as the developing countries are concerned, the demand for teachers has been so tremendous that the hastily established schools have had to accept any one at all with reasonably high level of intelligence, merely in order to keep the children occupied" [42]

All such unqualified teachers must receive some form of training, and this means that a variety of emergency solutions have had to be adopted. When INSET is provided for teachers, it is done so on the

assumption that it will help them to improve their classroom work. It may help teachers to meet changes in curriculum, changes in school organisation, and teaching methods and personal changes due to progress in their careers. INSET has the advantage that it can be made available at the time when it is needed, and can therefore be quickly adopted to changing conditions and specific needs. It is certain that, in the technological age, countries can no longer wait until a whole generation of teachers has died out before introducing new innovations in the classroom. There is no other solution than to put into operation the concept of lifelong education for teachers which can be accomplished through INSET. [43] Lord James, [44] emphasised that it is only through INSET that the gulf between advancing knowledge and practice can be bridged. The rapid expansion of knowledge and its effects on curricula and teaching methods, are major factors in justifying the need for INSET to support teachers and schools in coping with change effectively. According to UNESCO: [45]

> "INSET should be considered more than an emergency solution. It should be considered as furnishing an additional method of training teachers. As an alternative system for opening up the teaching profession to adults and should not be regarded as an inferior method in relation to traditional norms."

Having seen the scene in international perspective, the particular

variant of the problem in question, that is to say the case of Jordan, now needs to be introduced.

1.3 The Problem in Question

After succeeding in spreading education to every part of Jordan, the Ministry of Education is now trying to improve the quality. This sector of national life and formal provision has been given continuous support by political and public leadership over a lengthy period, and has acquired a national priority in the development projects and future policies of the country. By 1988, around 37% of the total population were enrolled in formal institutions and schools, and the number of teachers had reached 42,533. [46] In spite of the considerable output of community colleges and universities in Jordan and abroad, the number of qualified teachers fell short of the demand, and the Ministry of Education was obliged to employ a large number of unqualified persons to teach in the compulsory and secondary stages.

The problem of the shortage in qualified teachers expressed itself, forcefully, in all the national development plans. The first national five-year plan for economic and social development (1976-1980) stated:

> "Despite the expansion in the field of teacher training and in-service training programmes during the last years, the percentage of unqualified teachers teaching at the compulsory level reached 65% in the academic year 1974/75" [47]

In the second national five-year plan (1981-1985), the shortage of qualified teachers at all levels was ranked as the first educational problem to be dealt with. The plan estimated that, in 1979/1980, 32% of teachers working at the compulsory level, and 92% of those at the secondary level were 'not qualified' by the standards stipulated in the Law of Education No.16 of 1964. [48]

Despite all previous efforts, the third five-year plan (1986-1990) pointed out that, fully qualified teachers constituted only 8% of academic secondary school staff, and 4% in vocational secondary schools. [49] However, with the introduction of new reforms to improve the quality of education, the minimum requirement for teaching in the compulsory stage was raised to the first university degree, or its equivalent, according to the new Law of Education of 1988. This means that the Ministry is required to upgrade all the teachers who hold community college diplomas (around 20,000) to B.A. equivalency, through in-service certification programmes. [50] The Ministry is also expected to provide INSET activities to enable teachers to deal with the new curricula and text books. Many educationists in Jordan feel that raising the requirements for teaching is a step in the right direction, despite the shortage of qualified teachers.

The demand for qualified teachers is increasing in all the developing countries. Many countries, including Jordan, raised the school leaving age and a large percentage of students remained

in schools after the period of compulsory education. Gould, [51] states that some countries facing the problem lowered the standards of admission to teaching to ensure an enlarged supply of teachers. But Yates, [52] notes that successful teacher education depends on the human qualities of the prospective student-teachers selected. He stresses that it is desirable to raise the entrance requirements for prospective teachers, despite the shortage of qualified teachers.

Jordan is apparently faced with a quantity-quality dilemma which Husen, [53] sees as a problem of educational expansion in the developing countries. Mandi, [54] also warns that the danger of development to the detriment of quality is particularly great in periods when the quantitative increase in the number of pupils is on the agenda. Educational authorities are not only faced with the problem of producing enough well-qualified teachers to satisfy the system, but must also raise the professional level of teachers already employed in order to raise the quality of education provided in schools. Many educationists argue that the quality of education provided in schools is largely determined by the quality of teachers. Baker, [55] agrees and advocates a longer period of training and retraining for teachers to enable them to change their perceptions towards desirable lines. She points out:

> "Schools must reallocate resources so that improved pupil performance becomes a reality. They will need to give priority to those resources that have the greatest impact on students. Because teachers are not only the largest resource the school possesses, but also the most important one, an emphasis upon their training and retraining is crucial"

McGinley, [56] suggests that, to achieve high performance among pupils, it is not enough to employ teachers of high calibre, but he stresses also the importance of providing them with staff development programmes. These views tend not only to emphasise the importance of high quality teacher-training, but also have gone further to stress the importance of retraining and staff development. In order to face the problem of quality and quantity, in-service teacher education and training become one of the major concerns of the Jordanian Ministry of Education in recent years. In-service education and training programmes have been used extensively for the initial training of unqualified teachers, and the retraining of the lowly qualified teachers. This has enabled the Ministry of Education to minimise the percentage of the unqualified teachers in the compulsory cycle and to help other teachers in coping with changing situations in schools. With the introduction of new reforms and innovations in the educational system, the Ministry of Education is facing new challenges and adopting new policies concerning education in general and in-service education and training in particular.

Unfortunately, there is a lack of organised research on INSET in Jordan, as is the case in many developing countries. No major studies have been conducted to examine the perceptions of teachers and educators at different levels towards INSET activities.

1.4 The Objectives of this Study

This is a descriptive and empirical study of the system of education and the professional development of teachers in Jordan. The major objectives of it are to examine the education system, in general, and the INSET activities in Jordan, in particular.

According to Van Dalen, [57] description of the phenomena in which any programme or system works, is necessary before progress can be made in solving problems. So this study will attempt to:

i) describe the main developments in the education system to see if the developments were able to meet the need for change;

ii) describe the existing INSET practices in Jordan;

iii) identify and compare the similarities and differences between the perceptions of compulsory school teachers, secondary school teachers and educators, towards INSET based on the following selected variables of sex, educational background, teaching experience and location;

iv) develop some guidelines for the future development of INSET within the education system.

The guidelines are to be based on the review of related literature on INSET, and the findings of the survey of the perceptions of teachers and educators. It is anticipated that the results of the survey will make it possible to support existing INSET activities, if satisfactory, and to recommend changes and improvements, where necessary.

1.5 Basic Questions

The researcher is expecting the study to answer the following basic questions:

i) To what extent was the education system developed to meet the needs of the society in Jordan?

ii) Are the objectives of the main INSET programmes designed to meet the needs of teachers and schools?

iii) Is there a difference between the perceptions of teachers and teachers' trainers towards INSET activities?

iv) Is there a difference between the perceptions of male and female teachers, compulsory and secondary school teachers, teachers with short teaching experience and teachers with long teaching experience, towards certain components of INSET activities?

v) Do location, sex, years of teaching experience, or educational qualifications influence teachers' perceptions on INSET?

vi) Are there factors which can be identified as contributing to satisfaction or dissatisfaction with INSET activities for the majority of teachers?

1.6 The Need for the Study and its Significance

The academic and pedagogical level of classroom teachers, especially at the compulsory stage, had deteriorated and their training programmes were poor. As a result, standards of education in schools had been weakened, and teachers became incapable of keeping abreast of modern trends in education and incapable also of absorbing and implementing the educational development programmes formulated by their government. The situation led to a pressing demand for reform and consequently, a national conference for education development was held in 1987, and agreed that the new policy should have, as its major strength, a better qualified and more highly-trained teaching force.

The significance of the study stems, among other things, from its timing since it coincides with the introduction of sweeping reforms in the education system. A need to investigate the provision of INSET activities is manifest at the present time of reform, in view of the fact that no attempt has previously been made to examine teachers' perceptions at compulsory and secondary levels towards INSET. It is hoped that the results of this study will provide the decision-makers and organisers of INSET with valuable feedback. Arab in-service teacher education projects might benefit from this study as it sheds light on the content, organisation, and teachers' perceptions of INSET programmes in Jordan, and provides data for further research on the subject.

1.7 Limitations of the Study

It is important to introduce a number of qualifications at this stage:

i) The study is subject to all the limitations inherent in the use of a questionnaire;

ii) The study makes no attempt to evaluate the effectiveness of INSET in Jordan. It is an attempt to describe, by means of a measuring instrument, preferences and perceptions of teachers relating to selected aspects of INSET;

iii) The study is limited to teachers who work for the Ministry of Education. Teachers who work in the private sector are excluded;

iv) The findings of this study may not necessarily be applicable to teachers, other than those working in the Ministry of Education, and are involved or practised INSET activities.

1.8 Definitions of Selected Terms

For the purpose of this thesis, the following definitions apply:

i) Attitude: a predisposition of a group or individual to react to an object in a specific way. This reaction includes cognitive, conative and affective elements. [58]

ii) Conference: a formal in-service activity sponsored at the local, regional, national or international level, by an organisation. The conference relies primarily on lectures, with some discussions. Attendance is frequently unlimited and two or three days probably constitutes a practical upper limit. [59]

iii) Demonstration: a teaching activity presented by skilled or experienced educators for the purpose of illustrating educational materials, procedures or techniques in connection with INSET.

iv) Innovations: those attempts at change in an educational system which are consciously and purposefully directed with the aim of improving the present system. [60]

v) In-Service Education and Training (INSET): The wide range of activities which is mainly designed to improve the professional performance of those who work in schools. This means that INSET may include formal, or informal training,from courses leading to degrees to participation in short workshops or in a day conference.

vi) Perceptions: in its broad sense means awareness or judgement, and it is proposed that perceptions are influenced by past experience and current interests. According to Bigge, et al,[61] perceptions are not only what one senses and feels about a subject, but also what one is inclined to do about it.

vii) Seminars: sessions or short courses with small enrollment, and with a primary emphasis on discussion.

viii) Workshop: an in-service activity designed to develop or demonstrate specific skills, concepts or instructional materials, for direct application to the classroom situation.

. . . . . .

It is hoped that this first chapter has succeeded in establishing the nature of the problem to be examined further, and to providing some introductory aspects of context. It is now necessary to move into a review of selected related literature in respect of the In-Service Education and Training of Teachers, and then of the socio-economic context of Jordan. These themes are dealt with in Chapters Two and Three, respectively.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The literature on INSET is abundant, However, it appears to be dispersed. In 1976, Nicholson, et al, [1] reviewed more than two thousand books, periodicals and published papers that had been written and published, mainly in the U.S.A, since 1957. In more recent years, the literature had further increased dramatically and, as Wells [2] rightly points out, the vastness of INSET makes the task of reviewing the literature on the subject a difficult one. Yet, the researcher of INSET soon discovers two generalisations that, with a few exceptions, may apply to the literature of the field:

i) very little in the way of hard data on the subject is available;

ii) much of what exists is not very useful. [3]

Another characteristic of the literature is the over-emphasis on the descriptive "what" of INSET programmes at the apparent expense of the more substantive "why" or "how" questions. [4] The literature on INSET outside the U.S.A. is both scant and lacking substance, and it has been observed that it quite resembles the state of INSET itself. [5] It is beyond the scope of this study to review all that has been written about INSET and its different components. However,

the following areas are appropriate for the purposes of this study and will be dealt with:

i) definitions of INSET;

ii) purpose and importance of INSET;

iii) providers of INSET;

iv) studies in INSET;

v) teachers' perceptions surveys;

vi) effectiveness of INSET.

2.2 Definitions of INSET

While in-service education is increasingly recognised as an important part of teacher education, there seems to be a difference of opinions concerning its definitions and functions. Educationists view INSET in different ways and thus use different terms: 'In-Service Education', In-Service Training', In-Service Education and Training', 'Staff Development', 'Continuing Education' and 'Professional Development' are some examples. Edelfelt, et al, use the term 'In-Service Education' as a synonym for the other terms when they define it:

> "In-service education of teachers (or staff development, continuing education, professional development) is defined as any professional development activity that a teacher undertakes, singly or with other teachers, after receiving his or her initial teaching certificate, and after beginning professional practice."[6]

Similarities in definition of the terms 'In-Service Education', 'In-Service Training' and 'Staff Development' are found in the literature, yet some regard 'In-Service Education' as one primary aspect of 'Staff Development'.[7] Dillon,[8] agrees that the term 'Staff Development' is more comprehensive than 'In-Service Education' and warns of confusion resulting from the use of different terms. The terms 'In-Service Training' and 'In-Service Education' are frequently used interchangeably, but according to Henderson,[9] there is sometimes a conflict between the two terms, with more recent educational literature showing preference for the latter. However, in the United Kingdom, both phrases are combined, and it is now largely agreed to use the phrase 'In-Service Education and Training' (INSET).[10]

For the purpose of this study, the writer will use the term INSET in a synonymous manner with the terms: 'Staff Development', 'Continuing Education' and 'Professional Development'. The term INSET in itself seems to mean quite different things to different people. Taylor,[11] states that INSET is not easy to describe or quantify, and that there is no agreed definition internationally. Bolam,[12] agrees that there is still a need to clarify the definition of INSET , and argues that INSET includes a whole range of components and aims. Harris,[13] refers to the multiplicity of meanings and functions by stating that INSET is defined differently by different people, while a comparison of the definitions of INSET indicate the term is changing meaning.[14]

In the fifty-sixth year book of the National Society for the Study of Education, which is considered as a milestone publication on INSET, Hass [15] maintains that In-Service Education includes all activities engaged in by professional personnel during their service which is designed to contribute to improvement on the job. A quick analysis of this definition shows that it answers four questions:

i) what? - all activities.
ii) whom? - by the professional personnel.
iii) when? - during their service.
iv) why? - to contribute to improvement on the job.

Eighteen years later, the National Society for the Study of Education, in its 1975 year book entitled Teacher Education, offered a different definition of INSET, provided by Cogan:

> "In-service education of teachers is commonly understood to include the collegiate and school-based programmes of professional study and work in which the teacher is involved after he has been certified and employed." [16]

Several differences with the earlier definition are clear. The content, or "what" of INSET, has been narrowed from "all activities", to "programmes of professional study and work". This change would include most types of INSET, but would exclude some activities such as educational travel or cultural experiences.

A second difference is that the "who" is restricted from professional personnel" in the first definition to "teachers" in the second, and that may imply that supervisors and administrators have been dropped from consideration. The "why" of INSET is omitted from Cogan's definition to make the term broad enough to include other purposes beside the improvement of classroom performance, such as personal fulfilment and educational advancement. In any case, INSET can be defined either broadly or narrowly. Harris, et al, in their book In-Service Education: A Guide to Better Practice, state:

> "Broadly defined, in-service education must include all activities aimed at the improvement of professional staff members. Since this conception is too broad to be useful for the purpose of this book, however, we are defining in-service education as planned activities for the instructional improvement of professional staff members." [17]

They explain that INSET is a goal-directed activity concerned with changes in individuals and organisational systems, and achieved through changes in people rather than in rules, structures, function or physical environment. [18] They developed a conceptual framework from the following:

i) in-service education is a process for change;

ii) changes through in-service education take place in an organisational context;

iii) in-service education is a process for planned change;

iv) in-service education is one of several organisational changes and takes place through personal development. [19]

A decade later, Harris [20] described INSET as "planned and programmatic", thus narrowing the definition further, and placed the emphasis on designing learning experiences, assessing needs and evaluating.

The concept of INSET involves a dimension of continuing education. Smith, et al, [21] comment on continuing teacher education on a continuum:

> "As long as knowledge about education continues to increase and new techniques and devices are contrived, there will be something new for the teacher to learn regardless of his degree or years of experience. The continuum of preparation can therefore cover the teachers entire career....That part of the continuum that precedes certification is ordinarily referred to as pre-service training. Preparation beyond this is called "in-service training" or more recently "continuing education"."

Freidman, et al, stress the importance of continuity and planning in INSET, when they define it as:

> "A planned, co-ordinated series of activities which contribute to professional development." [22]

In the United Kingdom, the Department of Education and Science described INSET as:

> "Any activity which a teacher undertakes after he has begun to teach which is concerned with his work." [23]

Johnston, [24] introduced a more detailed definition after emphasising that INSET may take place at any time during the continuous professional life of the teacher:

> "In-service education may consist of carefully planned sustained work over a lengthy period, leading to a further qualification in the form of an advanced certificate, diploma or higher degree, it may be equally well be casual study, pursued regularly in the evenings or during vacations, and in no sense leading to measurable recognition for purposes of salary or of promotion."

Lord James of Rusholme, Chair of a major report on the education and training of teachers in England and Wales, and in respect of the third stage of his plan, states:

> "The third circle (INSET) comprehends the whole range of activities by which teachers can extend their personal education, develop their professional competence, and improve their understanding of educational principles and techniques." [25]

This definition is comprehensive rather than restrictive in scope. INSET here includes "the whole range of activities" and recognises three purposes:

i) extension of the teacher's personal education, whether or not it contributes to improvement of his performance;

ii) development of the teachers' professional competence (in the academic field or subject matter);

iii) improvement of the teachers' understanding of educational principles and techniques.

Bolam, [26] defines INSET as being:

> "those education and training activities engaged in by primary and secondary teachers and principals, following their initial professional certification and intended primarily or exclusively to improve their professional knowledge, skills and attitudes in order that they can educate children more effectively."

This is a more restricted definition which focusses upon teachers and principles, and restricts INSET to post-initial certification activities, although it should be noted that in many developing countries, INSET is often used to provide further education for unqualified teachers with no initial training, and who usually have completed only the primary or secondary stage of the formal system.

Defining terms frequently creates rather than resolves problems, but it does seem to be important to try to clarify the main features of INSET so that unnecessary confusion can be avoided. Educators

need a clear concept of INSET to enable them to design and conduct more effective programmes. [27] The purpose of comparing various definitions of INSET is not to try to find one that is correct or more widely applicable than the rest. Different writers have different purposes and each definition is correct in its own way. The main purpose is to show that there are different points of view concerning the definition of INSET and to raise the issues implicit in them.

In a comprehensive report on issues facing INSET, Nicholson et al, [28] analysed different definitions of INSET to determine what each included on:

i) When INSET happens?

ii) What constitutes INSET?

iii) Where INSET takes place?

iv) By whom INSET is given?

v) For whom INSET should be designed?

vi) Through whom INSET should be offered?

vii) Why INSET is given?

viii) How INSET is delivered?

In all the definitions, they found that INSET is taking place during the teachers' time of employment. Different definitions use different phrasing: "during service"; "after certified and employed"; "after beginning professional practice"; "after receiving initial teaching

certificate". Some definitions do not specify a time element.

As to what constitutes INSET, there are two basic approaches: comprehensive or restrictive. In respect of where INSET takes place and through whom, by whom and how it is given, the definitions are more varied. The issue of why INSET is given has more divergent answers than any other issue addressed by the definitions. The purposes of INSET and their inclusion or omission from a definition will vary according to the writer and what the definition is needed for. A workable definition of INSET is needed to reflect INSET's purposes and be broad enough to include a variety of experiences.

The concept of INSET has developed from the simple transmission of knowledge by attendance at a course, or even a single lecture, to a more sophisticated study of educational problems in their context. Many writers in the U.K. appear to broadly accept that all activities in which a teacher participates have an influence on his or her work at school, so the emphasis in the definition of INSET is placed on the increased proficiency of the teacher. Many American writers emphasise more the personal development of the teacher as an important aspect of INSET. They also adapt a wider definition of INSET to include: councellors, librarians, supervisors and principals, along with teachers in general.

2.3 The Purpose and Importance of INSET

The importance of INSET has been recognised since formal education began and Wells, [29] noted that the development of INSET parallels

the development of teacher education itself. Eraut, [30] states that national governments have been giving increasing attention to INSET recently for some of the following reasons:

i) educational practice needs to be more closely linked to national and local community needs;

ii) approaches to educational change which neglect the INSET dimension are usually unsuccessful;

iii) teachers need continuing education to keep abreast of changes in knowledge and society;

iv) there is growing concern in some countries about the quality of teaching of those who have had less basic educational training than current teachers;

v) the reduced demand for new teachers in some countries has focussed attention on those teachers who are in service;

vi) the public pressure for improved school performance.

Harris and Bessent, [31] gave four reasons for the importance of INSET:

i) pre-service preparation of professional staff members is rarely ideal and may be considered as an introduction to professional preparation;

ii) social and educational change makes current professional practices obsolete or relatively ineffective in a very short time;

iii) co-ordination and articulation of instructional practices require changes in people;

iv) morale can be stimulated and maintained through INSET.

Howey, [32] identified six categories of reasons why there is a need for INSET activities for teachers:

i) "transitional" ...as introductory activities to allow teachers to move from generalised, pre-service education to a specific role;

ii) "job specific" ...as response to typically recurring needs and problems in particular situation;

iii) "system related" ...as a response to dramatic changes in society and schools;

iv) "general professional development" ...as a means of staying current professionally without regard to apply the information to one's specific situation;

v) "career progression" ...as means of changing roles and responsibilities;

vi) "personal development" ...as a process of understanding and enhancing the individual in a professional role.

In addition to the reasons given by Howey, Hass [33] recognised a number of factors which make clear the need for INSET:

i) the continuing cultural and social changes which create need for curriculum change;

ii) pre-service education cannot adequately prepare members of public school professional staff for their responsibilities;

iii) the increase in pupil enrollment;

iv) the continuing increase in the number of teachers;

v) the continuing shortages of adequately prepared teachers;

vi) the increased need for improved school leaders.

Lord James, [34] emphasised that it is only through the growth of INSET that the gulf between advancing knowledge and practice can be bridged. He stated the following factors which make INSET so vital:

i) change in human knowledge;

ii) change in techniques of teaching;

iii) change in society;

iv) change in schools;

v) change in teachers themselves.

At present, little is done in many parts of the world to prepare teachers for such changes of function.

Some of the earliest INSET activities were very casual and arose from the professional interests of teachers who, by the second half of the nineteenth century, had begun to form local associations in the United Kingdom. Their interest in casual INSET, according to Johnston, [35] arose in part from their recognition of the need to protect their teaching methods from critical evaluation by inspectors. In the U.S.A., Post [36] examined the history of INSET during the past century and noted that, prior to 1944, INSET was viewed as a remedial process for teachers with the primary goal being to make up deficits in teacher knowledge. So the emphasis was on the acquisition of knowledge and skills thought to be important in teaching. Short summer courses were the main method of delivery. By the end of the 1930s, Colleges of Teacher Education in the U.S.A. began to develop new programmes for teacher training. The objectives of INSET began to change from upgrading the teachers with educational deficiencies to the issue of how to best serve the students enrolled in the public schools. [37] The emphasis in the U.S.A. on programmed and systematic approaches to INSET has taken place only after the second world war. The teacher shortages and the developments in technology have promoted more roles for and duties of education, and as a result increased the need for INSET. Social and economic

developments in the U.S.A. have demanded more from the educational establishments, making the need for more quality in education greater than ever. The question of teacher competency and the issue of accountability have also influenced the efforts for the professional development of school teachers and teacher education in general. [38]

The concept of professional development for teachers and administrators is a continuing process, because knowledge itself is a continuing process. Hass, [39] reinforces this point when discussing the purpose of INSET:

> "The major purpose of in-service education is to promote the continuous improvement of the total professional staff of the school system. All teachers, administrators and supervisors must constantly study in order to keep up with advances in subject matter and in theory and practice of teaching. Continuous in-service education is needed to keep the profession abreast of new knowledge and to release creative abilities."

Smith, et al, [40] comment further on the purposes of INSET from the teacher's perspective:

> "The purpose of perennial education of teachers is to increase the proficiency of teachers now employed. The roles of teachers, their prior preparation and their career aspirations vary so greatly that a programme of perennial education must serve a number of specific needs and goals. Among other goals, the

> programme should: remedy the teacher's deficiencies arising out of defects in his initial teacher training preparation, advance the teachers skills and pedagogical knowledge required for new teaching roles, advance and update the teacher's knowledge of subject matter, and train the teacher for non-tutorial positions."

A British government committee (ACTT), [41] suggested that the aims of INSET are to enable the teachers:

i) to develop their professional competence and relevant knowledge;

ii) to evaluate their own work and attitudes in conjunction with their professional colleagues in other parts of the education service;

iii) to develop criteria which would help them to assess their own teaching roles in relation to a changing society for which schools must equip their students;

iv) to advance their careers;

while Bolam, [42] distinguishes between five main purposes of INSET:

i) to improve the job performance skills of the whole school staff/or of groups of staff (e.g. a school focussed INSET programme;

ii) to improve the job performance skills of an individual teacher (e.g. an induction programme for a beginning teacher;

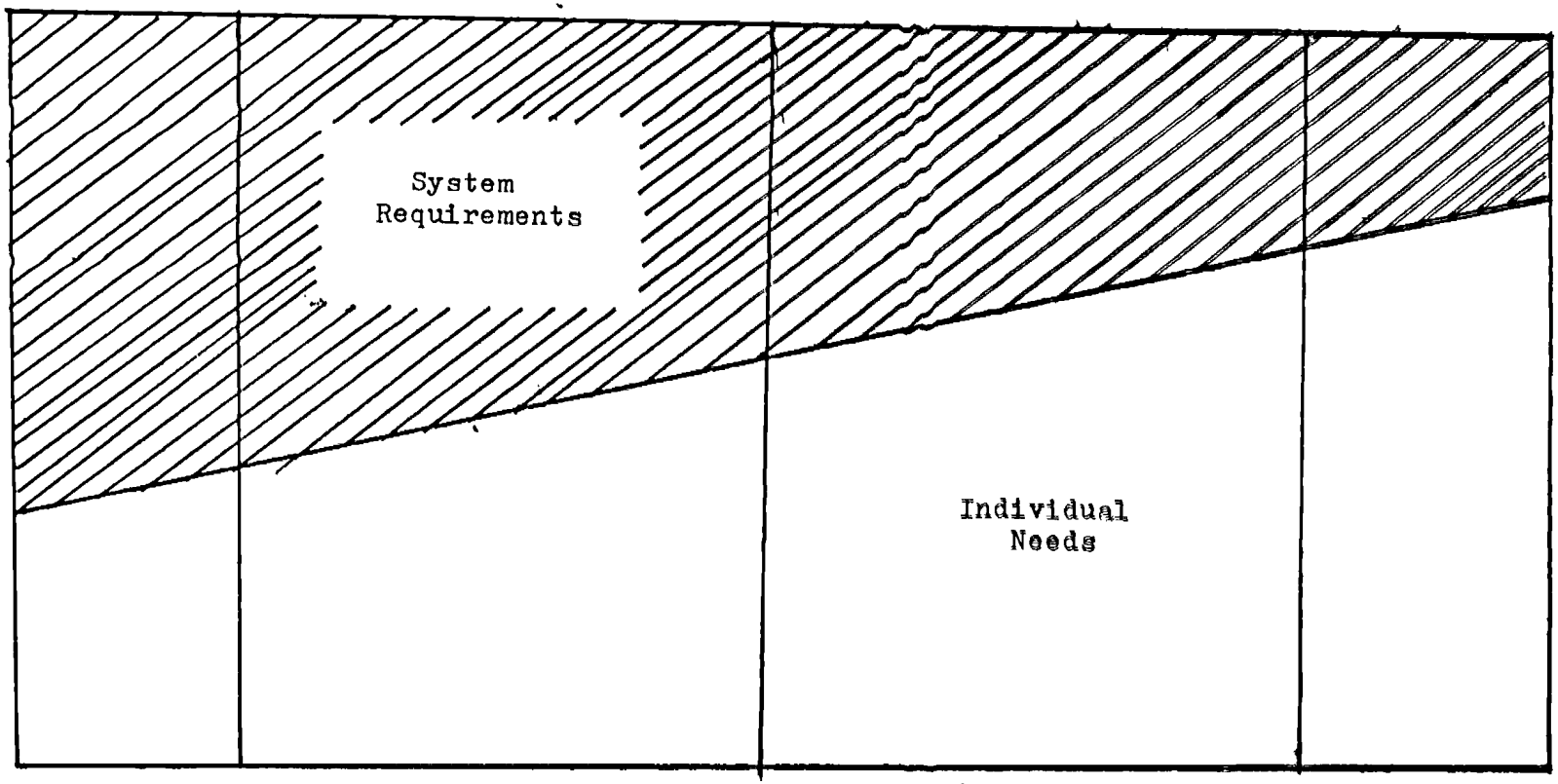
iii) to extend the experience of an individual teacher for career development or promotion purposes (e.g. a leadership training course);

iv) to develop the professional knowledge of an individual teacher (e.g. a Master's degree in educational studies;

v) to extend the personal or general education of an individual (e.g. a Master's degree course not in a subject related to teaching).

A recognised problem in all organisations is that of reconciling the potential conflict between meeting the goals of the organisational system and of satisfying the needs for self-fulfilment of the individual member of the organisation. Bolam, [43] adapted a diagram from Getzels and Guba (1957), and related it to the five purposes of INSET. In Figure 1, Purpose No.1, is seen as most likely to satisfy the requirements of the system and least likely to meet the needs of individuals, while it is the reverse case with purpose No.5. INSET programmes may be arranged for almost any purpose, and it is recognised that any INSET programme may have several purposes. The diagram does illustrate an important point, namely that a useful distinction can be made between the main and incidental purposes and outcomes of an INSET activity. Bolam, [44] in his final report on INSET for the

Figure 1: System and Individual Need Factors and the Purposes of INSET



Source: Bolam, R. (1986) Conceptualising In-Service in: Hopkins, D. "In-Service Training and Educational Development: An International Survey", London, Croom Helm, p.20.

organisation for economic co-operation and development, found that:

i) INSET is concerned with purpose 1 and 2 in all members countries, with 3 and 4 in many members countries, and with purpose 5 in few member countries;

ii) There is a preference for purposes 1 and 2 by the employing authorities when they are required to release teachers to attend INSET courses;

iii) INSET needs are complex and likely to be given different priorities by the various interested parties.

As INSET has developed, its purposes have expanded and grown in complexity. Johnston, [45] has referred to the wider purposes of INSET and presented the following list of functions:

i) extension of knowledge;

ii) regular acquisition of new knowledge;

iii) acquaintance with curricular developments;

iv) acquaintance with psychological developments;

v) acquaintance with the sociological basis of education;

vi) acquaintance with principles of organisation and administration;

vii) positive retraining;

viii) conversion courses;

ix) acquaintance with new aids;

x) introduction to new methods;

xi) understanding the new relationship between teacher and taught;

xii) development of measuring and testing techniques;

xiii) development of technology of education;

xiv) acquaintance with and participation in educational research;

xv) encouragement of international understanding and exchange.

Many views about the purposes of INSET show a breadth of vision rarely found in practice and most discussions focus almost exclusively on teacher's subject knowledge and pedagogic skills. Educationists view INSET as a continual process of change which, hopefully, will initiate positive change in teacher behaviour. Bush, [46] states that the ultimate goal of in-service education is the positive change in pupil behaviour through constructive alteration of teacher behaviour. Emphasising this point, Rubin [47] writes:

> "The only true index of the programme's quality lies in the teacher's classroom performance, and ultimately in the students learning. Surely the ultimate objective is to improve the students learning, but there are intermediate objectives at which in-service education can be aimed."

One of these intermediate objectives can be the alteration of teacher's behaviour, but it is essential always to link teacher behaviour to changes in pupil behaviour.

The aims of INSET in the developing countries may differ from those in Europe and North America. In most INSET programmes in the developing countries, emphasis is first placed on upgrading basic education and secondly, on the improvement of professional skills. [48] Bolam, [49] pointed out that in developed countries, INSET policy-makers are pre-occupied with problems caused by contraction due to the falling birth rate and the reduced demand for teachers, while in most developing countries, the reverse is true. The majority of teachers in the developed countries are qualified and have had a full programme of initial training, while in the developing countries the major task is to provide initial training for untrained teachers who are already in schools. The most important objectives of INSET in the developing countries, as summarised by Pires [50] are: to upgrade the competence of teachers, to extend their general education, and to enhance their qualifications. While Dodd, [51] describes the purposes of INSET in the developing countries as follows:

i) it is seen as a form of initial training, either as an alternative to the conventional pre-service course, or as a method of providing initial training for the untrained;

ii) it is seen as a means of upgrading the status of qualified teachers;

iii) it is seen as a means of refreshing and updating the mass of serving teachers.

In a detailed study of INSET in English-speaking Africa, Trevaskis [52] identified seven major objectives for INSET:

i) initial training for unqualified teachers;

ii) upgrading professional qualifications;

iii) implementing curriculum change;

iv) developing and evaluating curriculum materials;

v) developing professional skills;

vi) improving administration and supervision;

vii) orienting participants to new responsibilities.

In another survey conducted by the Commonwealth Secretariat [53] about INSET in Asian countries, the following purposes were suggested:

i) to provide training and professional qualifications to untrained teachers;

ii) to upgrade the qualifications of serving teachers whose original certification may have been rendered out of date by educational changes;

iii) to provide refresher and updating opportunities to familiarise teachers with modern practices in education;

iv) to promote the dissemination of educational innovation;

v) to improve the quality of educational administration at all levels;

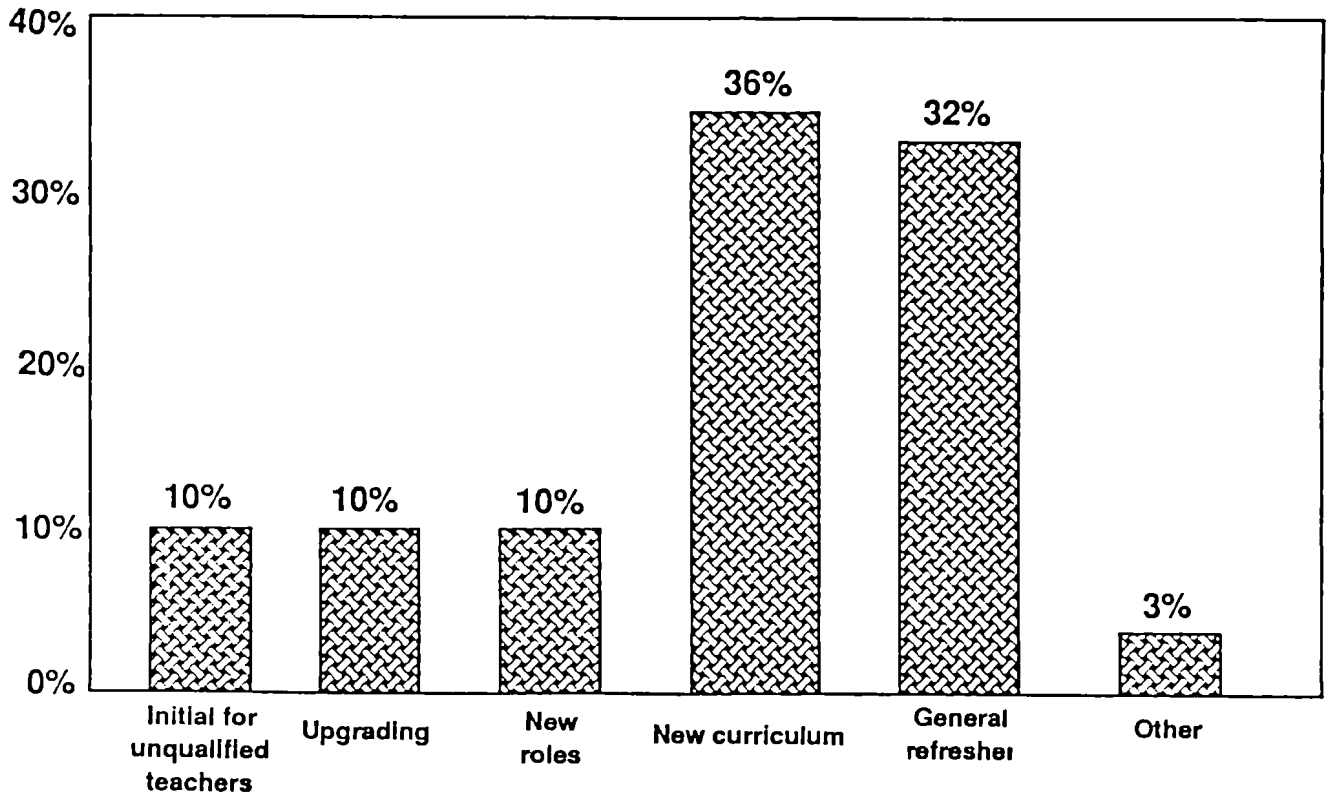
vi) to improve the quality of teacher education.

All the statements of INSET purposes to which reference has been made reflect the needs of the education systems and make little or no reference to the needs of individual teachers. Offering initial training and upgrading are considered the most important purposes of INSET in the developing countries, but in recent years, with large numbers of teachers completing their pre-service education, concern has shifted to other objectives.

In a fairly recent study of INSET of primary teachers in English-speaking Africa, edited by Greenland, [54] one hundred teachers from each country participating in the project, were asked to specify the purpose of recent INSET activities they had been involved in. INSET, for new curriculum and general refresher courses, accounted respectively for 36% and 32% of the responses. The remaining 32% were divided between initial training for unqualified teachers, upgrading courses and retraining for new roles. (See Figure 2).

In Jordan, the objectives of INSET are similar to those in other developing countries and INSET is regarded as a possible means of overcoming the problem of unqualified teachers, but with the recent changes in the education system and curricula, other objectives are

Figure 2: Purpose of Most Recent INSET Attended by Teachers



Source: Greenland, J. (Ed) (1983) In-Service Training of Primary Teachers in Africa. London, Macmillan Educational, p.69.

receiving more attention.

2.4 The Providers of INSET

A review of the literature shows that the range of courses and the variety of INSET provision are the responsibility of a number of different agencies. In most developing countries where the educational systems are centralised, the number is usually small, including: The Ministry of Education, Teachers' Colleges and the Universities as the main providers. Johnston, [55] explains that the provision of INSET courses by a national or central authority introduces the idea of compulsion. However, many developing countries, including Jordan, seek assistance from external agencies. The number and nature of these agencies involved varies considerably from country to country, and may include any from the following:

i) international agencies (UNESCO, UNICEF, OECD, Commonwealth Secretariat);

ii) foreign government agencies (e.g. USAID);

iii) foundations (e.g. Ford, Carnegie);

iv) cultural organisations (e.g. British Council).[56]

Whatever the body involved in any particular programme, in most cases the national Ministry of Education will have the final responsibility to ensure that the courses are properly organised and conducted in line with its policy. But, according to Henderson, [57] this kind of help provided from outside has not always been successful.

The picture is different in the developed countries. In Western Europe, the general picture concerning the provision of INSET, is one of expansion but in an uneven manner. There are wide variations in the extent and pattern of INSET. In some countries, the courses are compulsory (e.g. Sweden) - in others, not (e.g. Norway). Some countries provide their courses during school-time, others use the evenings and vacations, but on the whole (whether the educational system is centralised or de-centralised) both central and local organisations are involved in the provision of INSET. In the USSR, for example, the main providers for INSET are the Institutes for the improvement of qualifications, maintained by local authorities and a local inspectorate. In the U.S.A. where growing criticism of teacher education has resulted in expanding INSET more than any other country, teachers are required by law in some states to continue their formal education. In many states, a teacher's salary will increase every time he obtains a course credit, whatever the subject is, but this approach has been widely criticised by many educationists. [58] In general, the main responsibility in the U.S.A. for the provision of INSET, still rests upon local districts and state authorities.

If we look at the provision of INSET in the United Kingdom, (a country with a kind of decentralised system), we will find a large number of providers, including: DES, LEA's, Universities, Colleges of Education and Polytechnics. Cane, [59] in 1969, estimated that

there were 270 independent organisations arranging INSET courses in the U.K. In the U.S.A., the number of organisations is even higher and the discussion of the governance of INSET throughout the literature centres on which among different agencies interested in and responsible for INSET, should exert a controlling influence. Should it be the State Department of Education through regulations, or Institutes of Higher Education through degree granting programmes, or Professional Organisations through bargaining, or the School Districts through local imperative? The answers vary, but some believe that the primary responsibility must remain with the local district. [60]

A large number of providers raises the question of the role of each organisation, and raises also the need for co-operation and collaboration among these organisations. Several writers, including Watkins, [61] and Edelfelt, [62] support co-operative arrangements for INSET provision. Joyce, et al, [63] suggest that there are three primary purposes that lie behind co-operative efforts:

i) belief that involving other agencies will ultimately enhance programme quality;

ii) it is assumed that co-operation at the in-service level may result in co-operation at the pre-service level, which may decentralise teacher education;

iii) financial reasons.

Collaboration is necessary for the development of INSET programmes and according to Weaver, [64] it is not a mere co-operation or a matter of good will, but an agreed distribution of power, status and authority. There are only a few guidelines for the distribution of responsibilities among the providers which lead to over-provision of some activities and under-provision of others. [65] This emphasises the need for real collaboration and co-ordination among the providers of INSET to avoid duplication and waste.

Local Educational Authorities in the United Kingdom provide INSET through advisors and teachers' centres, though more recently individual schools are organising it if they wish. According to Bolam, et al, [66] the number and functions of advisors vary between authorities, and there is little systematic data about their work. Their courses are usually short and do not carry any formal awards. Teachers' centres are a comparatively new development in the field of INSET, and it first appeared in the U.K. before it was adapted in many other countries. Devault found teacher centres' networks in many parts of the world, and stated:

> "Teachers' centres are part of the educational establishment in-service education effort in many countries throughout the world...the nature of the teachers' centres depends on many factors relating to the sociological and organisational milieu in which these centres function....the governance characteristics of teachers' centres reflect different social, political and educational philosophies within and across countries." [67]

The need for teachers' centres arose from the inadequacy of traditional provision of INSET in a period of rapid social and technological change.[68] Although teachers' centres are financed by LEA's in many countries, they are considered as neutral territory, independent of the school and the Inspectorate. In most of the literature on teachers' centres, professional democracy is always stressed. Davney, et al,[69] describe the teachers' centre as a place where teachers continue their professional education and emphasise the importance of the voluntary nature of the centres for participants. The programmes in the teachers' centres are arranged by their wardens, but the initiative for a course comes usually from the teachers themselves, unlike those arranged by the advisors, courses are spread over a longer period, depending upon the needs and interests of participants. The credibility of teachers' centres, according to Davis,[70] depends on the availability of human and material resources, the accurate identification of the teachers' needs and, above all, the good will. A strong driving force behind the appearance of teachers' centres in many countries was the dissatisfaction with traditional INSET provision, so the success of teachers' centres must not be measured in terms of number of meetings or number of teachers through the doors, but in terms of its contribution to meet the teachers' needs and to improve their performance in the classroom. A major problem for the teachers' centres is how to attract secondary school teachers to their activities. The vast majority of participants are from primary schools, and this

determines the emphasis in the programme of activities.

Universities, through Institutes or Schools of Education have, for decades, been greatly involved in providing INSET for teachers. Their main contribution to INSET is in the provision of award-bearing courses. Mattock, [71] lists four categories of named award courses:

i) Higher degree courses;

ii) First degree courses (leading to B.Ed);

iii) Special courses of advanced study;

iv) Diploma and certificate courses for teachers of handicapped children.

He argues that the universities must be concerned more with providing more short courses which do not lead to qualifications, while some educationists find it attractive to think that INSET might be done in universities during the university vacation, others disagree on the basis that the release of teachers must be spread across the whole year. Since the universities have had significant influence on the type, location and quality of INSET, thus much of the criticism of INSET falls either directly or indirectly upon them. The range of criticism concerning influence and control varies from complaints of elitism to charges of incompetence. Nicholson, et al, [72] cite the reluctance of Institute of Education faculty to leave the security and protection of the "ivory tower". They also note their

common failure to practise what they preach concerning the necessity of continuing professional development, so many feel that they are generally ill-prepared to serve as effective in-service education facilitators. Briault, [73] warns that universities are extremely insistent on their academic freedom, and there is a danger of their paying insufficient regard to the needs of authorities in schools in development of programmes.

In reaction to the general dissatisfaction with INSET programmes offered at Schools of Education, Drummond [74] argues that, if schools and colleges of education fail to initiate new approaches and develop new roles for themselves, someone else will do it for them. He proposed that colleges of education should:

i) work to establish agreements with schools for joint development of INSET programmes;

ii) provide personnel to schools who would work individually with teachers and principals at the school site on a regular basis;

iii) organise a school service centre to provide consultants, research and evaluation services on a continuing basis;

iv) help design and test INSET materials to meet identified needs;

v) conduct research on learning in school.

With all those providers of INSET, someone may ask: who is going to be the major provider of INSET? There is no simple answer to this question, but many educationists agree that the responsibility should rest with regional or area body, and not with a single organisation. What is needed is better planning and co-ordination. However, recent changes in England and Wales, especially in relation to the 1988 Education Act, provide for local financial management, whereby individual schools, (and especially head teachers) decide on the amount and type of INSET they can afford. This new arrangement adds more significance to the earlier statements of James and Dolan: The former was of the view that:

> "In-service education will only be worth the personal and financial sacrifices that it will involve if it is based on collaboration of the closest kind between the various agencies concerned, resulting in co-ordination between their efforts," [75]

while Dolan commented:

> "The question of who will control the various decision-making mechanisms is not so much a matter of law as it is a matter of political and economic power." [76]

2.5 Studies in INSET

The first significant study of INSET is the fifty-sixth year book of the National Society for the Study of Education, edited by

Henry, [77] with the title: In-Service Education of Teachers, Supervisors and Administrators. The book is divided into four sections. Section one deals with the need, history and nature of INSET, and serves as a theoretical framework for the other sections. It includes discussions about the need, purposes and extent of INSET. The modern concept of INSET and the involvement of the participants in planning and evaluating INSET activities.

Section two is concerned with role of teachers, administrators and consultants, and discusses major topics in respect of the provision of INSET. The characteristics and responsibilities of teachers, administrators and agencies involved are described, giving a clear picture of the boundaries of participation in the decision-making process, communications within and between organisational level, and the use of time and available resources.

The third section deals with INSET programmes and their relationship with pre-service education. Types of programme, location and content are also discussed, and section 4 deals with the organisation and evaluation of INSET programmes. The book offers a comprehensive view of concepts and practices of INSET, and reflects the major problems and concerns of the time at which it was written. It connects the present practices with the past experiences and developments in the field. Many researchers depended on this substantive book for their future work,but despite this fact, information is not presented in a structured set of patterns, topics overlap and concepts are repeated.

Teacher Education and Training by the DES, [78] is an important study about teacher education, best known as the James Report. In 1970, the Minister of State for Education and Science in the United Kingdom, set up a committee of enquiry into the education and training of teachers in England and Wales. The committee, under the chairmanship of Lord James of Rusholme, completed its work within a year and its report was published in 1972. The report suggested that the education and training of teachers should fall into three cycles. The first cycle would involve personal education, the second cycle pre-service education and training, and the third cycle would be in-service education. The report points out that a large expansion of the third cycle provision was an essential pre-condition of a more realistic and rational approach to initial training in the second cycle, and a much expanded and properly co-ordinated programme of in-service education and training was essential to the future strength and development of the teaching profession. In relation to this report, Lord Boyle, a former Minister of Educatich, observed:

> "It is safe to say that of all the recommendations contained in the James Report, none has received more widespread endorsement than the proposal for a massive increase of the provision for in-service or "third cycle" training. [79]

The In-Service Education of Teachers: Trends, Processes and Prescriptions is another important study, edited by Rubin. [80] In the first section: "In-Service Education in Perspective", Rubin

discusses the state of INSET at the time of writing. For him, INSET has rarely been appropriate; it

> "has been characterised by randomness and fragmantation, by programmes that differed more to expediency than to need and by methodologies that have been largely atheoretical." [81]

Concern about the quality of teaching raised important issues in INSET; who should determine INSET content; how to pay for the programmes to deliver them and evaluate their effectiveness, are all discussed. The second section is a collection of studies about the relationships between instructional movements and INSET. It examines INSET as a sub-system within the instructional process in the classroom. Section three: "Other voices, other opinions", examines INSET as a sub-system within the educational system at large, which the fourth section: "Operational Concepts", discusses a wide range of guidelines, principles and reasons for initiating, designing and developing effective INSET programmes. The fifth and final section emphasises the importance and the need for experimenting and developing a theory of teacher professional growth in which pre-service and INSET are considered part of a sustained continuum. To effectively accomplish these tasks, Rubin suggests:

i) to analyse past successes and failures;

ii) to call, from the research and development record, the best of practices now in use;

iii) to conjoin the yield from both of these activities into methodical experiments. [82]

The study provides a general view of the history and development of INSET by analysing the contributions and perceptions of researchers and decision-makers in the field. It also offers a comprehensive examination of the main trends findings, concepts and issues from which the major dimension of INSET can be derived. Finally, it presents guidelines to continue methodical research to improve both the conceptualisation and practice of INSET.

2.6 Teachers' Perceptions Surveys (INSET Surveys)

Cane published a survey in England and Wales in 1969, involving 2,601 teachers and 341 headmasters in three countries. [83] The survey was designed to find out what kinds of INSET activities teachers and headmasters prefer, to investigate to what extent teachers participate in in-service courses, and how their participation varies between regions. Teachers' attitudes and motivations, staff replacement and follow-up of training in schools were also examined. The majority of teaching staff completing questionnaires (80 per cent) expressed positively their need for INSET, [84] while between 28% and 49% of teachers in the total population had not taken any in-service training. Around half of the teachers reported that they would be more willing to attend courses if attendance is taken into account for promotion. [85] The survey revealed a considerable variation in the provision of INSET by different counties, and dissatisfaction with INSET provision at that time was clear when only a minority felt that existing arrangements took account of the personal circumstances of the teachers. [86] These

findings suggest that the provision of local, rather than regional or national opportunities for INSET, is very urgent and important. Teachers made it clear that they would like the bulk of INSET to take place close to their own school or home, preferably during school hours. A minority of teachers in the survey (up to 13% of primary teachers and 25% of secondary teachers) preferred one-term or one-year course, generally provided by DES and Universities.[87] An important part of the survey was concerned with establishing the topics that teachers feel should form the content of future INSET programmes. The topics which appealed to teachers were:

" i) Methods of dealing with learning difficulties.

ii) New methods of school/class organisation.

iii) The operation and application of new apparatus and equipment with practice opportunities.

iv) Short courses on recent findings of educational research in the teachers' area of teaching.

v) Planning and developing syllabuses in detail.

vi) Description and demonstration of methods of teaching academic subjects to non-academic children.

vii) Methods of dealing with large classes of varied abilities.

viii) Practical details and aims of recently introduced schemes of work and discussion of teaching results and demonstrations.

ix) Construction and interpretation of schools exams and assessment tests. " [88]

Teachers were also asked to choose topics which they thought should be given priority by organisers. The priority topics for both primary and secondary teachers were those that came under the following headings:

" i) Teaching methods, aids and materials.

ii) Development of new teaching schemes.

iii) Child development and learning problems of individual pupils.

iv) Training for future responsibilities, or different teaching jobs.

v) Courses leading to qualifications.

vi) Subject knowledge relevant to the curriculum. " [89]

The survey disclosed that the teaching methods which appealed most to the teachers were those involving a large element of participation, such as working groups, workshops, and lectures followed by an adequate period of questionning. [90] Three-quarters of the teachers said that they would like opportunities to observe and discuss demonstrations of lessons or teaching activities by other teachers. Great support was given for the use of T.V. and Radio in INSET. The least acceptable method of training was the traditional series of lectures without discussion. [91] The survey showed that the major problems which face INSET included co-ordination, organisation and staffing. However, the study has some limitation in that the views of administrators, advisors and university staff which may differ from those of the teachers, were not included.

Townsend, [92] in a survey carried out at Manchester University, sent 9,822 questionnaires to a national sample of teachers who attended a number of different courses. The survey allowed the teachers to think of topics not covered by the questionnaire, and thus gave the teachers more freedom than did Cane's study. The courses concerned fell into two main groups: subject areas and those of a more general and theoretical educational nature. The most popular courses come mainly within the first category, which was similar to the findings of Cane's survey. The order of the most popular choices of courses were:

i) Bachelor of Education degree;

ii) teaching of reading;

iii) audio-visual aids;

iv) teaching of slow learning children.

The most significant difference between the findings of Townsend and Cane were that, in the former, many teachers wished to take a B.Ed degree, while Cane found it important only to a minority of teachers.

Bradeley, [93] carried out a survey of the opinions of primary and secondary school teachers about the form of release and the kind of activities they would like provided in INSET. The survey involved 2,000 teachers in 1973, and the response was 73 per cent.

More than 50 per cent of the teachers wanted a single one-term block release. Nineteen per cent wanted one month block release, while day release patterns were less popular than had been generally supposed. Teachers were asked what would be the main reason, apart from career promotion, for undertaking a course. The preferences of teachers were as follows: [94]

i) to improve own teaching method (36.8 per cent);

ii) to learn more about recent trends in educational thought (28.8 per cent);

iii) to update knowledge of own subject (17.3 per cent);

iv) to enable to take up different duties (17.1 per cent).

When teachers were asked which activity of INSET they prefer, one third of teachers wanted to work with groups of teachers on professional problems, and roughly one quarter wanted prescribed taught courses. Analysis by length of teaching experience showed that young teachers were more favourable to work at college or university, while older teachers prefer teachers' centres. Forty-three per cent of men and 30 per cent of women would most like to work at the university or polytechnic, while 20 per cent of men and 30 per cent of women are attracted to teachers' centres. A larger proportion of women than men would like to work in a local school. [95]

Baker, et al, [96] conducted a survey for the DES at the

University of Bristol during the period 1978-1981, where a "school-focussed" approach to INSET was evaluated; four LEAs and over 1,000 teachers were involved.

The broad pattern of teachers' judgement on their INSET experiences was not a favourable one, only 29 per cent expressed favourable views of its quality, and only 33 per cent of teachers disagreed with the statement, "most teachers I know think INSET is a waste of time". [97] When teachers were asked to indicate the main sources of new ideas for their work, 80 per cent of respondents gave "own reading", 61 per cent gave "other teachers", and only 30 per cent mentioned INSET. Although there was agreement (82 per cent) that schools should formulate a clear INSET policy linked to school goals, only 13 per cent thought that their school already had such a policy, and only 23 per cent thought that their school methods of dealing with INSET was satisfactory. [98] Teachers were asked, in an open question, to indicate in order their reasons for involvement with INSET. The list, in order of preference, was as follows: [99]

i) to improve my knowledge;

ii) to improve my teaching;

iii) to widen my experience;

iv) to improve my qualifications;

v) to help the school.

The following results were obtained from the survey:

i) the vast majority of teachers (83 per cent) agreed that positive action should be taken by their heads and deputies to use INSET for staff development;

ii) 70 per cent agreed that there were general problems for which INSET for the whole staff was appropriate;

iii) 65 per cent said they would attend more INSET if it is focussed on their school's particular requirements;

iv) 69 per cent favoured the increased involvement of college of education staff in INSET work with experienced teachers;

v) 32 per cent only said they had approached their heads to talk about INSET. Seventeen per cent of secondary school teachers only reported approaching their heads of department. Contacts with external personnel outside the schools were extremely infrequent, involving LEAs advisors and college lecturers. [100]

In the U.S.A., a large number of studies have been carried out about perceptions of teachers and administrators of INSET. Hermanowicz, [101] in a study of teachers' perceptions conducted in twelve states, found a general dissatisfaction with INSET programmes. Teachers found the programmes dull and almost useless, because they

were too general, poorly timed, or mainly devoted to administrative records.

Brimm and Tollet, [102] conducted a study about how teachers feel towards INSET? Seventy-three per cent of respondents felt that INSET activities too often did not appear relevant to the real needs of the teachers, and 44 per cent felt that their INSET programmes were not well planned. However, teachers indicated that there is a remedy for the deficiencies in planning INSET. Ninety-three per cent stated that teachers needed to be involved in the development of purposes, activities and methods of evaluation for INSET programmes. Ninety per cent of teachers felt that the main purpose of INSET should be to help teachers to upgrade their classroom performance. Eighty-seven per cent indicated their approval of INSET activities which help them to become acquainted with new teaching practices and innovative programmes, while 86 per cent felt that teachers should receive a release time to attend INSET.

Howey, [103] studied the perceptions of teachers, professors and parents in three states and 21 projects across the U.S.A. He found that the three groups felt that there was not enough INSET provision for teachers in their respective parts of the country. A majority of teachers and professors reported INSET generally as not effective. Professors believed college courses as most commonly providing innovative content, but teachers felt that district workshops and interaction with their peers to be more innovative. Teachers perceived teachers to be the most effective instructors, while

professors believed professors as most effective, but both groups felt the need to free teachers from instructional responsibilities to let them engage in INSET activities.

Reed, et al, [104] identified the most significant reasons for teachers to be involved in INSET programmes as follows: professional career, personal development, academic degree, enlarge work dimensions, salary increase, academic credit, school goals, change to different positions, increased job responsibility, employer recognition and peer recognition.

A survey of INSET of primary school teachers in English-speaking Africa was carried out in 13 countries, and was reported by Greenland, [105] and Bude. [106] The principal aim of the survey was to provide an up-to-date account of INSET at primary level in the participating countries, via an investigation of INSET policy, the major strategies employed and teachers' attitudes and experiences of INSET. The project produced a synthesis report which set out the major findings, followed by seventeen case studies.

A sample of around 100 teachers in each country were asked how many separate INSET activities they had attended in the last three years. Those who replied "none" ranged from 61 per cent in Nigeria, 53 per cent in Uganda, and only 8 per cent in Malawi. [107] The highest take-up of INSET was in Ghana, where 45 per cent had attended more than three activities. As for the duration of INSET

activities, 35 per cent of all activities cited had lasted one day or less, while a further 38 per cent lasted between one day and one week. Considerable differences between countries were obvious, with 98 per cent of activities in Zimbabwe lasted less than one week, while in Ghana, 52 per cent lasted more than one week. As for teachers involvement, 88 per cent agreed that teachers should be consulted when the topic of INSET activity is being decided; 83 per cent agreed that teachers needed more opportunity to see how other teachers teach; while 73 per cent agreed that there are general school problems which could be dealt with by INSET activities for the whole staff. The techniques and methods of delivering INSET especially for the short courses, consists mainly of lecture method;on the other hand for INSET activities which leads to full certification, increasing use is being made of distance teaching techniques.[108] A review of agencies providing INSET shows that the responsibility in most countries is shared between the Ministry of Education, teachers' colleges, the inspectorate, the teachers' union and teachers' centres.

The survey pointed out that clear attention must be given to teachers' perceptions of the function of those designated as trainers. There is a great need also to keep a balance between INSET for teachers' personal development and INSET, as determined by the heads of the schools.

The findings of the survey suggest that there is no systematic evaluation for INSET activities in most of the participating

countries. The survey seems to agree with Trevaski's, [109] conclusion that there was no defined policy for INSET being pursued in most African countries.

2.7 INSET Effectiveness

Some general characteristics of effective INSET programmes are identified through the literature. Effective programmes, according to Knox, et al, [110] should be:

i) designed to meet the needs of the participants;

ii) planned and administered co-operatively with clearly defined objectives;

iii) provide, in addition to theory, practical help that deals with the basic issues;

iv) continuous, long term and an integral part of the educational process;

v) based on sound principle of learning, designed to produce a creative atmosphere, and it should receive support from the administration;

INSET effectiveness depends upon many factors. The work of McLaughlin and Berman, [111] revealed that neither the amount of

money spent on the project, nor a particular technology, was significantly or consistently related to success of the project. Instead, the two most important factors were:

i) institutional support from administrators;

ii) implementation strategies.

They add that staff development programmes are more likely to be successful if they receive recognition in district policy, are supported by capable leadership, and there has been a critical assessment of the needs of participants. A good INSET plan, according to Dillon, [112] will include:

i) need assessment
ii) anticipated results;
iii) meaningful involvement, practical learning, and rewards for the participants.

Welles, [113] suggested seven guidelines for effective INSET as follows:

i) teachers differing needs and abilities should be considered in the design of INSET programmes;

ii) teachers should be involved in decision-making at all phases, including design, implementation and evaluation;

iii) valuing the teacher as experimenter and problem solver can contribute to effective INSET;

iv) reflection is a crucial process in making rational change in attitudes and behaviour. INSET programmes should provide conditions conducive to reflection;

v) professional growth of teachers must be sought in the context of their professional setting, with particular attention to the groups which can support their change efforts.

vi) INSET programmes should build upon processes which facilitate self-renewal.

It seems that there is a considerable agreement on the principles of effective INSET programmes. However, Turner [114] conducted a survey which produced some significant conclusions concerning teachers' perceptions of effective INSET. After reporting that teachers' perceptions on INSET may change over time, he pointed out that:

i) there is no single format of INSET that is effective for all teachers;

ii) the climate in which in-service is conducted is a major ingredient in teachers' perceptions of effective INSET;

iii) teachers must be involved in the learning process;

iv) teachers need to practice under the guidance of an expert and to be provided with follow-up assistance in their classroom;

v) teachers will identify factors which contribute to satisfaction with INSET;

vi) teachers need assistance in identifying specific teaching weaknesses.

Chambers, [115] asks how could teachers be encouraged to involve themselves in (and not just attend) INSET planning and design? The answer to this question differs greatly from one country to another.

But it is now accepted that the best sort of motivation is the teacher's own sense of professional responsibility. A teacher should be motivated by a desire to improve his effectiveness through a process of continuing education. Macdonald,[116] stressed intrinsic, rather than, extrinsic, motivation as the key.

There is a general agreement that INSET is an essential factor in ensuring that schools are staffed by qualified teachers. Most INSET activities, in the past, failed to achieve their objectives because teachers felt that these activities did not meet their needs. Therefore, educators agree that INSET, to be effective, should be based on teachers' needs and with their co-operation.

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CHAPTER THREE

THE SOCIO-ECONOMIC CONTEXT OF EDUCATION IN JORDAN

3.1 Introduction

The educational system of any country cannot be explained without mentioning the salient features of the social and economic systems. Thus, in the context of this study, it is necessary to examine the historical and geographical background and the socio-economic pattern of Jordan, to try to understand why education is so vital to the Jordanian people. A national system of education covers a certain geographical region and maintains most or all the schools in that region. It grows up with the country and continuously adapts itself to its needs. Its form of organisation, legal provision and means of support are influenced by the organisation, of other fields of national life. The national system of education usually emphasises the national language, the national history and geography, and endeavours to bring up citizens who have allegiance to their country. The geographical location of the country, the character of its people, their culture, religion, together with the political and economic systems of the country are influential factors in determining the educational philosophy and aims. Counts stated:

> "....education is always a function of time, place and circumstances. In its basic philosophy, its social objectives and its programme of instruction, it inevitably reflects in varying proportion the experiences, the conditions, and the hopes, fears and aspiration of a particular people or cultural group at a particular point in history." [1]

3.2 The Geography of Jordan: (See Figure 3)

Jordan, which is known also as the Hashemite Kingdom of Jordan, is a small Arab country in the Middle East. The Arab Middle East, with Jordan at its centre, has acquired a special position of importance. Throughout its long history, it attracted the attention of many empires and has always been subject to political, economic and social pressures and influences from many directions. The area has witnessed many civilisations and was the cradle of the three great monotheistic religions. Jordan is situated near the south eastern shores of the Mediterranean, between longitudes 34° and 39° east, and latitudes 29° and 33° north. It is bounded on the north by Syria, on the east by Iraq, on the south by Saudi Arabia, and on the west by occupied Palestine. The total area of Jordan is 92,290 km, while the west bank which has been occupied by the Israelis since 1967, forms 6,633 km. The climatic and soil conditions, with the exception of the low-lying land of the Jordan valley, are not generally favourable for intensive agriculture, and only about 8 per cent of the area is normally cultivated; [2] the remaining parts are desert or barren hills. The country can be divided into three main regions distinguished by topography

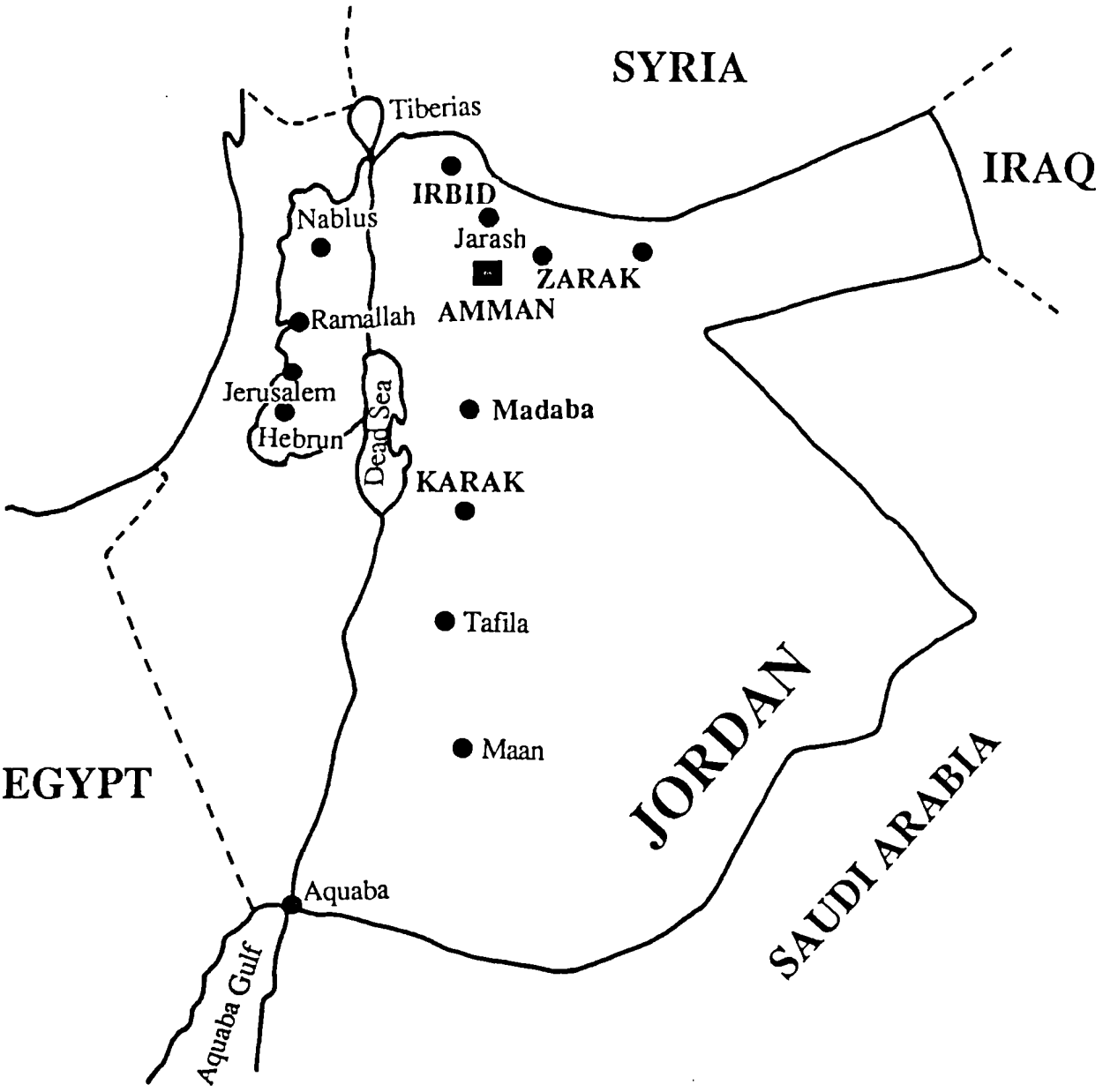

Figure (3) Map of Jordan.

and climate: the highlands; the Jordan rift valley; the desert. The highlands which adjoin the valley extend from the Syrian border on the north, to the Gulf of Aqaba in the south. The average annual rainfall is 380 mm. To the west of that is the Jordan rift valley which reaches a maximum of 14 miles in width and which reaches 1300 feet below the sea level at the Dead Sea (lowest spot on earth). West of the valley, the level rises again to the Palestinian hills. The desert region to the east and south east occupies nearly 87 per cent of the total area. For centuries, only bedouins have lived there. The government has succeeded recently in its efforts to settle them by building schools and clinics, and providing them with water and electricity.

The country has generally a Mediterranean type of climate, though its temperatures vary from one region to another in certain seasons. In the eastern and southern parts, the weather is hotter than the western parts. Temperatures reach 33°C in summer, but rarely below zero in winter. The rain season usually starts in November and ends in April. Rainfall amounts vary from one year to another, which affects agricultural production on a large scale. In the highlands, the annual rainfall sometimes reaches 600 mm, while in the desert it rarely reaches 10 mm.

The Jordan valley has long, dry and hot summers with temperatures rising to more than 40°C, while thehighlands have a more moderate climate.

3.3 A Historical Background

The land of Jordan has a history of civilisation which dates back to the biblical and even earlier times. It has seen the rise and decline of the great empires of the Ancient World of Egypt, Babylon, Persia, Greece, and Rome. Jordan has played a small but significant role in the history of the region, due to its geographical location. Jordan is a junction of the roads going westwards to Europe and North Africa, southwards to the Arabian peninsula and the red sea, eastwards to Iraq and Arabian Gulf, and northwards to Mesopatamia and Asia Minor.

The archaeological evidence indicates that human beings lived there over 9,000 years ago. [3] Jordan experienced migration of Arab tribes from the Arabian peninsula long before the Islamic conquest. The Nabatean Arabs established a state in the fifth century B.C. and made Petra their capital. The Nabateans remained strong until the beginning of the second century A.D. when they were conquered by the Romans. With the advent of Islam in the early seventh century and the defeat of the Byzantines by Moslem Arabs in 636 A.D., Jordan became a Moslem country.

The Greek and Roman periods left little, if any, traces in the memory of the people, as Patai points out:

> "The ruins of proud Hellenistic and Roman cities, still testify to their artistic, technological and religious civilisation, but the Greek and Roman way of life and way of thinking has never become an integral part of the folk consciousness." [4]

The region was the cradle of the Christian faith and the Byzantine period, during which christianity became the dominant religion in the area, is still influencing in a limited way parts of the contemporary life in Jordan. The Arab conquest in the first half of the seventh century A.D. and the rapid Islamisation of the population moulded the character of Jordan as it appears in the twentieth century. Ever since, Arabic became the language of the country and Islam the religion of the great majority of the people who never ceased to be identified with the Arab-Muslim culture.

In 1099, the Crusaders invaded Jordan and the century-long domination by them has been considered merely as the first encounter with the western world. However, the Crusaders' influence on the people's way of life and religion was negligible, and they were driven out by Saladin in 1187. [5]

Early in the 16th century, Jordan became a part of the Ottoman Empire, as well as the rest of the Arab world. The Turkish rule lasted four centuries (1517-1918) and by 1900, the Ottoman Empire, dissipated by corruption and economic decline, was slowly crumbling. The Arabs were developing a strong sense of national revival, yearning to gain their independence from the Turks.

In 1915, contact was established between Great Britain and

Sherif Hussain (Sherif of Mecca), and the Arabs revolted against Turks and fought with the Allies as they were promised full independence.[6] Upon Turkey's defeat, Britain and France partitioned greater Syria (Syria, Lebanon, Palestine and Trans-Jordan) and Iraq into zones of influence and responsibility. The partition was enshrined in the mandate which was granted by the League of Nations. Britain assumed responsibility over southern Syria (Palestine and Trans Jordan) and Iraq, while France governed northern Syria (Syria and Lebanon).

Under the British Mandate, Palestine and Trans Jordan were joined for administrative convenience. The British government issued the Balfour Declaration on 2 November 1917, calling for the establishment of a national home for the Jewish people in Palestine. At that time, the Palestinian Arabs constituted over 92 per cent of the population, and owned nearly 96 per cent of the land.[7]

As a result of a meeting held in Jerusalem in 1921, between Prince Abdullah (son of Sherif Hussain) and Winston Churchill, Abdullah was proclaimed the ruler of Trans Jordan (the area east of the Jordan River). He was supposed to form a government and to establish law and order in the area. In return, Britain was supposed to give financial and military aid and to recognise Trans Jordan as an independent country on a later date.[8]

The declaration of Jordan's independence took place on

May 25th, 1946 and Prince Abdullah was proclaimed a constitutional monarch, with the title "King of the Hashemite Kingdom of Jordan". [9]

The development of events in Palestine and the establishment of Israel in 1948, created an untenable situation for Jordan. As a result of the 1948 Arab-Israeli war, Israel managed to capture 77 per cent of Palestine. Of the remainder about 20 per cent, thereafter known as the West Bank, was united with Jordan in 1950 and the Palestinians who were living in the West Bank became Jordanian citizens. King Abdullah was assassinated in Jerusalem in 1951 and was succeeded by his son, Talal. Less than two years later, the present King, Hussain, ascended the throne at the age of 18, following his ailing father, King Talal.

In 1967, Israel launched an overall attack on Egypt, Syria and Jordan, and the whole West Bank was occupied by the Israeli army. The impact of the 1967 war on Jordan was tragic. The population of the East Bank of Jordan increased by one-third (because of the refugees from the West Bank) and all sectors of economy, health and education were affected.

The present Kingdom of Jordan is a centralised state, governed by a parliamentary system and a constitutional hereditary monarchy. The Jordanian Parliament consists of two houses: the Upper House (senate) and the Lower House (House of Deputies).

The Upper House is composed of forty members appointed by the King, while the House of Deputies has eighty members, elected by the Jordanian people. The King enjoys an immense constitutional power. According to the constitution, the King is the supreme commander of the armed forces. He approves the laws and appoints the Prime Minister.

A new election was held recently in Jordan to elect a new Parliament. It was the first election to be held since the Israeli occupation to the West Bank in 1967.

3.4 Changing Economic Conditions

Jordan's economic system is based on free enterprise and private initiative. The Government participates with the private sector in implementing large scale industrial projects. During the 1960s, the economy was characterised by the dominance of its agricultural sector, but the condition has changed significantly. The main developments in agriculture, industry and finance, will be discussed.

3.4.1 Agriculture:

There are three basic problems which have hindered the development of the agricultural sector in Jordan:

i) The size of potentially agricultural land is small. The proportion of arable land is 11 per cent, but the area under actual cultivation does not exceed 8 per cent. The remaining parts of Jordan consist of barren hills and desert.

ii) The pattern of small land ownership, which hinders the introduction of modern cultivation technology.

iii) Over 92 per cent of cultivated land relies on rainfall which makes agricultural production subject to the extreme fluctuation of the weather.

The most vital core of the country's agricultural future seems to depend on the development of the Jordan valley. The valley offers a great prospect for significant increases in agricultural crops, given its fertile soil, the water of the Jordan River, and convenient temperatures for cultivation. The unique climate of the valley makes it possible for the farmers to have winter crops two months earlier than other regions in the neighbouring countries, which enables them to sell their products at high prices.

The valley has witnessed significant development in the last few years, due to the expansion of irrigated areas, and the use of modern farming techniques. The valley produces over 45 per cent of the country's total production of vegetables and fruits, while 80 per cent of Jordan's exports of vegetables and fruits

originate from the valley. [10] Agricultural production has fluctuated over the years due to the variations in the rainfall. Water is one of the scarcest natural resources in Jordan, and while about 27 per cent of the economically active population is engaged in agriculture, only 11 per cent of G.D.P came from agriculture during the period 1969-1981. Agricultural products contribute 24 per cent of export earnings. The agricultural output increased from JD 90 millions in 1984 to JD 97.5 million in 1985, but its contribution to G.D.P declined to 7.9 per cent. [11]

3.4.2 Industry:

Jordan, as a small country with limited resources, faces many challenges which dictate the development of its meagre and undeveloped resources. Industrial development faces two major problems: the scarcity of natural resources and the smallness of the local market. In spite of this, Jordan succeeded in setting up a number of large industrial projects. Potash has been found in the Dead Sea and is produced for export. Phosphates and cement are also produced since the country has comparatively large raw materials for both. A major plant at Aqaba produces amonium phosphate and sulphuric acid. Other main industrial goods are tanning products, detergents, cigarettes and medicines.

Most main industries have achieved high rates of growth during the last few years, and the industrial index grew at an average

rate of 15 per cent over the period 1971-1981. [12]

The contribution of the industrial sector to GD.P increased from 12.6 per cent in 1972 to 15.7 per cent in 1975, and to 16 per cent in 1981. [13] The government has followed a liberal policy and introduced several laws to attract investors and foreign capital. According to the 'Encouragement of Investment Law' of 1972, both Arab and foreign investors are encouraged to invest in Jordan, and are exempted from taxes, fees and other charges. [14] Nonetheless, existing regulations have still not been conducive enough to attract the participation of sufficient foreign capital in industrial development. [15]

In the Five-Year Plan (1981-1985), 28 per cent of the total investment has been allocated to industry. [16] The industrial income went up from JD 167 millions in 1980 to JD 212 million in 1985, and the sector contribution to GDP reached 19 per cent in the same year. [17]

3.4.3 Trade Balance and External Aid:

A trade balance deficit has been a characteristic feature of Jordan's economy throughout its various stages of development. The ratio of the total deficit to GDP at market prices for the last ten years, between 1976-1985, average 32 per cent. The deficit was financed from the invisible services, factor income from abroad and capital transfers to the government. [18]

Between 1971 and 1981, imports of goods and services have risen by an average of 29 per cent per year, while exports increased by 39 per cent annually. In 1975, total exports accounted for 37 per cent of G.D.P, rose to 41 per cent in 1978 and reached 45 per cent in 1981. On the other hand, total imports constituted 94, 96 and 106 per cent of the G.D.P in 1975, 1978 and 1981, respectively.[19] This indicates that Jordan is extremely dependent on foreign trade and aid.

The visible trade deficit (exports-imports) has risen dramatically during the 1970s, from about JD 60 millions in 1971 to JD 690 million in 1981. The remittances of Jordanians working abroad reached JD 376 million in 1981, and helped to narrow the gap deficit.[20]

The most important items in export are phosphate and potash, followed by agricultural products and pharmaceutical goods. Most exports go to the Arab countries (Gulf area, Saudi Arabia, Iraq, Syria, and Lebanon). The largest proportion of imports comes from the U.S.A., followed by the U.K., West Germany, Saudi Arabia, Japan and Italy.

Since independence, Jordan has been heavily dependent on foreign aid, which has been responsible for the country's economic survival. The source and volume of external aid have changed over the years. In the 1950s, external aid accounted for more than

50 per cent of government budget and mainly financed by the U.K.

During the years of the 1960s until the mid 1970s, the U.S.A. was the main source of external funds to Jordan, given mainly for political reasons. Since the mid 1970s, the Arab countries have been the main donors. The sudden surge in Arab transfers started after 1973 when the oil prices increased significantly after the Arab-Israeli war in 1973. In 1975, Arab transfers compromised JD 27 million from Saudi Arabia, 14 million from Qatar, JD 13 million from Abu Dhabi, JD 11.5 million from Kuwait and JD 4.5 million from Iraq. In 1981, the foreign aid reached JD 282 million, which amounted to 50 per cent of government revenue.[21] During the 1970s, there was a sharp increase in remittances from abroad, which was related to the increase in the number of Jordanian skilled workers in the Arabian gulf countries and the increase in their wages.

The economic situation began to change in Jordan during the 1980s. All economic development plans have assumed that the external aid and remittances from Jordanians abroad will continue to flourish as the attainment of economic targets remained heavily dependent on these two factors. However, actual economic performance fell far below expectations, as a result of negative trends in the economies of the Gulf States, due to the Gulf War between

Iran and Iraq, and the decrease in oil prices, which lead to a decline in domestic and external demands. As a result, the size of transfer to Jordan fell from JD 415 million in 1981 to JD 290 million in 1985. The remittances from Jordanians working abroad in 1985 was 15 per cent below the 1984 level.[22] The government relied on external borrowing to meet investment and consumption expenditures which reached a total of 8.5 billion U.S. dollars in 1988. This led to an economic crisis in 1989, when the Jordan currency lost 50 per cent of its value and the government was forced to take drastic action to remedy the situation.

3.5 Population Profile

a) Change and Distribution:

During the last three decades, the rates of population increase, as well as demographic distribution, have been influenced by many social, political and economic factors. Internal migration from the West Bank to the East Bank and from rural areas to cities has resulted in a fundamental demographic change. Migration of thousands of Jordanians to the Gulf States due to the oil boom also contributed to this change.

The East Bank population increased from 680,000 in 1952 to 2.67 million in 1985, with an annual growth rate of 3.9 per cent.[23] This rapid increase has meant that a significant proportion of the population is under 15 years of age (52 per cent), which places

heavy pressures on education, health and social services.

The pattern of population distribution in Jordan has been affected by factors of internal and external migration. The governates of Amman and Zarka, which accounted for 48 per cent of the population in 1961, accommodated 57 per cent in 1985. The unemployment rate in Jordan fluctuated from 2 per cent to 14 per cent during the period 1952-1985.[24] In 1988, unemployment reached its highest level, largely because the domestic and regional recession which started in 1982. However, participation by women in the labour force increased from 3.1 per cent in 1961, to 12.5 per cent in 1985.[25]

The rapid urbanisation in Jordan is the result of the wide difference in employment opportunities between urban and rural areas. The early planning policies had centred on expanding economic activities in the main cities, rather than rural areas, and thus have encouraged rural population to move to the main cities in expection of higher wages and better access to services. As a result, about 85 per cent of the population is clustered in three main regions: Amman, Zerka and Irbid. The rest of the population is scattered in small towns and villages.

b) Structure:

There are three fundamental divisions of the Jordanian society:

i) the Bedouins and the nomadic people;

ii) the villagers and the rural people;

iii) the urban people.

These represent distinctly different ways of life within the society. The bedouins have a long history in Jordan. Towards the end of the seventeenth century, a number of nomadic tribes left Saudi Arabia and settled in different areas of Jordan, and played an important role in its modern history.[26]

Leadership in tribal society is vested in the hands of the "Sheikh", who is assisted by a tribal council called the "Majlis". Recently, there has been a decline in the Jordanian nomadic sector. This decline is generally due to economic factors that are undercutting the traditional foundations of Bedouin life, and making life in villages and towns more attractive and profitable. However, the historic values of the nomadic society continue to influence the lives and beliefs of the Jordanian people. The effort to translate these values into meaningful terms in the context of modern life in Jordan is still going on. Villages and rural areas are still playing an important role in Jordan's society. Within the Jordanian village, there are two economic sectors. The first is agricultural, within which land is the key to social and economic status. The second is the non-agricultural, whose income is mainly derived from outside the village. One of the main features of the village society is its deep-rooted spirit of family and clan solidarity. Devotion to the land, immersion of the individual in the kinship groups, adherence to religion and community cohesiveness are characteristics of the village life. However, these characteristics are being weakened and altered by the forces of modernity.[27]

Towns have played a dominant role in Jordanian history. The concentration of cultural achievements in towns has resulted in a sharp contrast between urban and rural areas. The town looked to the rural areas only for tax revenues, food and raw materials. This contrast was widened during the earlier stages of the western influence on the Arab world. While the city was ready to accept and absorb western influence, the village was relatively remote in respect of outside influence. This stage has now been largely left behind as a result of modern means of communications and government efforts in the field of education. Basically, Jordanian towns have two groups of people which play leadership roles. The first of these consists mainly of merchants and military civil and religious officials, who enjoy a high social status based on wealth or family connections and occupation. The second group is the emergent middle-class, which exerts a considerable influence on the cultural, economic, political and educational practices.

The majority of the Jordanians are Muslims. They comprise about 93.6 per cent of the population, with the Christians comprising the remaining 6.4 per cent.[28] The Arabic language is the native tongue of almost the entire population.

3.6 Educational Motivation

The educational quality of a population, measured by educational attainment, forms an integral part, not only of economic development,

but also of social and cultural change. Jordan has an extremely low illiteracy ratio, in comparison with other Arab and developing countries. Jordanians are motivated by many factors in their quest for education. Among these is the cultural influence. The Arabs have a traditional interest and respect for learning which goes back for many centuries. As Muslims, Jordanians ascribe to education as a religious sanctity. Islam gave an incentive to learning and Muslim society provided ample opportunities for study. The prophet, Mohammad, said: "Quest for learning is a sacred duty for every Muslim, male or female." It is also a common knowledge that Muslims are aware that the prophet urged them to seek knowledge, even if it were in China. Coupled with this traditional respect for learning is the rising Arab nationalism which aspires to political and economic independence, to Arab unity, as well as an awakened interest in the historical heritage and a desire to contribute to the main streams of human civilisation as the Arabs did in the past. Jordanians realised that only through education can the needed values, skills and knowledge be promoted.

In addition to the religious and cultural factors, there is a strong awareness among Jordanians of the vital role of education in improving the economic standards of the people. Events have proved education to be a marketable skill. To the ordinary Jordanian, education is an economic asset which assumes more income in Jordan or abroad.

3.7 Conclusion

This historical and economic review reveals that Jordan is confronted with the necessity for change and has a challenging future. As a small developing country with extremely limited natural resources which, taken with the fact that it shares borders with Israel, means that the economy of Jordan had to rely on outside financial support. Political events in the area have significantly affected the growth of the economy, particularly the events of the 1967 war and the Gulf war. Yet, despite all the obstacles, the country has managed to achieve a high rate of economic growth. Given the dearth of economic resources, the development of human capital has assumed a special position as a prime agent of economic and social progress.

Progress in the field of education has been the most prominent feature of socio-economic development in Jordan, enhancing its development capacity and contributing to the growth of other Arab countries through provision of educated and skilled manpower. Remittances from Jordanians working abroad exceed the income from agricultural and industrial production in Jordan. This is a measure of the importance of education to Jordan's national survival and future development. The next chapter will deal with the development of the educational system in Jordan.

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CHAPTER FOUR

THE DEVELOPMENT OF THE EDUCATIONAL SYSTEM IN JORDAN

4.1 Historical Background

Jordan entered the 1990s after four decades of continuous efforts in socio-economic developments, especially in education. After forty years of substantial progress in the field of education, Jordan must be prepared to face up to the challenges arising from the need to improve the quality of education, its relevance and cost effectiveness.

This chapter is concerned with the development of the educational system in Jordan and within this context, the history, expansion, organisation and aims of the educational system is traced from the early 1920s.

Jordan inherited a traditional system of education from the Ottomans who ruled the area for more than four centuries. During the Ottoman domination, education was neglected. It was left to the people to deal with as best they could. Schools were run mainly by the donations of some people in terms of "wakf" or endowment. [1]
The educational system in the Ottoman Empire consisted of two stages. Kuttab (mosque school) and Medresseh (school or college). [2]

Most of education in Jordan before 1921 was provided in Kuttabs. Writers describe the Kuttab as a place where pupils, under the

supervision of the Immam or Sheikh, were taught how to read the Quran and learn it by heart. Secondary emphasis was placed on reading, writing and mathematics. [3] In the rural areas, the Sheikh of the Kuttab was paid by the fathers of the pupils in cash or in wheat at the harvest time. The Kuttabs were inefficiently administered and poorly equipped and although they have disappeared nowadays, the original pattern of rote learning still persists in secular education and frequently conflicts with teaching methods borrowed from the West. [4]

By the end of Ottoman rule, the traditional system of education in Jordan consisted of limited number of Kuttabs, several primary schools providing three years of study, and four elementary schools providing six years of study. [5] There were no preparatory or secondary education and the medium of instruction was Turkish. The enrollment was 980 boys and 59 girls, with 27 men teachers and 2 women teachers. [6] On the collapse of the Ottoman Empire, and until their unification in 1950, the East Bank (Transjordan) and the West Bank (a part of Palestine), each developed its own system of education, independent of the other. In Transjordan, a small system of education started to develop in 1921. New schools were built and the number that year rose to 25, with 59 teachers and a budget of 6,000 Palestinian pounds. The number of schools increased steadily until it reached 65 in 1930, and the budget rose to 20,000 Palestinian pounds. [7]

Education developed more rapidly in the 1930s. Many well-trained and qualified teachers were recruited from Syria, Lebanon and Palestine to teach in Transjordan, and several private schools were established. Until 1939, education in Transjordan was legally subject to the provisions of the education laws of the Ottoman empire. However, in that year, new regulations which superseded the Ottoman laws, were enacted. These regulations laid down the administrative responsibilities of the educational system and the basic lines of educational organisation, and they abolished all previous Turkish laws on education. Education Regulation No.2 for the year 1939 defined the functions of the Ministry of Education as:

> "The foundation, administration and inspection of all public schools, general supervision over private schools, encouragement of scientific and literary activities, and of scouting and physical education in schools, promoting fine arts, control of public moral, and concerning itself with all that pertains to public education and culture." 8

The regulations set down the main features of elementary and secondary education, and specified the conditions for admission to each type. Teachers of elementary schools had to be graduates of primary teachers' colleges, while those of secondary schools had to be graduates of a higher teachers' college. Since neither type of colleges existed in Transjordan at that time, teachers had to be

sent to, or recruited from, neighbouring countries. However, in the event of a lack of qualified teachers, the Ministry was allowed to employ persons with lower qualifications on a temporary basis. [9] Private schools could be opened only by the permission of the MOE * and their teachers had to obtain a licence to teach from the Ministry.

In 1946, Transjordan was proclaimed an independent state, and a new constitution was adopted. Article 21 stated:

> "The communities should have the right to establish and maintain their schools for the teaching of their members, provided they conform to the general requirements prescribed by law." [10]

By the end of 1946, the educational ladder in the country consisted of:

i) seven years of elementary education in two stages (elementary cycle of five grades, and a higher cycle of two grades;

ii) four years of secondary education divided into intermediate and upper stages of two years each.

By 1946, there were 73 public schools of all types, with 9,874 pupils of whom 1,956 were girls. In addition, there were 100 private schools with 6,472 pupils, of whom 2,640 were girls. The ratio betweeen

*Ministry of Education

children attending schools to the total number of children of school age was estimated at 28 per cent. [11] Table 4.1 shows the distribution of pupils by type of school in the public sector: [12]

Table 4.1: Attendance of Pupils by Type of School (Public Schools)

Type of School	Enrollment
City primary and elementary schools	6,321
Rural elementary schools	3,099
Tribal schools	16
Secondary schools	366
Technical schools	72
	9,874

There was no public secondary schooling for girls in the East Bank until 1950, and no post-secondary education was available in Transjordan before 1951. Students were sent to study abroad, whether under government auspices or at their own expense.

The management of education in Transjordan was under the direction of British advisors. The British selected for the Ministry of Education, a staff who strongly believed in centralisation and strict adherence to the rules. Initiatives and innovations were not encouraged and headmasters, teachers and pupils were regulated by a

strong code of practice. The curriculum at school level was concentrating mainly on theoretical subjects, with no emphasis on sciences.[13] The educational philosophy underlying the curriculum has, as its core, the concept that pupils should be deeply instilled with theoretical information on a wide variety of individual subjects. This lead inevitably to the traditional emphasis on rote learning and memorisation. The 'best' pupil was the one who could memorise the most. No attempt was made to relate the curriculum to the needs of the people and the conditions of the country. The British influence on the development of education in Transjordan can be summarised as follows:

> "The new administrative policy did not affect the basic concepts and methods of teaching on the general organisation of the system in Jordan. Most of the changes were minor - students were expected to memorise a large body of facts, discipline remained important, and examinations continued to dominate the thoughts of students and teachers alike. Rigidity and formalism dominated the educational system to such an extent that the schools of the 1940s were practically identical to those established by the Turks a century earlier."[14]

Under these conditions, children received education that was restricted in scope from unqualified teachers in unsuitable buildings. A rigorous examination system was utilised to limit the number of applicants to the higher levels, and usually only about 50 per cent of the candidates passed at the primary and

secondary levels.[15] There was a high drop-out rate and deteroriation of standards resulting from the fact that the slow increase in enrollment was not matched by adequate increase in physical and human facilities.

Money was not made available for expanding the system to meet the demand of the public, and this may explain the large number of private schools in the country. The total budget for education in 1946 was £35,248, which represents 1.08 per cent of the general budget, and the ratio of students attending schools in 1946 to the whole population of the country was only 2.4 per cent.[16] The British grant to the government was generally used to finance the Arab Legion which was established mainly to protect the British interest in the area. As a result, the development of education was slow and rigid. Extreme centralisation resulted in great inefficiency and wastage of resources and personnel. The educational system was not able to perform its major functions, and no attention was paid to varied local needs and problems.

After the declaration of independence in 1946, several attempts were made to improve the system of education by introducing decentralisation. The country was divided into three educational districts, with a director possessing rather limited powers in charge of each. But few changes actually took place since the Ministry tended to retain ultimate control.

The development of education in the West Bank and the rest of

Palestine between 1918-1950 was different from that of the East Bank, although both areas fell under the British mandate. By seeking the mandate over Palestine, Britain undertook a double obligation: the promotion of development of the Arabs to a stage where they would be able to stand by themselves and the facilitation by immigration and settlement of the development of a Jewish homeland according to the Balfour Declaration. The objection made by the Palestinian Arabs (93 per cent of the population) that the two obligations were contradictory went unheeded, and by 1948 a Jewish state was established in the greater part of Palestine. [17] By the end of the Ottoman rule in 1918, there had been in Palestine, 95 elementary schools and 3 secondary schools, with a total of 8,248 pupils, of whom 1480 were girls. The number of teachers was 234. In addition to these state schools, there were 379 private schools, with 8,705 pupils and 417 teachers. [18]

The British authorities, in dealing with education in Palestine, were guided by both British and Turkish practices. The Ottoman Education Law of 1913 was followed until 1933 when an Education Ordinance was published by the mandatory government. That Ordinance classified public schools, according to the main language of instruction, into Arabic and Hebrew schools, and recognised every local Council as a local authority which was to form its own educational committee. Each authority was to provide

land, school buildings, and other school requirements.[19] The responsibility for education was discharged by the Department of Education, under a Director of Education. So, the educational system was strongly centralised. The major lines of educational policy, appointment of teachers, text books, examinations, and other technical matters were all concentrated in the office of the Director of Education, who was British, and who was assisted by a British deputy director and five assistants. All the Arab schools were administered directly by the Director of Education. As for the Jewish public schools, the responsibility of the Director was indirect and nominal; the schools were under the control of a Jewish Organisation known as "Va'adi Levini".[20] Arabic was the medium of instruction in the government Arab schools, with English as a second language, while Hebrew was the medium in the Jewish public schools. This situation lead to the division of public schools on racial, linguistic and national grounds from the beginning of the mandate period.

A Commission of Enquiry appointed by the Secretary of State for the colonies in 1945, concluded that:

> "The disturbing aspect of education in Palestine which must strike everyone who examines it is its separatist effect. In most countries, education is a unifying force. Experience has shown that an educational system can be used to create a national culture and a common purpose, while preserving local or racial characteristics.

> In Palestine, education works the other way. The two main systems, the Jewish and the Arab or government system, have no contact with one another." [21]

During the British mandate, a large number of elementary schools and a few secondary schools were built. In 1945, the number of schools rose to 478 schools, with 71,662 pupils. [22] Although the figures show a great increase, yet a great deal remained to be accomplished. In 1945, only one-third of the Arab children between the age of five and fifteen received any education, and 37 per cent of the applications for admission to school were rejected. A Commission of Inquiry, in 1945, stated:

> "We have been impressed by the widespread and insistent demand of the Arabs for education and by the inability of the government for financial reasons to meet it." [23]

In order to remedy the situation, the Palestinians took the initiative in educating their children by establishing many national private schools to offer opportunities to children who were not accepted in the government schools. [24]

The British authorities in Palestine focussed their attention on elementary education, but at the same time they laid severe restrictions on the admission and promotion of students to the intermediate and secondary schools. According to Watson, [25] this policy was common in most colonies, the aim of the colonial

administration was to spread a simple form of education and to prepare a limited number of people for the requirements of the government service. Little attention was paid to the individual learner's development, needs and attitudes.

The unification of the two regions (East Bank and West Bank) took place in 1950, and since then education in Jordan has undergone some radical change. The national administration that replaced the British authorities acknowledged the need for a new system of education that would be serviceable to the people and in line with their aspirations. Several meetings were organised in 1950 between administrators and educationists from the two systems, which resulted in a common curriculum and regulations. The complete unification came into effect in 1952 after an extensive effort to join the two systems by adopting the best features of each and by responding to the main educational problems facing the country.

The Constitution of the country was revised and special reference to education was made. According to Article 20, primary education was to be compulsory and free for all Jordanians in public schools.[26] All restrictions on the freedom of promotion and admission of capable students to secondary schools were lifted. These measures were coupled with parallel changes in the content of curriculum to make it more national. To solve the problem of

the shortage in qualified teachers, the MOE established two teacher-training institutes - one for men and one for women in 1952.

4.2 The National Aims of Education

In order to achieve integration between the two parts of Jordan (East Bank and West Bank), education was given top priority in the 1950s. The state intervened to provide a progressive educational system to suit the new political and social conditions. Political leaders felt that the support of education could not be left to private, religious and local institutions, but must be provided out of public funds if education is to be oriented around the concept of citizenry in a democratic state. Since 1950, a number of legislations and regulations were issued to make education more accessible for the people. In 1952, the Constitution was revised and special reference to education was made. Rule 6 of the Constitution, stipulates that the state within the limits of its potentialities guarantees education for all. [27] Elementary education was made compulsory and free in public schools.

In 1955, the General Law of Education No.20 was approved by the legislative body of the country. The aims of education were outlined, and legislation governing all schools were introduced. Article 3 summarised the aims of the educational system as:

> "Providing educational opportunities for the people, developing the individual's personality and civic responsibility, and bringing up a generation which is sound in body, religious belief, thought and character, fully conscious of its duty towards God and the Homeland, and actively contributing to the advancement of the country." [28]

The MOE, according to this law, was to be responsible for the general policy of the educational system in consultation with the supreme Education Council, which was an advisory body composed of eminent Jordanian educators. All schools, public and private, were subjected to the supervision of MOE. Article 33 made Arabic, history, geography and civics, obligatory subjects in all private schools. The aims of education stated in the Law of Education No.20 of 1955, were traditional, general, vague, and based on the Islamic Arabic heritage and the British view of knowledge. Its purpose was to develop the mental ability of the pupil and concentrated on acquiring knowledge, facts, and information. Pupils were encouraged to learn by heart a subject which could not be linked with daily life. The aims failed to take into account the development of the child as a whole or the needs of Jordanian society, in general. With drastic developments sweeping the country during the 1960s, a need to reform the aims of education was felt to take account of the new developments and experiences which had accumulated. Brubacher points out:

> "Having an aim is to act purposefully, to consider future events in the light of the past, and to act intelligently." [29]

Many educationists believe that education must have aims, and that setting them before action is necessary for the learning/teaching process.[30] The value of an aim emerges when it gives meaning to action, determines its direction, and defines the means and the modes of its achievements.[31] Accordingly, new aims of education in Jordan were set out in the Law of Education No.16 of 1964. According to this law, the responsibility for education in Jordan is vested mainly in the central government represented by the Ministry of Education (MOE). The Ministry formulates and implements the educational policy for the whole country. It plans the curriculum and chooses the text books. The general aims and objectives of education, according to Article 4, are summarised as follows:[32]

i) to develop responsible citizens who believe in:
   a) the basic principles of the constitution;
   b) the rights and responsibilities of the citizen.
   c) honesty and dedication to work, as well as responsibility in behaviour and fruitful co-operation with others on the basis of democratic relationships.

ii) to develop an understanding of the natural, social and cultural environments, starting with the home and ending with the world as a whole;

iii) to develop important basic skills, such as effective communication, critical and creative thinking, logical reasoning, the ability to use scientific methods of investigation, and proper management of relationships with others.

iv) to assist the normal growth of the individual physically, mentally, socially and emotionally, taking the individuals' differences into consideration;

v) to raise the standards of health of the individual and the community through proper health information and the development of healthy habits.

vi) to raise the economic standards of the individual and society, taking into consideration different individual interests and aptitudes to meet present and future needs of the country in all aspects of its economic life. This aim could be achieved through the provision of educational opportunities and diversification of education, so that it serves the different individual interests and aptitudes on one hand, and the existing and future needs of the country on the other hand, within a comprehensive socio-economic plan.

The Ministry of Education is responsible for the achievements of these aims and objectives through the establishment, supervision and administration of various types and levels of educational provision. These aims of education represented a major change from those previously in place, which were based mainly upon the Islamic heritage and long-standing social and cultural traditions in Jordan. The new aims include: consideration of the development of the whole personality of the individual child (i.e. child centred) and the needs of the Jordanian society (i.e. society centred). This means that there has been a shift from knowledge-centred aims to socially-centred aims which show that many of these aims were derived from, or influenced by, the pragmatic educational philosophy of the USA. But whatever the educational aims may be on paper, the central problem is the gap that separates them from practice. These aims are more reflected in the school syllabuses, rather than in the whole of the education system and without a proper evaluation of the total system, one cannot be sure whether or not the broad objectives are being achieved.

4.3 Educational Administration

Education in Jordan is provided by both public and private sectors. The M.O.H.E undertakes the major share of responsibility for general education in the compulsory and secondary levels. Private schools are under both national and foreign auspices, including U.N.R.W.A. (United Nations Relief and Work Agency) which is responsible for the education of Palestinian refugee students in Jordan in grades 1-9. Refugee students in the secondary stage attend public schools. In 1988 schools run by the M.O.E. accommodated 74% of the total school enrolment, while U.N.R.W.A. provides education for about 15% of the pupil population. National and foreign private schools educate 11% of the school enrolment. [33]

It is clear that the M.O.E. is the principal authority for education regulating and controlling the education provided by all agencies in the country, with the exception of higher education which is the responsibility of the Ministry of Higher Education and the Boards of Trustees of the Universities. The supervisors of the M.O.E. have the right to inspect private, as well as governmental schools.

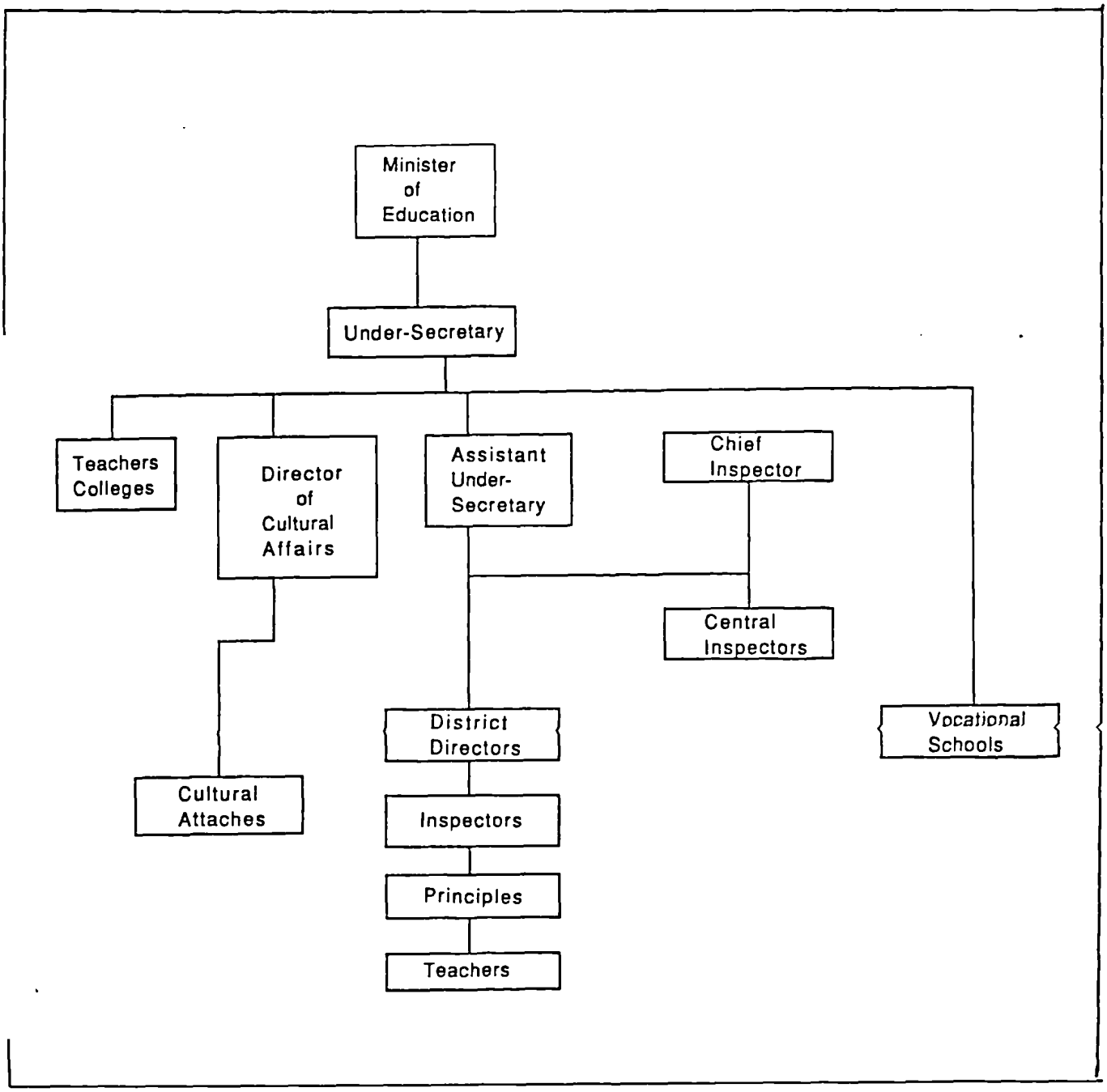
The system of public education in Jordan is a centralised bureaucracy. The Ministry controls the areas of planning, curriculum, text books, recruitment of teachers and other personnel, and finance. It also administers the public examinations at the end of the secondary stage and provides schools with all educational

television programmes.

In the last thirty years, the M.O.E. has undergone a number of organisational changes in an attempt to deal successfully with an ever-expanding system, and to carry out its assigned responsibilities and obligations efficiently. Figure 4 shows the organisational structure of the Ministry as it existed in 1958. The chart shows the Minister of Education at the top. He was the supreme and final authority in the Ministry, responsible for its general policy and the work of its officials. Next to the Minister was the Under-Secretary who was the permanent head of the Ministry and who directly controlled its day to day operation. The Under-Secretary was supported by an assistant Under-Secretary, who was responsible for administrative matters and schools; also by the Director of Cultural Affairs, who was responsible for all foreign relations of the Ministry, such as scholarships, students abroad and cultural activities in schools, and finally by the Chief Inspector who was in charge of technical supervision at schools. [34]

During the 1960s, the administrative structure was modified with the enactment of the 1964 Law No.16, as a result of which the task of the Ministry became larger and its objectives more numerous. The law emphasised the need for the decentralisation of educational administration, and the delegation of more authority to local levels. [35] In 1969, the Board of Education was established with the power to formulate educational policy. This consisted of 16 members who represented both the public and private sectors of the

Figure 4: Organisation of the Ministry of Education, 1958



Source: UNESCO (1958) World Survey of Education, Zurich, p.645.

society, with the Minister of Education as the Chairman. The Board offers recommendations regarding the implementation of the general education policy; any new regulations; studies the annual budget of the M.O.E.; and offers its advice on the establishment of new educational institutions. The Board has the authority to make decisions related to curriculum development and the revision and production of text books. [36]

A key role in the Ministry of Education is played by the Committee of Education, whose members are the Minister, as Chairman, the Secretary-General, and all the Directors-General in the Ministry. The Committee supervises all educational projects, approves general policy to be followed by each directorate, and plans the administrative organisation of the Ministry and the Educational Districts of the country.

The country is divided into a number of educational districts or regions. The number and functions have changed over the years. Each educational district is headed by a Director of Education, with main responsibilities as follows:

i) planning school expansion projects in the district within the general educational plan prepared by the Ministry;

ii) appointing and transferring teachers from one school to another;

iii) organising the supervisions activities;

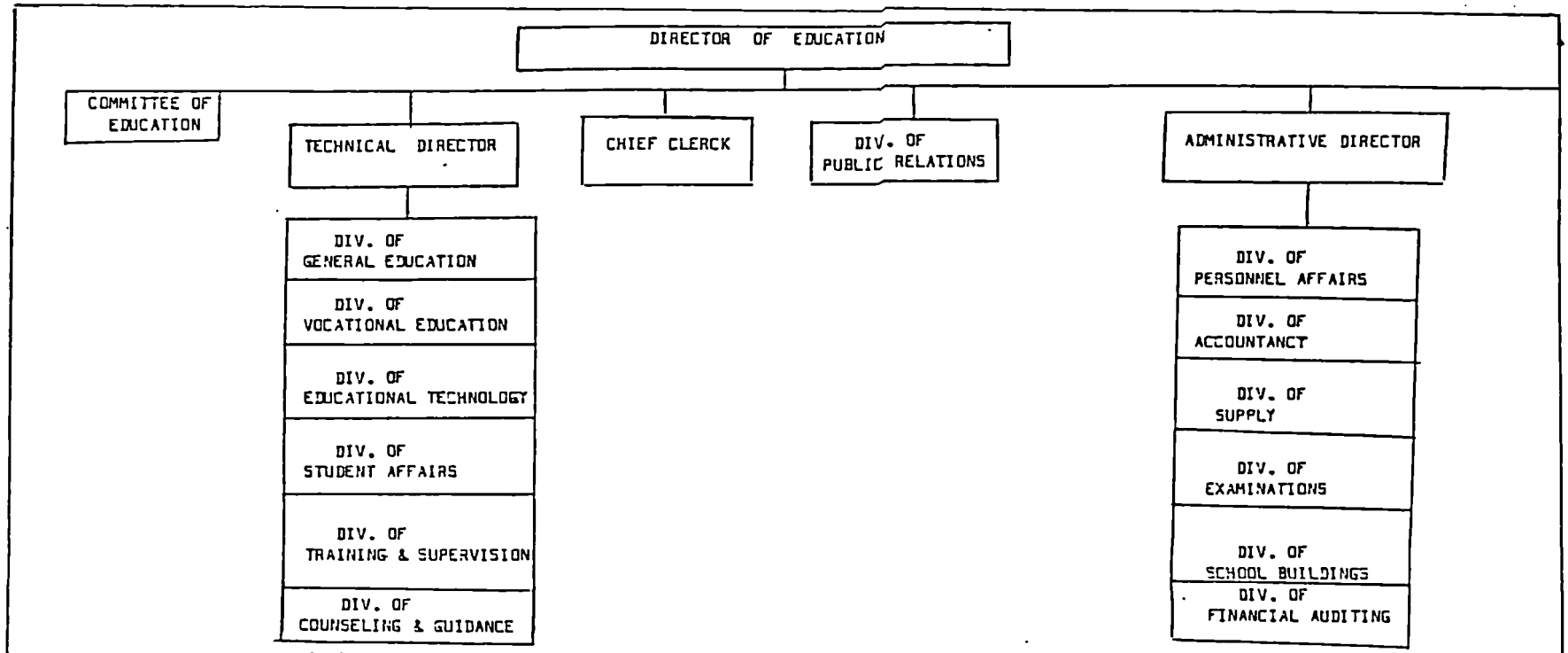
iv) organising in-service programmes for teachers;

v) recommending to the Ministry granting, renewing or cancelling the licenced private schools in the district. [37]

At present, Jordan is divided into 23 districts of education, and each district has its own technical supervisors.

Figure 5 shows the organisational structure of the Directorates of Education in 1988. Further down on the hierarchical ladder of administration, lie the school headmasters and teachers. Headmasters are usually recruited from among teachers who have proved themselves capable in the performance of their duties, and have shown some administrative ability. The role of headmaster is mainly in organising the timetable and other school activities. They are expected to guide their teachers and submit reports on teachers' attitudes and achievements. But they are rarely permitted to make important or crucial decisions concerning the functioning of their schools without previous consultation with the district director of education. As for the teachers, they have no hand in policy-making and they are simply required to carry out orders imposed upon them from the top. They face hard working conditions, and their salaries are relatively low. To solve their economic difficulties, some of the best trained teachers emigrate to other Arab 'oil' countries looking for higher salaries.

Figure 5: Organisation Structure of the Directorates of Education in the Governates & Districts of Jordan



• CURRENTLY, THERE ARE (23) DIRECTORATES OF EDUCATION:

Greater Amman (1), Greater Amman (2), Private Education, Suburbs of Amman, Zarqa, Irbid, Madaba, Balqa, Rumtha, Deir Alla, South Shouneh, Karak, Ma'an, Tafileh, Aqaba, Al-Qasr, Soth Mazar, Soath Ghor, Bani Kenana, Mafraq, Ajloun, Jerash, Al-Kourah.

Note: Some Directorates of Education may have more than one Technical and Administrative Director; e.g. Greater Amman (1) & (2)

Source: Ministry of Education (1988) Documentation Centre, MOE, Amman.

The people in Jordan have no active role in shaping the policy of education or in the administration of their schools (except in the private schools). As the government finances all public schools, the Minister is not necessarily obliged to comply with the general wishes of the population. This makes citizens spectators rather than participants in their educational affairs. However, there has been a trend to encourage decentralisation of educational administration and interaction between school and community. This trend has been maintained by:

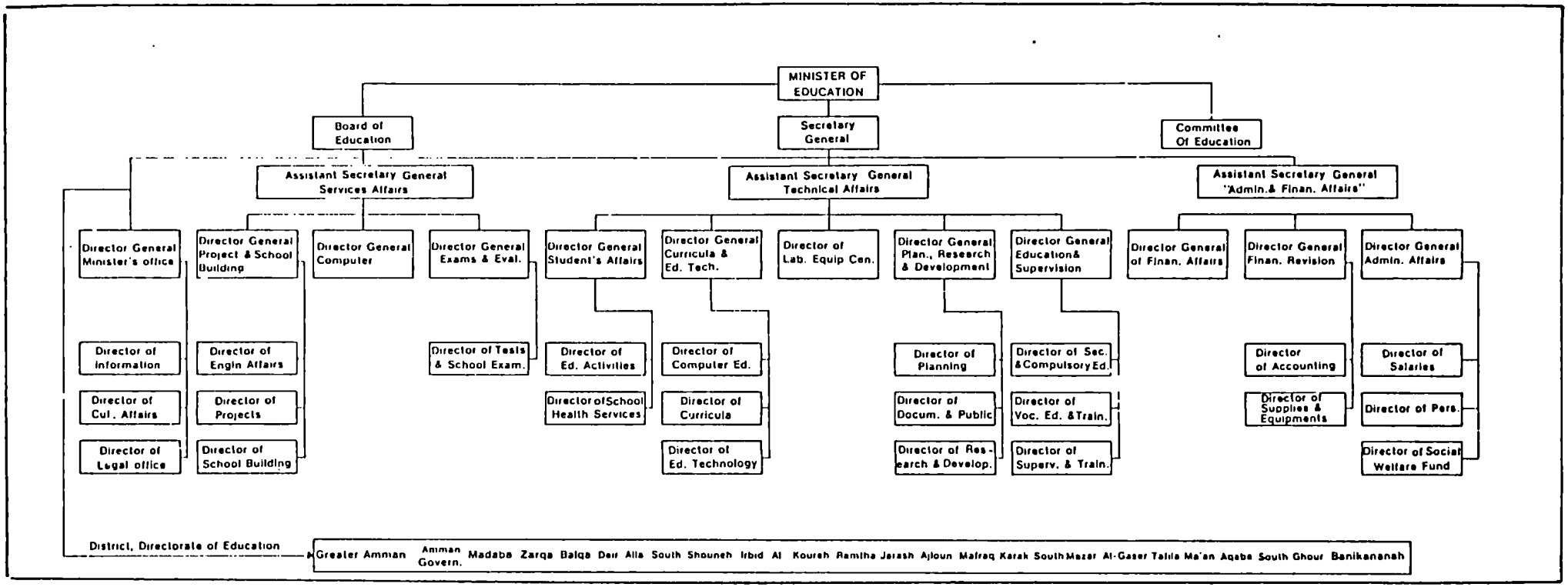
i) the delegation of more authority to local administrators for such matters as staffing, supervision, provision of educational services and budgetary control;

ii) the delegation of more responsibilities for head-masters at schools to develop their own activities and to solve their own problems;

iii) the encouragement of greater community participation in general decision-making at the school level, through establishing Parent-Teachers Association in every school in the country. [38]

As a result of such reforms, the M.O.E. has reorganised that it must delegate more authority and responsibility to the Directors and Districts. Figure 6 shows the organisational chart of the M.O.E. as it was in 1988.

Figure 6: **ORGANIZATION CHART**
MINISTRY OF EDUCATION
1988



Source: Ministry of Education (1986) The Progress of Education in The Hashemite Kingdom of Jordan 1986/1988, MOE, Amman, p.16.

The Central Office of the Ministry consists of ten General Directorates and is administered by the Secretary General, who is directly accountable to the Minister. He is supported by three senior assistants for: services; technical affairs; administrative affairs. Each of these assistants supervises a number of General Directorates. In addition, there are 23 District Directorates headed by Directors of Education.

Educational administration in Jordan was certainly traditional and centralised in the past, aiming at stability in its institutional forms and its personnel practices. The approach was one of 'system maintenance' and control, rather than experimentation and innovation. The lines of authority and responsibility were not clearly defined, and this was compounded by the concentration of activities in the capital. However, the Ministry has now experienced a number of organisational changes as a result of increasing workload. Efforts towards decentralisation have resulted in delegating more responsibilities to the Directors of Education, which has released the Minister and the Secretary General from the routine work and enabled them to concentrate their efforts on important matters, such as ongoing evaluation and innovation in the system.

4.4 The Financing of Education

Education is free at all stages in public schooling. However, students contribute nominal annual payment for school activities

and facilities (currently 3 pounds for the compulsory cycle, and 6 pounds for the secondary stage). The M.O.E. distributes text books to all pupils in the compulsory cycle, while secondary school students purchase their books at cost price. Free boarding facilities are offered to a limited number of students in vocational secondary schools.

The national treasury is the basic source for financing public education, while local sources contribute a small percentage. In 1986, 95.5% of the Ministry's budget came from the national treasury, while only 4.5% came from local sources such as municipal taxes and donations from private individuals. [39] The budget is usually classified into different programmes with separate allocations for each. The Ministry of Finance is responsible for supervising the proper execution of the budget, but no detailed approval is required by the Ministry of Education for expanding the allocations, provided it complies with the financial regulations.

A study of the annual budget of the Ministry between 1977-1987 shows a large increase in the expenditure on education to deal with the high enrollment ratio as a result of the growing consciousness of the importance of education among the Jordanian population. Table 4.2 shows that the budget has increased from 18,610,500 J.D. in 1977 to 50,781,000 in 1982, and to 77,000,000 J.D. in 1987. This represents a ratio to the general budget of 7.1%, 8% and 8.3% respectively. [40] With 645,518 students at public schools

Table 4.2: Education Expenditure 1976/1986
Comparative Statistics of the Ministry of Education Budget and Its Percentage to State Budget between 1976-1977 - 1986-1987

Percentage to State Budget	Ministry of Educ. Budget	State Budget	Fiscal Year
7.1%	18,610,500	263,000,000	1976
6.7%	22,315,000	332,600,000	1977
7.1%	26,357,000	317,813,000	1978
7.0%	35,766,000	513,683,000	1979
7.5%	39,668,000	529,233,000	1980
8.0%	50,781,000	638,250,000	1981
8.0%	61,563,000	765,600,000	1982
8.2%	63950000	775370000	1983
8.5%	65540000	770200000	1984
8.6%	70,400,000	811,222,000	1985
8.3%	77,000,000	923,705,000	1986

Source: Ministry of Education (1987) The Statistical Yearbook 1986/1987, Amman, National Press, p.13.

in 1987, public education in Jordan appears to be an inexpensive economic venture compared with the educational systems of many other developing countries. Table 4.2 shows a large increase in the amount allocated to education over the years. However, if we compare these amounts to the total budget, the results will be discouraging. The M.O.E. has become the largest and most important civil agency in the country. Its workload and responsibilities have increased rapidly, yet its share from the total budget has been strictly controlled at around 8%, which is not enough to meet the expanding demands. Although it is difficult for the Government to determine priorities in a limited budget, nevertheless, the M.O.E. does not appear to have an adequate share from the government resources with which to operate the Government's own policies in the field of education. In 1984, the average cost per student was J.D. 103.[41] Table 4.3 shows the detailed costs per student in various cycles and educational categories.

Table 4.3 : Average Cost per Student by Educational Cycle and Category (JD 1) in 1984

Cycle and Category	Average Cost
Elementary	57.5
Preparatory	85.9
Elementary and Preparatory	76.4
Secondary/Academic (Arts and Science Streams)	105.8
Preparatory and Secondary	98.9
Elementary, Preparatory and Secondary	84.3
Comprehensive Schools	165.5
Industrial Schools	277.3
Commercial Schools	120.2
Agricultural Schools (Rabba Agricultural)	429.4
Vocational Training Centers	187.2
Overall Average Cost per Student	102.4

Source: Ministry of Planning (1986) Five Year Plan for Economic and Social Development 1986/1990, Amman, National Press, p.233.

This low cost may be explained by three factors:

i) vocational education is not widespread in Jordan;

ii) general secondary schools have no boarding sections;

iii) the low salary level of teachers, since all of them are locally recruited.

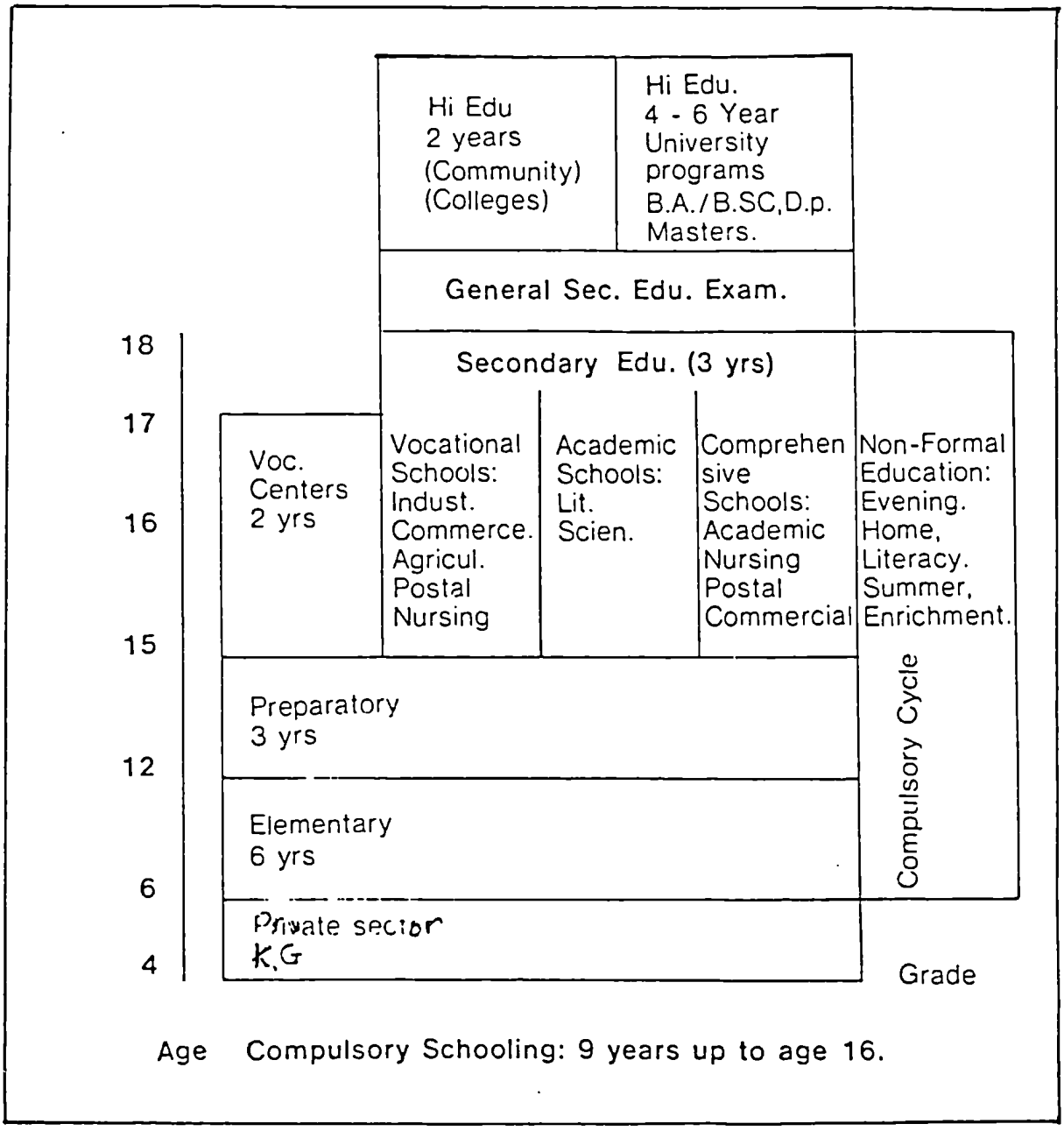
Notwithstanding these criticisms, Jordan still invests a large amount of money in education, as compared to its scarce resources. The Five-Year Plan (1981-1985) allocated JD 226 million for the development of education, while the Five-Year Plan (1986-1990) allocated JD 154 millions for the same purpose, of which a large amount will be in the form of loans from the World Bank and Arab 'oil' countries. [42]

4.5 The School System

4.5.1 The Educational Ladder (see Figure 7):

Children normally start the six years of primary education at the age of six. The primary cycle is followed by three years of the preparatory cycle, and the nine years constitute the compulsory years of education. At the end of the compulsory stage, all students used to sit for the public preparatory examination, but this was cancelled in 1975, and since then all students who pass their school examinations at the end of the third preparatory class are promoted to the secondary cycle. Girls and boys have equal opportunities, and there is no

Figure 7: Educational Ladder



Source: Ministry of Education (1988) Progress of Education in the Hashemite Kingdom of Jordan. Amman, Addustor Commercial Press, p.11.

discrimination whatsoever in education among Jordanian citizens. The duration of the secondary cycle is three years (grades 10, 11, 12), provided in the form of general secondary schools, comprehensive schools and vocational schools. The latter includes commercial, postal, agricultural, nursing and industrial schools. Students of all types of secondary schools sit for the General Secondary Education examination. Those who pass can continue their higher education in community colleges and universities in Jordan and abroad. In addition to the three-year vocational training centres, there are the two-year vocational training centres where students do not sit for any general examination. Education in these centres is terminal for such students. Higher education in Jordan is provided by institutes, community colleges and universities.

Pre-school education in kindergarten is provided by private agencies. Children are accepted in these institutions at the age of three years and eight months. Although the M.O.E. does not offer pre-school education, it issues regulations concerning the supervision and administration of kindergartens in the country. The aim of pre-school education, according to these regulations:

> "is to guide children towards the correct habits and actions, to develop their abilities, and to prepare them for entering the elementary school." [43]

Attendance at kindergartens usually lasts for two years.

4.5.2 The Compulsory Cycle:

The duration of the compulsory cycle is 9 years, which comprises an elementary stage of 6 grades, and a preparatory stage of 3 grades. The Jordanian Constitution made it the responsibility of the state to ensure the education of all citizens, irrespective of their social or religious differences, and according to Education Law No.16 of 1964. Under this Ordinance, a pupil may not be dismissed or leave the school before the completion of the sixteenth year of age, except on medical grounds. [44] A child is admitted to the first grade of the elementary school at the age of five years and eight months. The curriculum consists of: Arabic, Religion, Arithmetic, History, Geography, Science, Art Education, Physical Education and Vocational Activities. Commencing at the fifth grade, all children learn English as a second language, but in most private schools the study of English and French begins at earlier grades. Elementary education constitutes the basis of education. It is the foundation for other cycles and has been considered one of the most important means for strengthening national unity. The aims of this cycle were defined as being:

> "To prepare the pupil to become a good citizen through developing his personality and offering him an education aimed at forming a citizen sound in body, mind, character and belief. It should also try to discover his abilities, aptitudes and tendencies for further studies." [45]

One characteristic of primary education in Jordan is the system of modified automatic promotion of pupils for the first three years

of the cycle, then is permitted to repeat a grade twice in the upper three years of that cycle.

During the year 1987, there were 535,575 children at 1,273 elementary schools, of which 685 were co-educational.[46] About 52% of the school enrollment was male, and 48% female, as compared with 1959 when the ratio had been 70% to 30%.[47] Most of the pupils of the sixth grade are promoted to the seventh grade (the promotion rate in 1987 was 94%).[48] The seventh, eighth and ninth grades make up what is known as the preparatory cycle. Education at this level is free and compulsory, and continues the functions of the elementary school with respect to basic skills and courses in Mathematics, Science, Languages and Social Studies as a foundation for secondary education. It also offers vocational courses as part of its general education curriculum. Generally, boys preparatory schools in rural areas also offer Agricultural courses, while in urban areas they offer either Industrial or Commercial options. Girls preparatory schools usually offer courses in Home Economics. In 1987, there were 210,710 pupils in 1,122 preparatory schools, of which 270 such schools were co-educational.[49] About 53% of the school enrollment were boys and 47% were girls, while in 1972 the ratio had been 60% boys and 40% girls.[50] (For the expansion of compulsory education, see Appendix 1).

4.5.3 Secondary Education:

Secondary education consists of three years (Grades 10-12) and is provided for students who completed the compulsory cycle. The students are assigned to different types of general and vocational specialisations on the basis of three criteria: [51]

i) the student's performance at the end of the preparatory examination;

ii) the student's expressed preference for an academic or vocational specialisation;

iii) the number of places available at secondary schools.

Student guidance is not provided to assist in indicating preferences, and in practice examination performance is the dominant criterion in the allocation process,with the highest placing students entering academic and industrial specialisations. Students who do less well on the examination tend to be assigned to vocational specialisations, according to a prestige hierarchy which ranks industrial training most highly and agricultural and nursing training at the bottom. This process is inefficient because it fails to account for different aptitudes of students, and because it results in training some students in specialisations in which they are unlikely to work. It also unfairly discriminates against agriculture and other practical vocations, thus perpetuating their undesirability and depriving a

number of important economic sectors of good quality labour. The M.O.E. is developing aptitude tests to provide an additional criterion to guide the assignment of secondary students. No more than 60% of boys and 70% of girls are allowed to enrol in general academic secondary schools. The others may enrol in Vocational Schools or Trade Centres.[52] The Secondary General Schools offer two options: literary and scientific. Streaming starts at the beginning of the second year (11th grade) and usually those students with high achievements records in science and mathematics are allowed to take the 'scientific major'.

The Secondary Vocational Schools are divided into Industrial, Agricultural and Commercial types. The curriculum in the secondary industrial and agricultural schools is divided into two main parts, theoretical and practical. The latter is allotted 50%-65% of the time. Students at commercial schools share with other students most of the general educational courses and have, in addition, specialist commercial subjects. New types of vocational schools have now been established: Postal Schools, Nursing Schools and Hotel Administration Schools, together with Comprehensive Schools.

The objectives of the different types of secondary education emanate from the general aims and objectives of secondary education, which are elaborated in the Law of Education No.16 of 1964. The major aim of general secondary education is to prepare the students to continue their studies at Universities and Institutes of Higher

Education, while the secondary vocational schools are supposed to prepare students to take up middle level manpower positions in the Jordanian economy. The comprehensive secondary schools aim at providing the student with the necessary knowledge and skills to prepare for higher education or for further vocational training at any training establishment. Figure 7 shows the educational ladder in Jordan. A general public examination, the General Secondary Education Certificate Examination (AL-TAWJIHI) is held annually for the students of the final year in secondary schools. Successful students are awarded the certificate and may enrol to continue their higher education.

The expansion of compulsory education has placed considerable strain upon secondary education as increasing numbers of students have sought places at this level. This led to a rapid and uncontrolled growth in the secondary education, with the number of students rising from 2,025 in 1951 to 31,014 in 1967, to 60,718 in 1977, [53] and to 127,961 in 1987. In 1987, there were 96,468 students in 512 general secondary schools, compared with 31,493 students in 28 vocational schools and 69 centres. [54] About 52% of general secondary school enrollments were girls, while in vocational schools 39% were girls.

The Ministry of Education realised that expansion in secondary education must be directed towards vocational education. The Ministry achieved the requirements of the Three-Year Plan (1973-1975) in respect of diversifying secondary education. The portion

of students admitted to vocational schools rose from 8% at the beginning of the Plan to 15% at the end. However, despite an obvious increase in the number of students in such schools since then, their proportion to the total number of students decreased in 1980 to 12.4% due to a large expansion in general secondary education.[55] The need still exists for continued expansion in vocational education, so as to bring up the proportion of enrollment to 40% of the total enrollment of the secondary stage by 1990. This will be achieved through establishing various vocational schools and centres, as well as expanding the capacity of existing vocational institutions. Establishing vocational centres where training ranges from six months to two years, was one of the practical measures which have been taken by the M.O.E. to provide more opportunity of access to vocational education and training. The relatively small number of students in vocational schools has resulted in a shortage of trained manpower in industry, commerce and agriculture. Such a shortage was accentuated by the emigration of skilled workers to Arab 'oil' countries. This led the M.O.E. to consider its policy in favour of the diversification of secondary education on new basic principles, linking it with economic development plans, the need for skilled manpower, and the problem of unemployment among graduates from secondary schools and institutions of higher education. However, three major problems are facing the Ministry in its attempts to expand vocational training:

i) rooted prejudice against manual labour;

ii) lack of qualified teachers;

iii) lack of finance.

(For expansion of Secondary Education, see Appendix 2).

4.5.4 Higher Education:

Higher education in Jordan is supervised by the Ministry of Higher Education which was established in 1985. This sector comprises:

i) Community colleges of two/three year courses with a variety of specialisations that prepare for teaching career or technician level occupation;

ii) Universities with four/six year courses leading to professional qualifications.

With the expansion of secondary education, the demand of Jordanians for higher education expanded exponentially. Approximately 60% of students completing secondary schools enter higher education institutions with about two-thirds enrolling in the community colleges, and one third in the four public universities. [56] Students enrolled in higher education in 1985 contributed 21.4% of the population in the age range 18-23 years, with a total of 46,000 pursuing higher education abroad. [57] In 1989, there were 55 community colleges in Jordan with 30,985 students. Thirty of these colleges were under the private sector. [58] The four

universities in Jordan are: University of Jordan, Yarmouk University, Mu'tah University, and the Science and Technology University. These were established in 1962, 1975, 1980 and 1985, respectively. All four universities are state institutions, but they are academically, administratively and financially independent by law. The universities are governed by their own boards which are responsible for establishing general policy guidelines and determining each year the number of students to be admitted to the different faculties. Policies for higher education are established by the Higher Education Council (HEC), chaired by the Prime Minister and consisting of membership from University Boards of Trustees and Royal Commissions. The HEC's functions include approvals for establishment of higher education institutions and fields of specialisation, the setting of tuition fees, the securing of financial resources, and approval of budgets.

In 1989, a total of 31,627 students were pursuing their studies in Jordanian universities, with 36019 students studying abroad.[59] The total number of students enrolled in various institutions of higher education in 1989 amounted to 98,631, which represents 22% of the population in the age range of 18-23 years.[60] This ratio is one of the highest in the world, and it implies that Jordan will have a surplus of university graduates. Officials in Jordan are worried about unemployment for the graduates, because Arab oil countries can no longer absorb as many of them as they have done in the past.

Higher education has experienced a dramatic increase in enrollment

over the past decade. This rapid enrollment growth has not, however, been accompanied by the development of institutional capacity, especially since the Ministry of Higher Education was created only in 1985. There is insufficient co-ordination among Community Colleges, and a lack of co-ordination between them and the Universities. Reliance on only one criterion (grade averages in the Secondary Education Certificate Examination) for university admission and specialisation purposes is another problem. Since the majority of the students studying at universities and community colleges in Jordan or abroad are self-financed, there is a need to address the degree of compatibility between employment opportunities and specialisations offered at higher education institutes. Programmes and specialisations need to be geared to what the markets demand. [61]

Universities in Jordan adopted the North American credit system where students are required to complete certain credit hours before graduation. Students are free to select a major field of study and normally complete their studies for the first degree within four years.

One of the important aspects of the Jordanian higher education system is the high ratio of students studying abroad. Since national facilities for higher education are insufficient to meet the individual demands, thousands of secondary school graduates are obliged to study abroad, thus draining a large amount of foreign

currency from the country. The majority of these students are studying at their own expense and the government exercises little control over their selection of fields of study. The pursuit of higher education outside Jordan involves some risks and results in a variety of problems. To deal with the situation, the Ministry of Higher Education agreed to permit the private sector to establish new universities in Jordan. However, many educationists believe that Jordan does not need more universities, and they are worried about the quality of education that will be offered at the universities of the private sector. Already, many community colleges in the private sector lack adequate facilities, and this may become the case at university level. In order to promote good quality education and guarantee at least a minimum standard in terms of academic facilities and programmes in community colleges in the private sector, a system of evaluation and accreditation has been introduced by the Ministry of Higher Education.

4.6 Educational Reforms

Throughout its history, the M.O.E. has been faced with numerous difficult assignments and responsibilities. It has to enforce compulsory education, combat illiteracy, train teachers to develop curricula, provide school buildings, and to provide guidance to all educational institutions, including the private sector, as well as the schools run by UNRWA. The above account of the rapid growth of schools and student populations during the last decade gives some concept of the magnitude of the undertaking of the Ministry.

The number of schools in 1978 was 2,518 with 647,590 students and 23,438 teachers; in 1987, it had risen to 3,356 schools with 906,281 students and 37,582 teachers.[62] Many educators argue that such an expansion was at the expense of the quality of education offered at schools and testifies to the difficult task of the Ministry of Education.

The great expansion in the field of education between 1950 and 1980 led to high enrollment ratios and uncontrolled expansion of academic secondary education, which was brought about at the expense of vocational education. The Ministry was interested in opening as many schools as it could without paying much attention to the quality of such education. To meet the demand, the Ministry was forced to recruit many teachers without proper training and due to their numbers, it was very difficult for the M.O.E. to provide effective in-service teacher education. In fact, the expansion of teacher numbers was not accompanied by a similar expansion in pre-service and in-service education programmes. Schools were established in many rented private houses which were in an unsatisfactory condition. Even in 1987, nearly 50% of all general education students were taught in rented premises, and one-fourth of this group were in rented double-shift schools.[63]

Curricula for all cycles are centralised and put too much stress on "knowing" and too little on "thinking" or "doing". As a result, the core of most Jordanian students' educational experience can best be characterised as memorisation of academic material. In an attempt

to remedy the situation, the M.O.E. introduced several educational reforms.

During the 1970s, the M.O.E. tried to shift the emphasis towards vocational education in an effort to link its programmes and projects with the requirements of national plans for general development. The diversification of secondary vocational education was increased, new vocational education institutions were established, and comprehensive schools were introduced in 1976 on an experimental basis to provide students with opportunities to receive vocational training in addition to academic education.

Many other innovations were introduced, aiming at improving the educational process. The academic year was divided into two semesters and to cope with this transition, curricula and text books were revised and reorganised. The study plan for schools was revised with class periods reduced for all cycles for both teachers and students to allow for engagement in creative activities. Remedial, enrichment and summer study classes were introduced into the educational system to try to improve its efficiency and effectiveness.[64]

However, the major aspects of the new policy orientations to reform education during the 1970s can best be summarised by the following goals and objectives of the Five Year Plan of 1976-1980:[65]

i) to achieve total compulsory education in the elementary and preparatory cycles;

ii) to expand the diversification of secondary education, to serve the needs of Jordanian society for technical and trained manpower;

iii) to upgrade the quality of education by treating all aspects which adversely affect the efficiency of the educational and learning process, which include: students, headmasters, teachers, school buildings, curriculum, text books, furniture and equipment;

iv) expand adult education and functional literacy programmes.

In line with these goals, several legislative measures have been taken and school curricula have been reviewed. The plan did not make much headway because of numerous difficulties, especially the lack of adequate financial support.

During the 1980s, the major responsibility of the M.O.E. has continued to be to improve the quality of education. Although Jordan's general education system is quantitatively impressive, it is qualitatively inadequate in terms of Jordan's human resource development needs. Jordan has one of the highest rates of coverage of school-age population among middle-income countries. Enrollment

rates in 1985/86 were 97% in the compulsory stage, and 65% in secondary and 24% in higher education. Jordan's compulsory enrollment rate exceeds that of comparable countries in the region (e.g. Syria, Iraq, Algeria, Egypt and Morocco), and secondary enrollments are the highest in the Middle East. Approximately, 71% of students completing secondary school enter higher education institutions.[66] This rapid quantitative growth has had an inevitable adverse effect on quality. Furthermore, major changes in the economic climate and the increasing use of technology in all aspects of life have contributed to the need for a further comprehensive reform of the education system.

In 1980, a Conference was held in Amman to review the educational system under the title "The Educational Process in a Changing Jordanian Society". In order to achieve the aim of improving the quality of education, the following recommendations were adopted:

i) decentralisation of the administrative system of the Ministry of Education;

ii) linking education with real life by increasing the efficiency in the implementation of life-oriented education in the compulsory cycle, and vocational education in the secondary cycle;

iii) emphasising the educational activities which increase the vitality and efficiency of the educational process to foster the social growth in the students, and to assist them to use scientific

knowledge in practical skills to extend the curriculum and objectives of the school, and to link the school with society. [67]

The economic recession wich followed in 1983 with the weakening of oil prices hit Jordan badly and made it difficult for the government to implement the recommendations for financial reasons. GDP grew only by 2 per cent to 3 per cent per annum during 1983/1986 against average growth of 12 per cent per annum for the period of 1975-1980. The situation was aggrevated by the decline of foreign aid by over 50 per cent. [68] This was coupled with substantial decline in the external demand for Jordanian qualified labour. Problems and constraints were emerging in all the sectors, especially education. The Five-Year Plan 1986-1990 summarised the problems facing the education system as follows: [69]

i) Teachers:

a) shortage of qualified teachers in academic and vocational secondary schools;

b) general weakness in teaching methods, and failure to stimulate pupil capacities for critical and creative thinking;

c) lack of interest on the parts of males in joining the teaching profession, coupled with a high staff turnover.

ii) Students:

a) high rate of failure and truancy;

b) lack of channels among various educational streams in the secondary cycle;

c) lack of opportunities for the students to participate in discussing educational and social issues of concern to them.

iii) Curricula

a) failure of certain curricula and text books to keep abreast of current research and developments in various areas of knowledge;

b) failure of certain curricula and text books to link principles, theories and laws with applied work or practical daily situation;

c) insufficient attention to the various mental skills which would facilitate a transition from rote learning to analysis, synthesis, evaluation and experimentation;

d) insufficient linkage among the various taught subjects, coupled with duplication and overlapping;

e) insufficient participation and co-ordination by concerned parties (teachers, supervisors, subject specialist(s) in the preparation of curricula and text books.

iv) School Buildings

a) inability to meet annual increases in student numbers;

b) inequitable geographic distribution of school buildings;

c) high proportion of rented buildings generally not suitable to be used as schools;

d) shortage of many schools of necessary facilities like libraries, laboratories, halls and playgrounds.

The government felt that these problems had to be dealt with and that improvement in the quality of education and training were needed to obtain a skilled labour force responsive to the changing situation locally and abroad. Taking into account the changing patterns of the country's needs, policy-makers have critically reviewed and reassessed the provision of education and training in Jordan against the criteria of its relevance and adequacy for meeting the future needs of the country. Consequently, the government has committed itself to reconstruct and modernise the entire education system.

4.7 The National Conference for Educational Development

Taking into consideration that education is a "national concern", a team was appointed in 1985, and guided by Crown Prince Hassan, for a comprehensive reassessment of the whole educational enterprise of Jordan. The team submitted its report, 'The National Report on the Educational Policy', to the Board of Education in February 1987. This report consists of two parts: the current situation and the future outlook of the educational policy, [70] and to encourage full participation of all interested groups in the society, the reassessment process was conducted as follows:

i) A central team to supervise the process was formulated in the M.O.E. representing public and private sectors;

ii) Local teams were formulated at each local district to hold a local conference on education, and provide the central team with its recommendations;

iii) workshops were held to discuss the local findings and recommendations;

iv) teams of experts were established for each subject area or educational activity, to evaluate and discuss all the findings and recommendations, and to prepare the final report about its field;

v) documentary televised seminars were held for each report;

vi) an executive bureau was formulated to review and co-ordinate the final reports. [71]

Consequently, "The First National Conference for Educational Development" was held in September 1987, under the patronage of King Hussain, attended by a large number of experts: educationists, teachers, students and parents. The King's speech outlined the general principles the development process should take into account to enable educational outputs meet the future requirements and needs, as follows: [72]

i) maintaining a sound balance between resources and population;

ii) achieving a sound balance between the national identity on one hand, and the openness on world culture on the other hand;

iii) coping with the contemporary changes, and providing self-capability to meet its needs;

iv) adherence to faith in God and spiritual values, to knowledge, and respect of all kinds of work.

The Conference recommendations were comprehensive and could be grouped into the following areas: educational policy, educational structure, curricula and text books, technology of education, teacher education effectiveness, educational administration, the school-building facilities, and the role of universities in general education. The overall objectives of the educational reform, as outlined at the Conference, were:

i) to improve the level of general education output in compulsory and secondary cycles;

ii) to achieve relevance to labour market needs;

iii) to meet the requirement of scientific and cultural development and change. [73]

The above objectives are to be achieved through a set of policy reforms, aiming at the following:

i) improving student achievement by: extending compulsory education to 10 years, introducing two-year comprehensive education at the secondary level, and providing better trained teachers;

ii) increasing the relevance of schooling by modernising all curricula for compulsory and secondary education;

iii) increasing the efficiency of resource utilisation;

iv) increasing the efficiency of educational administration by enhancing decentralisation of educational administration, emphasising the concept of educational leadership at all levels, and delegating more responsibility and authority.

To translate these commitments into action, the Ministry has embarked on a comprehensive ten-year education reform programme, including the following:

i) extension of free universal basic education to 10 years (grades 1-10), restructuring of streaming for secondary grades 11 and 12, and introduction of new system of admission to the secondary cycle based on previous grade point averages;

ii) comprehensive curriculum reform to make it more relevant to modern day needs and more responsive to individual students' differing capabilities. All the text books have to be changed;

iii) a programme for upgrading teachers' qualifications at the compulsory stage from two years Diploma, up to a B.A. equivalency;

iv) a programme to familiarise teachers with reform goals through in-service education;

v) the replacement of rented facilities by new purpose built schools, and gradual elimination of double-shifting in schools;

vi) introduction of improved methods of education, cost recovery and revenue raising;

vii) establishment of a national educational research and development capability which would identify, test, evaluate and introduce educational innovations. [74]

A comprehensive three-stage ten-year plan to implement the reforms had been approved with estimated cost of around US $ 950 millions. [75] A new Education Law has been approved in 1988 to reflect the new educational policies and the basic compulsory education has been extended by one year to cover grades 1-10. In view of Jordan's constrained economy, it is very difficult to finance the programmes of reform without foreign aid. The government is seeking the help of the World Bank and Japan, in particular. The affordability of financing requirements is critically dependent on two factors:

i) the expansion of external assistance flow;

ii) implementation of cost-saving measures.

The M.O.E. has carried out several educational reforms in the past decades. Those reforms did not deal with the educational system as a whole, but tackled selected subjects at sporadic periods. The present form is different in that:

i) it is comprehensive, covering all aspects of the educational process;

ii) it is not confined to the M.O.E. personnel; the public and private sectors have been involved;

iii) it enjoys the direct patronage and supervision of the highest political leadership in the country.

Furthermore, the present reform has targetted four basic issues adversely affecting the quality of classroom teaching:

i) inadequate teacher qualifications;

ii) poor pre-service and in-service programmes;

iii) inappropriate classroom teaching methods;

iv) weaknesses in academic qualifications of school principals.

To deal with these problems, the teacher qualification requirements for basic education teachers have been raised from two years to four years, a major in-service education plan was developed, and a Higher College for Teacher Education and Certification has been established in 1989 to upgrade the existing community college graduat teachers academic knowledge to B.A. equivalency.

It is to aspects of this central issue of teacher quality that the main points of this thesis are addressed below.

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CHAPTER FIVE

IN-SERVICE TEACHER EDUCATION AND TRAINING

5.1 Introduction

The pace of changes which the world has already witnessed, and others that we may anticipate, suggest that the future forms of education systems should be radically different from those which exist today. It seems sometimes that whilst societies change, some educational systems struggle to remain the same. However, in many parts of the world there is increasing pressure to change the role of teachers and to emphasise the importance of new teacher education programmes in the general drive for social and educational reform. Corrigan[1] states:-

> "The education of a society can r ise no higher than the qualification of its teacher. To ignore or neglect the role of teacher education is to ignore the intellectual future of the country itself."

This notwithstanding, policy-makers within educational systems may respond positively to change or reject it and become its victims.

There is a considerable amount of literature about teacher education. It can be deduced from it that one of the main

general aims of teacher education is to produce satisfactory educational results in the schools. [2] Furthermore, traditional models of teacher education leading to a teaching certificate are somewhat similar throughout the world. According to Lomax, [3] the basic structure of the curriculum for teacher education includes two major components: the theoretical academic component and the professional or practical component. In general, teacher education in most countries is controlled by regulations which stipulate a list of required courses, some electives, and practice teaching. However, in some developing countries, there are large numbers of practising teachers who have received no formal initial professional training, due often in large measure to the shortage of qualified teachers and the immediate need to get almost any individuals, seemingly no matter how unprepared, to the front of the classroom. According to Hercik, [4] this is another negative feature of the educational heritage left to the developing countries by the colonial era.

A further legacy of colonialism is that many developing countries continue to imitate the western models in school organisation and teacher education. The rigid separation between primary and secondary teachers, and the kinds of pre-service and in-service education which still prevail in western countries, also persists in developing countries. [5]

There has been a great deal of controversy and debate over

the ways in which teachers should be prepared and trained. As a result of dissatisfaction with traditional teacher education, attention has been increasingly focussed on several emerging movements which have had an impact on teacher education. These may be labelled: progressive, behaviouristic and humanistic.[6] The debate among the advocates of each approach continues and centres on four main issues: goals, rationale, instructional procedures and assessment. The current situation of teacher education is described by Lynch, et al.[7]

> "Teacher education is a disputed territory of conflicting tendencies: on one hand there is a tendency to maintain and reproduce the pattern of traditional ways of valuing, thinking and organising; on the other, there is a tendency to promote innovation and reforms.... The aims of teacher education are problematic in so far as the society and the role on which they are focussed reflect contradictory tendencies."

Nonetheless, changes are taking place in the profession.

In the area of organisation and articulation, two major trends are prominent: the level of education for teachers is steadily being raised while a clear effort is concurrently under way to integrate and unify the educational patterns and programmes for teachers of the various levels and specialisations.[8]

It has now become generally recognised that teacher education

must be conceived as an extended process within which the pre-service courses can be regarded as no more than initial training. Lippit and Fox, [9] state:-

> "Teacher education is continuing education. Discontinuities must be minimised between pre-service and in-service education."

Taking these assumptions into consideration, an attempt will now be made to outline some main features of the development of the system of teacher education in Jordan, with emphasis on in-service education and training of teachers.

5.2 Some General Historical Trends

Jordan is a developing country. Within it, the issue of teacher education at both pre-service and in-service stages is relevant for many reasons. [10] These include: The important and vital position of teachers in the educational process as the hinge between the learners and the curricula and educational activities at schools; and the leading role of teachers as agents preparing the new generations to be good citizens. Moreover, it can be said that the success of the schooling process and educational reforms is largely dependent on teachers competencies.

But despite the importance of teacher education, Jordan had

no teacher-training institutions in the first half of this century. Some students were sent to study in teacher-training institutes and universities in Palestine, Syria and Iraq. [11]

Most of the elementary boys' school teachers had only secondary education without professional training, while most women teachers were not educated beyond the elementary level.

With the Union of the East and West Banks in 1950, and the introduction of free compulsory elementary education, the MOE was faced with the problem of recruiting teachers without much regard to their qualifications. An urgent need was felt to prepare qualified teachers to fill the vacancies in schools. The actual training of teachers in Jordan can be said to have begun in 1951 when a class unit was established in a secondary school in Amman to train teachers by means of a one-year course of post-secondary education. In 1952, the class unit was transferred to the Institute of Teacher Training which was opened in Amman. This trained teachers for two years to teach in the compulsory cycle. Another institute, for women, with a capacity of one hundred teachers, was established in Ramalllah in the West Bank. But the teacher-training institutes, during the 1950s graduated nowhere near enough teachers to meet the requirements of a rapidly expanding school population. The situation reflected on the quality of education offered in schools as Harris, [12] writing in 1956, stated:-

> "Apart from financial limitations, a major impediment to expansion of the educational system is the lack of teachers and teacher-training facilities....the quality of teaching is, in general, poor because the majority of teachers have never had professional training."

The qualifications of teachers in Jordan during the 1950s were low. In 1957, for example, 70 teachers had elementary education, 615 preparatory, and 1028 the fifth secondary qualification. Such qualifications were below those required for the matriculation certificate. Those who held a matriculation certificate numbered 2772: approximately 58 per cent of the teachers employed by the MOE.[13] The situation continued until the Law of Education of 1964 was approved and the minimum requirement for teaching at the compulsory stage was raised to a teacher-training college certificate or equivalent.

During the 1960s, additional teacher-training institutes were established and by the year 1976, there were 11 institutes with 7000 students.[14] Furthermore, the University of Jordan was opened in 1962, and, in 1966, the first professional course in education was introduced there. It is worth mentioning that, during the 1970s, a number of private teacher-training institutes also emerged as a result of growing demands for teachers in Jordan and other Arab oil countries.

In 1981, all teacher-training institutes were converted into

community colleges. This meant that teacher education has since then become one of several programmes offered by these colleges. There were 41 such institutions and, in 1982, 7200 students were enrolled in teacher education programmes. [15] Latest available data show the number of community colleges standing at fifty-two, and student enrollment in teacher education programes to be some 13,239. [16]

Together with what are now four universities, the institutes of higher education in Jordan are helping to solve the country's problem of shortages of qualified teachers.

It can be deduced that, in 1957, about 79 per cent of the teachers had only secondary certificate or below. In 1961, the percentage was about 70 per cent, while it dropped to 51 per cent in 1967, and to 32 per cent in 1977. In 1987, the percentage of practising teachers in MOE schools with only a secondary school certificate stood at a mere 1.8 per cent.

This changing pattern is partially explained by the fact that, in 1966, the MOE started to employ Jordan University graduates. Additionally, the number of graduates of the teacher-training institutes in Jordan increased. For instance, the graduates of these institutes numbered 43 in 1953, 359 in 1959, 884 in 1967, and 3294 in 1977. [18] Furthermore, in 1971, the MOE established a Certification and In-Service Teacher-Training Institute with the

Table 5.1: Qualifications of Teachers: Selected Years, 1956-1987 [17]

Qualifications	1956/1957		1960/1961		1966/1967		1976/1977		1986/1987	
	No.	%	No.	%	No.	%	No.	%	No.	%
Below Elementary	10	0.2	1		0	-				
Elementary	60	1.3	24	0.4	28	0.3				
Preparatory	615	14.1	245	4.1	125	1.4	150	0.7		
Matriculation & Secondary	2772	63.4	3825	65.1	4288	49.0	6394	30.2	496	1.8
Teachers' College	443	10.1	1185	20.3	1793	20.5	8294	39.3	19201	69
Under-Graduates	141	3.2			1403	16	420	2.0		
Vocational	168	3.8	256		360	4.1	467	2.18		
Others	158	3.6	150	2.5	106	1.2				
1st University Degree							4992	23.6	6825	25
1st University & Diploma							303	1.4	960	3.5
M.A.							101	0.48	160	0.6
Ph.D.							7	0.03	3	0.01
TOTAL	4367	100	5876	100	8746	100	21128	100	27645	100

aim of upgrading the unqualified teachers (holders of secondary certificate) in the compulsory stage to the level of the graduates of teacher-training institutes. [19] Thousands of teachers have benefited from this programme and become qualified.

5.3. Requirements of Teaching

The Law of Education of 1964 stipulates that: [20]

> "i) No teacher will be employed in any educational institution in the country, public or private, unless he/she receives a licence from the MOE authorising him to teach.
>
> ii) The requirements for securing this licence are:
> a) for kindergarten and compulsory stage: a certificate of secondary education in addition to two years of post-secondary education in professional education courses, general education and field of specialisation in the subject taught.
>
> b) for secondary stage: a university degree or its equivalent, in addition to one year study of education. In case of necessity, a university degree shall be sufficient."

The most important article in this respect is Article 23 which states that the MOE has to provide the proper educational opportunities for the teachers of public and private schools who were appointed before the enactment of the Law of Education in 1964, and who do not have the requirements mentioned above, so that their professional standards may be raised. [21]

Relative to other developing countries, during the early 1960s, Jordan's standards for teacher preparation were high, [22] but during the mid-1960s and 1970s, these standards were not maintained. Despite the continuous efforts of the MOE, a large number of teachers have not met the established standard of preparation. In 1967, estimates of the percentage of teachers meeting qualification standards by school level were as follows: [23]

Table 5.2: Estimates of the Percentage of Teachers meeting Qualification Standards by School Level: 1967

School Level	Percentage Qualified
Elementary	25%
Preparatory	46%
Secondary	43%

In spite of the expansion in teacher education and in-service education during the 1970s, the proportion of unqualified teachers in the compulsory cycle (elementary and preparatory) stood at 65 per cent. In 1974, secondary education in general and vocational education in particular suffered from an acute shortage of qualified teachers in that the percentage of unqualified teachers was around 90 per cent. [24] It should be explained that the MOE was forced to appoint thousands of unqualified teachers to fill the vacancies in schools. In other words, the shortage of qualified teachers chould be related

to: the expansion in the enrollment of pupils due to the implementation of the Compulsory Education Act; the lack of financial resources to open more pre-service training institutes; and to the overflow of qualified teachers to the other Arab oil countries seeking better salaries.

In an attempt to deal with the problem of unqualified teachers, the MOE adopted two strategies: the pre-service approach realised in teacher institutes and universities; and the in-service approach realised through certification and upgrading unqualified teachers on the job. Figures in 1988, [25] show a great improvement in the Jordanian teaching force, as measured by qualifications: 97 per cent of the teachers at the compulsory stage being qualified according to the requirement of Law of Education No.16 of 1964. At the same time (see Table 5.3), the majority of secondary school teachers are shown to hold a first university degree, but without professional studies in education.

Subsequently, in the light of the recommendations of the National Conference on Educational Development in 1987, the new Law of Education of 1988 has raised the requirements for teaching in the compulsory stage. The Law, in its Articles 20-21, stipulates: [26]

> "i) Every teacher in any educational establishment, public or private, must obtain a licence from the MOE authorising him to teach.

ii) The requirements for securing this licence are:
a) for kindergarten and basic education (compulsory stage): the first university degree or its equivalent.
b) for secondary stage: the first degree in addition to diploma in education (at least one year study after the first degree).

The figures in Table 5.3 show that, in 1988, there were 21,888 teachers with community college certificates working at compulsory stage schools in the MOE, while 9,584 teachers at the secondary schools hold the first university degree only without educational certification. According to Article 21 of the Law of Education of 1988, the MOE is responsible for providing those teachers who do not meet the requirements for teaching with opportunities to raise their professional standards. [27] This means the MOE has to upgrade teachers to the level of the first university degree, and to upgrade secondary school teachers who hold the first degree to the diploma level. Furthermore, the Ministry is obliged to provide training opportunities for all teachers to acquaint them with the new curricula and new text books.

5.4 Pre-Service Teacher Education

In respect of pre-service teacher education, it is the Jordanian government's aim to produce graduates who possess skills and competencies considered necessary for effective teaching at the compulsory and secondary levels. Until 1988, the training of primary school teachers comprised two years at community colleges, while the training of secondary school teachers consisted of four years at the universities.

Table 5.3: Distribution of Teachers in the Ministry of Education according to Sex and Qualifications in 1987/1988

Qualifications/ Sex	Secondary Certificate	Community College Diploma	BA/BSc	BA & Diploma	Master Degree	PhD	Grand Total
Males	256	7388	5257	820	152	2	14333
Females	449	14042	4327	182	31	-	19031
TOTAL	705	21388	9584	1002	182	2	33364

Source: Ministry of Education (1988) Educational Statistics, Amman, MOE, p.11.

Community colleges supply the compulsory cycle with teachers to all subjects. The duration of study is two years and the credit hours system is followed in teaching. The student must accrue 75 credit hours before he/she is graduated. The curriculum is divided into: general education (40 per cent), professional education (30 per cent), and a field of specialisation (30 per cent). [28] A demonstration school is attached to some of the community colleges to allow students to practice teaching, and to carry out experimentation in new fields of education, especially methodology.

Pre-service education for secondary school teachers is provided at the universities in Jordan and abroad. Each year, the MOE sends an increasing number of students who have finished their secondary education to universities to specialise in various subjects in which the Ministry identifies needs. These students are legally bound to work for the Ministry when they complete their studies. By such an arrangement, the MOE can virtually guarantee the recruitment of a large number of qualified teachers in various specialisations. For a university first degree, the duration of the study is four years. To be awarded a Diploma in Education, students must complete 33 credit hours, which usually takes one year for full-time students and two years for part-time students. The uniform curricula in university courses are too theoretical and specialised and students during their studies for the first university degree, for example, receive no practical training in teaching. In the community colleges, students do at least receive six weeks practical teaching

in their second year supervised by their specialist teachers. [29]

There has, on the whole, been no fundamental change in the curricula used in compulsory and secondary teacher-training in Jordan. All prospective teachers receive theoretical knowledge, but little or no practical training. No real integration or co-ordination exists between the theoretical and practical sides of the curriculum. It can be argued that the curriculum in teacher education, in large measure, determines the quality of teachers, who, in their turn, have the responsibility of implementing the new curricula for schools at the grass roots level. [30] It is thus important that the curricula for teacher education in Jordan is reviewed and made appropriate for the educational level of the trainee teachers, and for the achievement of general aims of education. In particular, emphasis should be placed more on practice than on theory.

Pre-service teacher education in Jordan is facing quantitative and qualitative problems. There is still a need for adequate numbers of trained teachers to meet the needs of schools in compulsory and secondary education. The supply in many specialisations (Mathematics, Science, English, Vocational) is still far short of demand. This compells the MOE to employ considerable numbers of unqualified teachers. As for the quality of teacher-education, there is a widespread dissatisfaction with it. There is a general belief that general aims of education can be achieved if teachers possess

certain qualifications. But a high percentage of those who join the pre-service teacher-training programmes, especially at the community colleges, have obtained low grades in the General Secondary Education Examination, and have failed to secure admission to universities.

Little or no attention is paid in the selection process to the personality of student teachers. Rather, this presently depends largely on the success of applicants in passing the General Secondary Education Examination (Tawjihi), with an average of not less than 60 per cent of the grand total of marks. Thus, the selection process ignores important characteristics in the personality of the candidates, such as: motivation, commitment, and leadership qualities. This leads to the admission of unsuitable people to the teaching profession.

Holmes, et al, [31] have argued that the quality of teacher education is affected by the following features:

> " i) The academic and social background of entrants to teacher education.
>
> ii) The content of courses which the students follow.
>
> iii) The way in which teacher education is financed, administered and controlled."

The assumption can be made that reforming these aspects of teacher education provides an opportunity for improving the quality of

teacher education in Jordan. As though in heed of this, the National Conference for Educational Development, in its recommendations concerning education, states: [32]

> "The new educational policy should depend on better qualified teachers. To achieve this decisive element, teacher education programmes should be revised and their academic standards should be raised."

The Conference concluded that, to achieve the desired goals of education, teacher education programmes must be so structured and effective to produce efficient teachers who can effectively implement the new national education policy at ground level. The teacher education programmes should aim at: [33]

> "a) providing trained teachers of high calibre in sufficient numbers to meet the increased needs for free and compoulsory education for all children up to the age of 16.
>
> b) catering for the requirement of all types of schools within the system.
>
> c) producing teachers motivated strongly enough to be active agents in implementing reforms, and meeting the challenge of developing the potential human resources of the youth of the country to meet its manpower needs.

To make progress, the challenges and demands that Jordan faces call for a new breed of well-trained and dedicated teachers who believe that pre-service education is the first step in a career which require a life-long education.

5.5. In-Service Teacher Education and Training

5.5.1 Aims and Policies: An Introduction:

People in Jordan have expressed a keen interest in education, to which the state has responded positively by offering free universal education for all children: in the first nine grades since 1964, and to the tenth grade since 1988. This led to a rapid growth of education and has required the employment of an increasing number of teachers, many of them unqualified. The MOE, in recognising the importance of qualified teachers for the achievement of the major aims of education, gave in-service education stronger support. The professional growth of teachers is a vital element in any formula for improving education in schools. Rubin, [34] states:

> "The conception of new theory on teaching and education, the initiation of experimental research, the development of new teaching materials, and the improvement of instructional technologies are useless if their benefits are not incorporated into the classroom."

In-service teacher education (INSET) has a role to play in this respect.

The National Conference for Educational Development has thus approved a number of recommendations to upgrade the professional performance of teachers in order to enable them to play an effective role in educational development, and to contribute to

the fulfilment of its objectives. The aim of the reform programme is to increase the effectiveness of teachers as one means of raising the level of pupil achievement in schools. Indeed, with the introduction of new curricula and textbooks in Jordan, there is an urgent need, through INSET, to familiarise all teachers and related staff with the content, methods and philosophy of new curricula.

Rubin, [35] has summarised the strategy for curricular change and INSET as follows:

> "The professional development of teachers seems to be a central element for reforms in education. It is the teacher already in the school who must serve as the agent of reform. Each teacher must be made to recognise that he plays a crucial role in curriculum development, and that he has an obligation to assess the shortcoming of the existing programme, to better it through experimentation, and to measure the value of suggestions put forth by the research of others."

It is clear that the teacher represents a vital link between the intentions of planners and reformers, and the educational experience of students. Unfortunately, the quality of teachers in Jordan represents a major bottleneck in any attempt to implement educational reforms. Educationists, in Jordan, believe that if curriculum reform is to be effective, a new type of teacher will have to emerge. To this end, following the recommendations of the National Conference for Educational Development, the MOE proposed

a comprehensive certification and training plan for teachers. The assumption underlying the whole programme of curriculum reform is that the old method of teaching and learning (i.e. a teacher-centred approach, rote learning and a concentration on the input of information) is not suitable for a modern society. The new curricula will, therefore, be learner-centred, and there will be an emphasis on training in creative thought and reasoning, with the use of discovery methods, group work and problem-solving. [36] But the key requirement to put this change into effective operation will be an effective training programme to enable the teachers to understand and handle the new materials.

The notion of INSET in Jordan is, in fact, not new. The MOE began providing INSET activities in 1955 by establishing a Training Division in the Ministry. The general aim was to develop the Ministry employees' professionally, and to upgrade their level of performance. In 1960, the Minister of Education established a five-member Teacher Education Committee, headed by the Under Secretary. The Committee was responsible for developing the right policies and decisions concerning INSET, with the Training Division responsible for their execution. [37] School supervisors were responsible for recommending training courses and trainees. The Training Division arranged short in-service courses for teachers in Jordan and abroad. The courses were generally remedial and updating programmes. A compensatory programme was also launched in 1964.

It is useful to define quite what is meant by compensatory remedial, updating and upgrading programmes, and to differentiate between their different aims. In the compensatory programme, the basic aim of INSET is to compensate for the absence of initial pre-service training. In the remedial programme, the main purpose of INSET is to make up for the deficiencies in previous teacher-training. In the updating programme, INSET is officially viewed mainly as a means of keeping the teacher abreast of new developments in his field and in the teaching/learning process. In the upgrading (certification) programme, the aim of INSET is to achieve higher certification through better qualifications.

In 1969, the compensatory programme was terminated and the MOE reconsidered its policies concerning INSET. In 1971, the membership of the Teacher Education Committee was enlarged to 15 members, with the Minister of Education as Chairman. As a result, new policies in respect of INSET were issued and several important decisions were taken. [38]

Firstly, a Certification and In-Service Teacher Training Institute (CITTI) was established and became the sole agency responsible for training unqualified teachers at the compulsory stage. Its Diploma was recognised as equivalent to the Diploma awarded by teacher-training institutes, with both graduates receiving a 20 per cent increase in salary.

Secondly, the Training Division at the Ministry became responsible for other short INSET programmes, with the trainees awarded a Certificate of Attendance only, but no salary increments.

Thirdly, school supervisors were made responsible for recommending trainees on a voluntary basis. Specialised lecturers from the Ministry and the University were asked to participate as instructors.

And fourthly, the University of Jordan was made responsible for the provision of a Diploma course to qualify secondary school teachers.

As a result of the above, the MOE succeeded, during the 1970s, in reducing the percentage of unqualified teachers in the compulsory cycle.

The main objectives of the different types of INSET can be summarised as follows:

i) INSET for initial training;
ii) INSET for upgrading;
iii) INSET for curriculum change;
iv) INSET for training for new roles.

The first two objectives are very broad and may include a number of more limited specific objectives. The programmes developed to

achieve those objectives usually last two years. They include the CITTI programme and Diploma programme at the University. The programmes geared to the second two objectives are of shorter nature, typically ranging from a half-day to four weeks.

During the 1980s, a directorate for educational certification and training was established in the MOE to supervise all INSET activities. More emphasis was put on certification than other forms of training. This trend was clear in the objectives of INSET, which were stated, in a proposed plan for teacher certification in 1988, as follows: [39]

a) To upgrade the level of teachers of the basic education stage from holders of community college diploma to the level of the first university degree in accordance with the new Law of Education of 1988. It was believed this objective could be achieved through the establishment of the Higher College for Teacher Certification;

b) To upgrade the level of teachers who hold the first university degree by giving them pedagogical courses in the universities in Jordan, awarding the Diploma of Education to teach in secondary schools;

c) To upgrade the level of principals and supervisors considered key figures in development and change, by enabling them to enrol in universities and Higher Teacher Certification Colleges;

d) To familiarise all teachers, principals, supervisors and other related staff with the new objectives of educational development and to help them in dealing with the new curricula and textbooks.

5.5.2 INSET Agencies and Activities:

5.5.2.1 The Training Section in the Ministry of Education:

The overall purpose of INSET in Jordan is to raise the professional level of teachers. The Training Section in the Ministry, under the direction of the General Director of Education and Supervision, has been the major agency responsible for the accomplishment of that purpose. The Training Section conducts a number of short courses yearly, either during the scholastic year, or during summer vacation. The number of these courses from 1962 to 1971 was 207, in which 10,164 teachers participated. [40] In 1975, the number of courses was 19, and the participants numbered 1,492. [41] In 1987, the number of courses was 93, and the number of candidates 6,444, of whom only 4,983 attended the courses (77 per cent). [42] The duration of summer courses varies from one week to four weeks each. The courses concentrate on teaching subjects and teaching techniques.

School supervisors are responsible for recommending the training courses and trainees. A head trainee usually is assigned for every INSET course, and he/she is responsible for the development and implementation of a curriculum for the course. Teacher

participation is almost compulsory, and dissatisfaction is common among trainers who feel that many courses are a repetition of what they heard from the supervisors before. [43] The Training Section describes the courses as remedial and updating programmes, and usually responds to the recommendations of supervisors, assigning priorities on the basis of the number of supervisors who recommend the same courses. [44]

The courses have no prescribed curriculum, and it is clear that there has been, and continues to be, no systematic planning for these programmes. [45] One can point to a number of weaknesses that may explain the dissatisfaction of teachers towards these remedial and updating courses: lack of consultation with the teachers, lack of incentives, inflexibility of the curriculum, rigidity in timing and location of the courses, and discontinuity of the programmes in that they failed to relate to any future INSET activity that could lead to further training and certification.

To solve the problem of unqualified teachers, a compensatory programme was launched in 1964 aiming at the teachers of the compulsory cycle who hold the general secondary school certificate only. The programme consisted of a 15-week course and was held three times a year. The programme had no special curricula of its own, but adopted some selected courses from the teachers' training institute curricula. The trainers were members of teachers' institutes, and the lecture method was the dominant form of instruction.

The compensatory programme carried no salary increments for the successful teachers, and those who failed were asked to repeat the whole programme and to pay the estimated expenses incurred by the MOE. The programme was criticised by both teachers and lecturers.[26] The teachers felt that it was too theoretical, inflexible, dysfunctional and unrewarding. They described the recruitment method as coercive. The instructors felt that the curricula was inadequate and unsuitable in that it was originally prepared for pre-service education. The programme was terminated in 1969, and the Ministry decided to establish a special institute to solve the problem of unqualified teachers at the compulsory stage. Efforts to remedy the situation were severely undermined by the constant influx of new and untrained teachers recruited to meet the natural growth in enrollment and a steady drift of experienced teachers towards better paid jobs in the Gulf area.

In the 1970s, an estimated 70 per cent of compulsory cycle teachers were unqualified. The MOE recognised that an innovation approach to teacher education was needed because the traditional method of withdrawing teachers from schools and pacing them in teacher-training institutes was too expensive and time-consuming. Instead, in 1971, a specialised institution for INSET was established: the Certification and In-Service Teacher Training Institute.

5.5.2.2 Certification and In-Service Teacher Training Institute (CITTI):

The CITTI was established in 1971 with the aid of the United Nations Children Fund (UNICEF), with the aim of improving the quality of education in Jordan through: [47]

i) The certification of unqualified teachers employed in the compulsory cycle, by raising their professional and academic level to that of graduate from the pre-service teacher education institute (two years of post-secondary education);

ii) The training of key education personnel and others working in the educational field, and offering opportunities for refresher training and professional growth for qualified teachers.

The institute was organised into a headquarters in Amman and fourteen field branches in the directorates. The study programme comprised the following:

i) A first summer course consisting of two regular weeks at the institute, intended primarily for induction and orientation;

ii) The first scholastic year: Trainee attends one day each week in the institute, or one of its branches in the districts;

iii) A second residential summer course of four weeks' duration;

iv) The second scholastic year during which the trainee attended one day per week at the institute or one of its branches;

v) A third residential summer course of four weeks.

The two-year programme was divided into four semesters organised according to the credit hour system. About 65 hours were required for graduation: 27 credit hours for general education, 18 credit hours for professional education, and 20 credit hours for specialisation. [48]

CITTI adopted, what was termed, the integrated multi-media approach (IMMA) in its training programme. IMMA depended on the integration of various educational media within the framework of systematic INSET courses, with adequate provision for follow-up action throughout the duration of each course. Indirect methods, comprising self-study assignments, reference material and audio-visual aids, were combined with direct methods of weekly seminars, tutorial guidance and practical training carried out by field tutors. The direct methods were complemented by the intensive summer courses held in the institute on a residential basis. During the scholastic year, trainees were released from their teaching duties one day each week to attend seminars at the local CTTTI centre. During the two-year programme, teachers were visited in their schools by field tutors. It was expected that each teacher would be visited at least twelve times during the entire programme. School supervisors were responsible for the follow-up of the trainees who had completed their INSET course. Enrolment in the programme was voluntary and the following incentives were provided:

i) A diploma equivalent to that of teacher-training institute;

ii) A 40 per cent increment of the basic salary;

iii) An improved opportunity for promotion within the school system;

iv) Permanent tenure in the government service by obtaining a permanent teaching licence.

CITTI proved to be very effective in tackling the problem of unqualified teachers in Jordan and teachers were competing to join it. Enrolment patterns are summarised in Table 5.4: [49]

Table 5.4: Enrolment of CITTI: 1973-1980

Year		Number of Graduates
1973		213
1974		355
1975		560
1976		681
1977		950
1978		1096
1979		1322
1980		658
TOTAL: 4645 Female Teachers and 1190 Male Teachers		

The CITTI increased its annual intake capacity to deal as best it could with the problem of unqualified teachers, especially among

females. It did have some considerable effect. The percentage of unqualified teachers at the compulsory cycle dropped from 70 per cent in 1970 to 35 per cent in 1977, and to 10 per cent in 1980. [50]

The institute benefited from the experiences of UNRWA/UNESCO Institute of Education, which was established in Beirut, Lebanon in 1964, by UNESCO to provide professional training for the unqualified Palestinian refugee teachers using a multi-media approach. [51]

The CITTI, compared to other pre-service teachers' institutes, seemed better to meet the real needs of teachers. Training was related as closely as possible to the job which had to be done by the student teacher, and this meant concentrating primarily on teaching practice. Trainees at CITTI, being full-time teachers, were in agood position to implement in their schools what they had learned in INSET courses. They could integrate theory and practice by bringing their field experiences to their INSET courses, providing a valuable and continuing form of feedback. Teacher-training institutes and community colleges, in comparison, do not provide adequate field experience, and there is a lack of co-ordination between the institutes and schools. CITTI was a new approach in INSET in Jordan and an encouraging one. Since 1971 and until 1982, the institute offered opportunities to about 6,500 teachers to complete their diploma, and this figure represents more than 90 per cent of all the teachers for whom the programme was initiated. [52]

CITTI was the first Arab indigenous in-service teacher institute with a formal systematised programme that awarded a diploma, which formally qualified its holder to teach in compulsory schools. The institute provided professional help to various Arab in-service projects and was visited by delegations from several Arab countries.

Since 1975, the CITTI started a certification programme for school principals whol hold the community college diploma. The one-year programme was designed to give courses in school administration and supervision. The programme was terminated in 1985, and only 20 per cent of the target group participated in it. [53]

5.5.2.3 The Universities:

In 1973, the University of Jordan started an in-service up-grading programme for teachers of the secondary stage. It was joined by Yarmouk University in 1977 and Mutah University in 1985. Such teachers, although university graduates, had received no pre-service professional training. The programmes in the universities are carried out through evenings or summer courses. These courses lead to a Diploma in Education. They comprise 33 credit hours. They are regarded by the MOE as a sufficient professional training to qualify teachers to teach in secondary schools. There is an opportunity for the teachers who obtain the Diploma to continue their studies towards an M.A. degree. The Diploma programme comprises the following specialisations: Teacher training diploma, school administration and educational supervision, counselling and guidance, special

education; in addition to Diploma in librarianship and documentation.[54]

The common courses required for all specialisations in the Diploma programme are: [55]

a) The Foundation of Education:

The aim of this course is to acquaint the teacher with education in general and the historical and philosophical foundations of the educational process. It also aims to introduce the system of education in Jordan.

b) Curriculum and Instruction:

This course deals with the general concept of curriculum and its development, underlying foundations and various factors that influence its characteristics. It also deals with different types of curricula, various approaches to planning, and general methods of instruction.

c) Research Methods:

The purpose of this course is to introduce to the student the basic concepts and skills of research methodology in dealing with psychological and educational problems.

d) Principles of Educational and Psychological Evaluation:

The course aims to acquaint the student with the essential concepts and skills in the construction of psychological and educational tests, interpreting test scores and the characteristics of a good test.

e) Educational Psychology:

Psychological principles applied to education is the main focus of this course. This knowledge, principles, concepts and skills related to classroom instruction will be emphasised. Strong emphasis will also be put on instructional objectives and factors affecting classroom learning.

f) Developmental Psychology:

The course deals with the importance of childhood and methods of study of childhood. The emotional, social and intellectual development in the adolescent period; intelligence and abilities, personal adjustment and mental health.

g) Principles of School Administration:

The main objective of this course is to acquaint the student with the basic principles of school administration. It also aims to discuss educational laws and regulations pertaining to school administration in Jordan.

h) Descriptive Statistics:

The aim of the course is to acquaint the student with the importance of statistical methods and fields of application, statistics in research, the collection and organisation of data.

The Diploma courses are general in nature and not interrelated. The aims of the programmes are prescribed, and the needs of the participants are not taken into consideration. The university

INSET programmes are theoretical in nature and do not include practice of teaching or follow-up.

Al-Khateeb, [56] conducted a study to identify the competencies needed by secondary school teachers in Jordan. He concluded that the programme of teacher education run by the College of Education in the University of Jordan was unable to fulfil the competencies needed by secondary school teachers in Jordan.

Another study by Hassan, [57] concluded that the Diploma course at the University of Jordan does not have any significant effect on the performance of its graduates. Hassan recommended that the programme must have clear objectives, and it must be reviewed and reorganised. In 1987, there were 783 teachers enrolled in the Diploma course at different universities in Jordan.

5.5.3 The Higher Certification College (HCC):

The teacher, being seen as the key in the teaching/learning process, was a focal point in the recommendations of the National Conference for Educational Development. The Conference called for upgrading community college diploma holders to B.A. equivalency through a certification programme, and providing continuous INSET programmes to enable teachers to cope with change. In October 1988, a higher certification college was established. It provides a means urgently to upgrade about 22,000 school teachers in the compulsory sector (71 per cent of the teaching force) to

Bachelor's degree status. The college, at first, had no buildings of its own and was hosted in Princess Alia College in Amman (community college). It began with a dean, secretary, and one staff member, with all the lecturers being part-timers. [58]

The minimum requirement for admission to the college is the community college diploma. The total requirement for the university degree (B.A./B.Sc.) amounts to 134 credit hours, of which a maximum of 64 credit hours can be accredited from the community college course work, while a minimum of 70 credit hours have to be attained at the HCC. Sixty-two credit hours are allocated for course of specialisation, while 8 credit hours only are allocated for education and psychology courses. [59]

Table 5.5: Study Plan of the H.C.C.

Type of Requirement	Minimum total credit hours	Max. credit hours transferrable from the Diploma	Minimum credit hours needed for certification
General Education Courses	16	16	-
Ed. & Psych. Courses	24	16	8
Specialisation Courses	94	32	62
TOTAL	134	64	70

The duration of the programme is 27 months, distributed over three summer courses and four semesters. Teachers during the regular semester work at their schools in the morning then join the college for three hours,

three days a week. Most teachers finish their work around 1 p.m. and have to be at the college at 3 p.m., which leaves them very little time for lunch or rest. Moreover, after finishing the lectures around 7 p.m., teachers have little time for using the library, interacting with peers and consulting faculty members.

In 1989, two branches of H.C.C. were established in Irbid and Karak. As with the main college in Amman, the two branches were hosted by two community colleges, and all the lecturers were part-timers. The college offers five fields of study: Islamic studies, Arabic language, English language, Mathematics and classroom teaching. The college is under the control of the Ministry of Higher Education (MOHE) and is headed by a Dean in Amman, with two deputies in Irbid and Karak. The H.C.C. does not have an organisational chart that specifies administrative and functional responsibilities. The college also lacks academic structure. No mention was made in any document about the academic organisation of the college into departments, sections or committees. However, the by-laws of the college were approved by the Cabinet in September 1989, and are expected to address the organisation of the college and the responsibilities of different departments.[60] It seems that the need to start the college overshadowed the proper planning required to establish an academic institution. The lack of planning is also reflected in the total absence of full-time faculty members. The lack of administrative and academic organisation of H.C.C. puts tremendous pressure on the Dean and his deputies, and this reduces the efficiency of the functioning of the college.

The curricula of the college is developed by experts from Jordanian universities, with the following guidelines taken into consideration: [61]

i) Programmes are to be designed along the same lines as those of pre-service teacher education provided by Jordanian universities;

ii) The course work required in the college should be based upon and complement previous course work done at the Diploma level;

iii) Provision is to be made for feasibility of transfer of course work previously done at the Diploma level in community colleges;

iv) The programmes should satisfy the professional need of the teacher.

The curriculum committees developed the existing curricula on the basis of course work taught at the community colleges on the one hand, and equivalent courses taught at the universities on the other. Consequently, most of the curriculum is highly theoretical. It does not, for example, allow for the observation of teaching behaviour of trainees through teaching practice. Furthermore, all curricula for subject matter specialisation are devoid of attention to teaching methodology.

Attendance of trainees, evaluation procedures, exams and grading systems follow the same lines applied in Jordanian universities. The MOE selects trainees on the basis of the following: [62]

i) The participant's grade in the General Secondary Certificate (10 marks);

ii) The participant's grades in the Comprehensive Community College Examination (20 marks);

iii) Teacher performance in the last two years through annual teacher evaluation reports (10 marks);

iv) Number of years of teaching experience. A maximum of ten marks is allocated: one mark for each year. However, the opportunity is open for teachers, whose service exceeds ten years but is less than 25 years, to join the college.

The names of candidates are usually sent to H.C.C. with some additional names as alternatives in case any candidate does not attend the college. The first group to join the H.C.C. in Amman, in 1988, consisted of 281 teachers. With the opening of new branches in Irbid and Karak, more teachers joined the H.C.C. each semester and, as latest available statistics show, presented in Table 5.6, [63] their number has reached 1,676.

Table 5.6: Number of Teachers enrolled in Higher Certification College, by Site and Sex: 1989

Site	Male	Female	Total
Amman	436	302	738
Irbid	539	181	720
Karak	129	89	218
TOTAL	1104	572	1676

As can be deduced from these figures, the percentage of female students in the college is around 34 per cent. This has to be viewed as substantial under-representation when it is considered that female teachers comprise about 60 per cent of the target group of Diploma holders. It seems, therefore, that the selection procedure may be biased against women teachers, though there are, of course, likely to be other factors constraining female participation. It should be noted, too, that a large number of teachers who have more than 20 years of teaching experience, and who are, in fact, eligible for retirement, join the college. It can be argued that it is in the interests of the MOE to select younger candidates who would provide maximum returns first and others later. When a candidate who is near the retiring age in terms of length of service is selected, the resources invested in training are likely to be wasted. These observations highlight the need for the selection procedure to be closely examined and reviewed.

Course objectives are stated in only vague and general terms and are not clearly interrelated. Officials are merely satisfied to raise the academic qualification of teachers to what is equivalent to a university degree. But it has to be recognised that professional development of teachers is not necessarily a by-product of raising academic standards. An effective INSET programme needs clearly stated objectives, carefully developed curricula, adequate teaching methodology, clear integration of teaching practice in the academic programme, and positive feedback. The H.C.C. programme is presently lacking in these respects.

5.5.4 The Role of Supervisors and Headmasters:

5.5.4.1 The Role of Supervisors:

In general, the main purposes of supervision are to safeguard and promote the efficiency of schools, to keep the central administration informed of the conditions of schools, and to encourage and to assist teachers.[64] In Jordan, in particular, supervisors have a threefold task to do with administration, assessment and advice.[65] The fundamental problem, both generally and specifically, however, is the incompatability between the function of advice and assessment, and, in the case of Jordan, despite the growth in freedom of both teachers and supervisors, and the genuine efforts of the MOE to emphasise leadership and professional advice rather than inspection and assessment, practices tend to change slowly. Historically, the term "inspection" was replaced, in Jordan, by the term "supervision", and the inspector became a supervisor in 1964.[66]

The tension between advice and inspection notwithstanding, supervisors in Jordan play an essential role in the professional development of teachers, both in the classroom and during INSET courses. They carry out the duties of what, in England and Wales, for example, would be both inspectors and local advisors. They perform advisory roles, visit teachers at their schools, and organise short INSET courses. Such courses are sometimes conducted in the style of a conference or workshop where the exchange of ideas and experience is emphasised. Most of the time, courses do, however, consist of lectures only.

Remedial and updating courses continue to be recommended by supervisors on the basis of their impressionistic feelings, rather than in the light of systematic diagnostic procedures. Since 1971, supervisors have been given full authority to conduct local INSET courses in their specialities for 1-6 days duration.[67] Each short course is designed for teachers facing similar instructional problems. The supervisors are also responsible for the follow-up of trainees, and they are urged by the MOE to encourage the implementation, in their schools, of what the teachers have learned in INSET courses.

The following table shows the total number of supervisors in 1988, according to their qualifications.

Table 5.7: Number of Supervisors according to Qualifications in 1988 [68]

Community College Dip.	B.A./B.Sc.	B.A. & Dip.	M.A.	Ph.D.	Total
23	100	149	66	2	340

Only 29 supervisors, out of the total of 340, are female despite the fact that female teachers constitute about 60 per cent of the teaching force. Table 5.7 shows that 100 supervisors hold the first university degree only, and 23 supervisors have a community college diploma, whereas the Law of Education No.27 of 1988 actually stipulates that supervisors should have a master's degree, and at least five years' experience. [69]

With 340 supervisors responsible for supervising more than 42,000 teachers in government and private schools, it is difficult to achieve objectives. There are around 100-200 teachers assigned for each supervisor. This number is rather high if it is considered that each teacher should be visited twice a year, and that schools are scattered over a wide area.

The supervisor is expected to be a trained professional who has the knowledge and skill to guide others, but in Jordan most of the supervisors have not had any appropriate training. While supervisors are usually well-trained in their special teaching

subjects, such training is usually devoid of sound supervising principles. [70] Supervisors need to acknowledge teachers as adult leavers and should take into account their stages of development, and the relationship between personal needs, job requirements, and role behaviour. If the supervisors are to perform their task efficiently, the MOE has to provide more opportunities for their professional development, especially at the post-graduate level. There is a pressing need for appointing a further number of qualified supervisors, especially female supervisors, to decrease the large number of teachers assigned for each supervisor, and to deal with the increase in the number of teachers every year. Supervisors must be carefully selected on the basis of their willingness, personality, subject knowledge, and appropriate teaching skills. They must also be trained in observation and evaluation techniques. [71]

5.5.4.2 The Role of the Headmasters:

Historically, in many country contexts, INSET activities have often been assigned to headmasters for planning and implementation. Studies in the literature identify the school's principal as a team leader who can, with proper retraining and teachers support, bring about significant improvement in school learning and performance in basic skills. [72] Harris, et al, [73] consider the role of headmasters to be crucial to the success of INSET programmes. They state:

> "The superintendent's participation in programmes on in-service education seems to be a crucial element in their success....when he provides enthusiastic leadership and shows, by example, that he is serious about setting a climate for self-improvement, the programme has a much greater than average chance for success. Where the leader merely tolerates the programme or sets it in motion and then remains allof from it, his subordinates tend to catch the spirit and little is accomplished."

Strong, flexible, innovative leadership on the part of the headmaster is considered important to modification of behaviour, which is what staff development is about. With the emergence of new concepts of INSET, like school-focussed INSET, the role of headmasters and teachers in INSET became even more important. Perry, 1977, quoted by Hewton, [74] defined school-focussed INSET as:

> "all the strategies employed by trainers and teachers in partnership to direct training programmes in such a way as to meet the identified needs of the school, and to raise the standards of teaching and learning in the classroom."

It is assumed that the needs of schools here include those of teachers as well.

The emerging role of headmasters in governance of INSET involves co-operating in planning, providing a suitable climate, and creating opportunities for self improvement. However, it would seem to be a corollary of this that, in its turn, should be provided for headmasters and other senior members of staff as promoters or supporters

of staff development. [75] Recent research points out the importance of the headteacher as a facilitator of change. Many interventions that cause changes in teacher behaviour come not so much by seminars and workshops as by day to day incidental, helpful interventions of heads. [76]

The Law of Education No.16 states that: [77]

> "the headmaster is the chief person who is responsible for the supervision of his staff. He is also directly responsible for the management and discipline of his school, as well as for stimulating co-operation in the school.

The educational regulations adopted by the MOE include a job description for headteachers in broad and general terms, but this job description has never been analysed or evaluated (see Appendix 3) It is worth noticing that, in the Law of Education No.16, the first responsibility of the headmaster is to supervise his staff, while in the job description the same responsibility came only as point 11 among 17 points. Supervision, therefore, is not, as many head-teachers in Jordan think, the responsibility of district supervisors alone. It is also the responsibility of headteachers, but they must be trained in order to perform their job. There are a number of expectations of headteachers in Jordan in respect of supervision. They are asked:

i) to understand the personal and professional problems of the teachers, and to help them to solve these problems;

ii) to conduct class visitations, followed by meetings with the teachers, as a regular practice for the improvement of instructions;

iii) to introduce new ideas and new methods of teaching;

iv) to review the teacher lesson plan;

v) to invite supervisors to work with the school staff in improving the methods of teaching.

If it is accepted that the main purpose of INSET is to improve the professional *performance of teachers*, *then* effective supervision must be a part of INSET. However, headteachers in Jordan do not, themselves, plan INSET courses - but they merely recommend the names of teachers whom they feel are in need of INSET courses. The heads assess the teaching ability of their teachers and write evaluation reports annually. The opinion of a head about the ability of a teacher is considered before the latter is permanently absorbed in service, and usually the identification of training needs is an important part of the report.

It is doubtful whether headteachers in Jordan can effectively fulfil all their responsibilities, especially supervision and staff

development, if the structure of schools remains the same. The structure of secondary schools in Jordan is simple compared with the structure of the secondary school in Britain. For example, there are no governors for the school and no heads of departments. This leaves all the responsibility with the headteacher. The "flatness" of the school authority structure is such that it makes no differentiation between teachers, and the only responsibilities of deputy headteachers are to deputise for headteachers when they are absent. With the introduction of new reforms in education, headteachers are expected to accept the responsibility for promoting the efficiency of their schools, and for encouraging, stimulating and assisting the professional development of teachers.[78] But with the heavy load of work, including teaching, large numbers of heads cannot accomplish these objectives. So, it can be argued, there is a real need to delegate some of the head's responsibilities concerning INSET to the deputy head or to a professional tutor from the staff who can be used as an agent for communication and change. In the context of England and Wales, Lord James reported that professional tutors at school should have three major functions:-[79]

i) supervision of student teachers on teaching practice;

ii) induction of new teachers;

iii) advising colleagues on INSET opportunities.

But some form of training is needed to ensure that the energies of the head and others are expended in the right direction to meet the

requirements of changing situations. In Jordan, the MOE has realised that: [80]

> "The professional abilities of many school principals are poor, and they lack the administrative skills and competencies that a school principal needs to perform his duties, and to be able to absorb the new ideas of educational reform."

Table 5.8 shows the total number of school headteachers, according to their qualifications in all MOE schools. [81]

Table 5.8: Number of Headteachers according to Qualifications in MOE schools: 1988

Secondary School Cert.	Community College Dip.	BA/B.Sc.	BA + Dip.	M.A.	Total
48	1650	473	284	47	2502

The number of heads who hold the Community College Diploma or less is about 68 per cent of the total number of heads, and all of them need certification at the HCC.

The MOE introduced a one-year programme in 1974 to train the headteachers of compulsory stage schools. However, this scheme, which was repeated each year, was discontinued in 1985. It qualified only about 20 per cent of headteachers in service, and some of these

have now retired.[82] No similar programme is, or has been, available for the heads of secondary schools, although the heads are encouraged to join the Diploma course at the universities.

There is an agreement among the officials in the MOE regarding the need for training the heads, not only before taking up an appointment, but also while occupying their position. It is not reasonable to expect headteachers to supervise and train their teachers while they themselves are untrained.

Within the wider literature on teaching and teacher education, there is a strong view that the teacher should be a critical member who must be involved in decision-making if instructional improvement is to take place.[83] Research studies indicate that good learning in the school best takes place when administrators are willing to involve those who shall be affected by the decision.[84] Teachers need to be involved in matters that affect their professional lives. In Jordan, this is not the case. Teachers do not play any significant role in planning, implementing, or evaluating INSET courses. They are expected simply to attend courses designed for them by others.

5.5.5 INSET Costs and Finances:

Financial allocations and costs in respect of INSET are difficult to quantify accurately. Moreover, to assert this is not to speak only of Jordan.[85] As Greenland has pointed out:

> "calculating the cost of INSET, even the cost of a single INSET activity, is a notoriously complex task and one which few countries developed or developing appear to have undertaken."

One reason for this is that the providers of INSET are rarely a homogenous group. It is difficult to isolate expenditure on various kinds of INSET activities from other forms of expenditure in the wide range of multi-purpose institutions conventionally engaged in INSET. For example, the cost of qualifying an untrained teacher involves contributions from several organisations. However, according to Bolam, [86] the cost of INSET may be regarded as comprising:

i) the salaries of the teachers released;

ii) expenditure on the provision of courses;

iii) financial support to teachers (payment of tuition fees, travelling and subsistence);

iv) expenditure on advisory services and administration costs.

In Jordan, officials admit that, at the present time, there is no accurate way of reasonably estimating the total financial investment in INSET. All the same, it is known that the MOE itself allocated 74,000 JD's for training in 1989, while in 1988 the same item of expenditure was 120,000 JD's. [87] The decrease in the

budget is a reflection of the difficult economic situation in the country. The budget allocated for training each year covers the costs of short INSET courses, including: lecturers' expenses, travel expenses for teachers, stationery and administration expenses. With around 30,000 teachers, the allocations seem inadequate. Money committed to INSET has historically been in short supply. In 1964, the budget for INSET was 6,700 JD's only, while in 1970 it was 20,3000 JD's.[88] It seems that, although INSET continues to be everyone's issue, it is still no one's priority.

5.5.6 General Certification and Training Plan:

The general aim of educational reform in Jordan is to increase the effectiveness of teachers and related personnel as one means of raising the level of pupils achievements in schools.

In 1987, the National Conference for Educational Development has approved a number of recommendations to upgrade the professional performance of teachers, headteachers and supervisors, to enable them to play an effective role in educational development. Discussions have shown that the lack of adequate training, especially for teachers, has caused poor performance in schools.[89] The Conference also recommended new curricula and text books. It is planned that these will be introduced at the beginning of the school year, according to the following timetable:

1990/1991	:	Grades 1, 5, 9
1991/1992	:	Grades 2, 6, 10
1993/1994	:	Grades 4, 8, 12

Teachers, headteachers and supervisors will need to receive training in their specialisation to deal with the new developments. Certainly, studies tend to confirm that investment in training, instructional material, and appropriate curricula are the most important factors in improving the quality of education. [91] The MOE has proposed a staff development programme, with the following objectives:- [92]

i) Training:

- To familiarise all teachers and related staff with the content methods and philosophy of the new curricula.

ii) Certification:

- To upgrade teachers and headteachers who have a community college qualification to university first degree standards.

- To upgrade teachers and headteachers who already hold BA/BSc, but have no professional training, to Diploma level.

- Certify educational leaders and supervisors to get Master degree in education, to meet the requirement of certification required by the new Law of Education of 1988.

It is proposed in the plan that the training programmes will extend for four years, from 1990-1993, to coincide with the introduction of the new curricula and new text books. All teachers, headteachers,

supervisors, and other related staff, are expected to participate. The teacher target group is a very large one, around 30,000 teachers. This does not, though, allow for the 3,000 new teachers likely to enter the system each year up to 1998. The training will mainly take the form of a mixture of district and national meetings in a traditional face to face format, although a brief reference is made, for example, to make use of programmed learning and teaching kits . The certification programme will extend for more than ten years from 1988-1998. The Ministry's plan is intended to certify 22,000 existing teachers who have community college qualifications by means of the degree level programmes at the universities and the higher college of certification. However, the universities did not participate in the plan until 1990. Even if the plan is implemented successfully, it deals with only 22,000 out of an estimated total of 37,000 teachers requiring such upgrading. The estimated number of new teachers, with community college diplomas, is 15,000. As regards the programme for upgrading BA holders, the current proposals to upgrade 10,000 teachers by 1998 will fail to solve the problem since it again ignores the new teachers, estimated to be over 15,000, likely to join the profession during this period. Thus, the situation by the end of the plan will be considerably worse than it is at present.

Another important issue is related to attendance requirements. In both types of upgrading programmes, teachers have to attend three days a week for a total of nine to ten hours after work.

Such attendance requirements presents serious difficulties for teachers, especially females, who represent around 60 per cent of the target group. Many of them are married, and have family responsibilities.

The estimated cost of the programme over the ten years is 29,657,027 JD's, [93] distributed as per the details in Table 5.9.

Table 5.9: Estimated Cost of Training and Certification Programmes

Programme	Estimated Cost (JD)
Training Programmes	866,294
Upgrading Programme for Community College holders	23,454,900
Upgrading Programme for BA/BSc holders	4,947,030
Upgrading Programme for Supervisors	388,800
TOTAL	29,657,024

It is doubtful whether Jordan can afford to spend around 30 million JD's on INSET in the present difficult economic situation. The Jordanian government is seeking external help from the World Bank, Japan and West Germany. A mission from the World Bank recommended "an appropriate and affordable programme for INSET, which must be implemented in the most cost-effective way possible." [94]

The high estimated cost, and the fact that 60 per cent of the target group are female teachers with family responsibilities, together with the attendance requirements, strongly suggest the need for a search for a non-traditional method of training. Distance education may be a very good option. Several countries are using distance education for INSET and pre-service courses. The Open University in the U.K. and Allama Iqbal Open University in Pakistan are two examples. There is a general belief that distance education can be cheaper than traditional forms of education and training, so it has clear advantages in terms of its potential for cost-effectiveness. It is basically for this reason that many developing countries support a sizeable enlargement of non-formal education in their efforts to build a better life. [95]

In Tanzania, officials at the Distance Teacher Training programme, for example, claim that costs per teacher trained are only one-third of the costs of the equivalent conventional residential programme. [96] There are many instances of the effective use of distance education in INSET. Erdos, [97] for example, has referred to initiatives in the U.S.A., Sweden, India, Australia, Malaysia, and Lebanon. While Greenland, [98] has pointed out that many African countries are now using radio, T.V. and correspondence materials in their INSET programmes.

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CHAPTER SIX

DESIGN AND METHODOLOGY OF THE EMPIRICAL STUDY

6.1 Introduction

The empirical dimension of the study of in-service teacher education in Jordan consisted of a descriptive survey, by questionnaire, of a selected sample of teachers, supervisors and lecturers in the three main areas of the country: north, middle and south. The survey was conducted to determine the pattern of perceptions of teachers and their trainers toward INSET in Jordan.

With the introduction of sweeping reforms in the education system, and with the introduction of a very costly INSET programme in the country, these need to be regarded as very important. INSET programmes are primarily for teachers, and should reflect the different sets of needs of teachers and schools. Although benefits to the pupils are an important consideration in any INSET programme design, if the programme does not initially meet the perceived needs of teachers, it stands less chance of success. So, careful consideration must be given at all times to the way INSET activities are planned and carried out.

The findings of educational research in recent years have supported the view that teachers' influence is crucial in education. Little has been written on INSET in Jordan, especially teachers' opinions on the subject. Moreover, the empirical study of INSET,

very important as a basis for any reorganisation that is to take place to meet the changing needs of Jordanian society, is largely unchartered territory. There is an increasing awareness that both the aims and the patterns of the training provided should be re-examined. Administrators, planners and educationists are drawing attention to the necessity for rethinking and clarification in the field of INSET. Before reforms can be introduced, more information is required about the present provision and the views of teachers and teacher trainers about their preferences, expectations and level of satisfaction with present INSET programmes. The experience of a teacher following INSET programmes is a transitional occurrence between being a student and being a teacher. This experience is viewed as a critical component in teacher education by administrators, college lecturers, and teachers. [1]

According to Gallemore, [2] the relationship of perceptions among teachers, supervising teachers, and college lecturers, is an important area of research if teaching is to maintain its high standing in education. Lecturers of education and supervisors contribute to the perceptions of teaching held by the student teacher. It is important that lecturers and supervisors and administrators understand teachers concerns, as teachers face the world of reality. Through their understanding, teacher trainers can influence behavioural changes in teachers necessary for a high quality performance level. Teacher trainers and administrators should not only be concerned with the ways they instruct their

student teachers, but they must also develop a clearer understanding of the perceptions of their student teachers.

In a recent review of INSET activities, the MOE expressed concern about the relevance and quality of some courses of INSET, the official belief being that trainees should be more fully informed of course aims and content, and the training styles to be adopted.[3] In Jordan, the MOE, the Schools of Education at the Universities, and the College of Higher Certification, have been sanctioned by the government to provide effective programmes of INSET for teachers to help them to deal effectively with the new developments in the education system. It seems that much INSET activity is not organised around major educational problems growing out of the needs of teachers and schools. In this respect, the MOE has acknowledged the lack of studies and research with respect to INSET.

Educational research has been defined in various ways. Some definitions show that the goals of educational research are quite unique to the study of education. Travers, [4] defines educational research as:

> "an activity directed toward the development of an organised body of events with which educators are concerned."

While Peters, et al, [5] define it as:

> "systematic and sustained enquiry carried out by people in some form of thinking in order to answer some specific types of questions."

However, research in education can be classified in different ways reflecting different points of view.

Sax, [6] classified educational research as:

i) Analytic;
ii) Descriptive;
iii) Experimental;

while Borg, et al, [7] classify educational research as:

i) Historical;
ii) Evaluation;
iii) Experimental;
iv) Observational;
v) Survey.

Most educational research can be placed in one of three broad categories:

i) descriptive research: aimed at describing the characteristics of subjects;

ii) correlational research: which explores relationships between variables;

iii) experimental research: which manipulates one or more variables, and measures the effects of these manipulations on other sets of variables.

It is important to realise that human beings, the usual subjects in educational research, are much more complex organisms than the subjects studied in other sciences. Education and the related behavioural sciences, such as psychology and sociology, are much newer and less advanced than natural sciences, like biology or chemistry. As a result, descriptive research is important in education. There is still a great deal that we do not know about teachers and students who are the usual subjects in educational research. Most descriptive research in education can be roughly classified as either survey research or observational research.

In this study, the descriptive survey has been employed. The descriptive method has been chosen because it is primarily concerned with portraying the present situation, and describing existing conditions with the hope of improving them in the future. As Best states: [8]

> "a descriptive study describes and interprets what is. It is concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing."

6.2 The Instrument

The survey data for this study was collected by means of a questionnaire incorporating a five point, likert type, response scale, in order to determine the opinions, preferences and perceptions of teachers and teachers trainers towards INSET in Jordan. The instrument contained two sections:

Part one concerned general information and was constructed especially for classifying the sample. It requested information on the following: location, sex, route (compulsory or secondary), present position, age, qualifications, experience, teaching subject, and in-service preferences.

Part two was the section of the survey to do with perceptions, and it consisted of forty, likert-type, items designed to measure in-service preferences of teachers and teacher trainers. Another ten items were also included to measure the satisfaction of teachers with INSET programmes. For the purpose of further analysis, the forty items were grouped into the following components:

i) content of INSET programmes;
ii) organisation of INSET programmes;
iii) presentation of INSET programmes;
iv) nature and extent of participants' involvement.

In designing the questionnaire, guidance was sought from the

work of several authors, including Nixon, [9] and Payne. [10] Nixon suggests to keep the directions as brief as possible, and to provide for the mere checking (ticking) of a possible answer already present on the form, rather than requiring a written answer. [11] The investigator decided to modify this advice slightly, by asking respondents to add their own comments on some questions. In this way, it was hoped that the respondents would feel more directly involved, and express their opinions more freely. Thus, the chief disadvantage of the closed form- loss of spontaniety and expressiveness on the part of the respondents- was to some extent, counter-acted.

Based on the review of research literature related to INSET, a pool of Likert-type statements was formulated. Fifty statements were selected and were reviewed by professional educationists, including an expert from Hull University computer centre. In the preparation of the questionnaire, the investigator consulted survey instruments designed by: Brimm and Tollet, [12] Cane, [13] Bradely, [14] and Baker, et al. [15] The questionnaire was translated into the Arabic language by the researcher. The translation was checked and verified by three Arab Ph.D students at Hull University, and three Jordanian educators. Five educationists in Jordan were invited to inspect and comment on the content of the instrument. These five persons included: a teacher, headteacher, supervisor, university lecturer, and a director of education. All had experience in INSET. After the evaluation, some statements were

modified. The Likert-type, five point scale for responses, was structured to incorporate the following response categories: strongly agree, agree, uncertain, disagree, and strongly disagree. A high score represented a more positive orientation towards INSET activities.

Appendices 4 and 5 to this thesis comprise, respectively, the full English and Arabic versions of the survey instrument used.

The questionnaire was tried out with 20 teachers in Amman. This pilot survey aimed at answering the following questions:

i) Did the respondents understand the purpose of the inquiry;

ii) Were the instructions in the questionnaire clear?

iii) How much time did it take for the respondents to complete the questionnaire;

iv) Were there any difficulties in understanding the Arabic text?

The teachers expressed their satisfaction, and confirmed that the questionnaire was easy to understand, and straight forward to complete.

6.3 Content Validity

A test is said to be valid if it measures what it is stipulated to measure, while content validity may be defined as the extent to which a test measures a representative sample of the subject matter content. [16] Content validation is usually guided by a major question: Is the content of this measure representative of the content of the subject being measured?, Any educational subject has a theoretical universe of content, consisting of all the things that can possibly be said or observed about the subject. A test high in content validity would theoretically be a random sample of the universe of the content. [17]

In developing the questionnaire for this study, an attempt was made to identify the important components of any INSET programme. Content, organisation, format of presentation, and participants' involvement were conceptualised as reflecting the major elements in any INSET programmes. The statements selected for the questionnaire, after careful construction and review, are presumed to be a representative sample of opinions, feelings, beliefs (perceptions), and possible action tendencies pertaining to INSET. According to Kerlinger, [18] content validation consists mainly of judgment. One judges the representiveness of the items alone, or with others. All the statements selected for the questionnaire used in this study were reviewed by selected professional educators.

6.4 Reliability

Reliability refers to the consistency of a measure. It gives us information about the degree to which a measure will yield similar results for the same subject at different times, or under different conditions. [19] Educational measurements often lack stability, scores change if the same students are measured twice on the same test. The quality of a test may be judged in part upon the consistency of scores it produces. A test that yields stable scores is a reliable test. The reliability of a test is related to difficulty also. If a test is difficult, respondents will guess many of the answers making the test less reliable. [20]

Reliability of a test can be estimated in several ways. [21] One approach is the 'test-retest' method. The same test can be given twice to the same respondents. The more agreement between the two sets of scores, the higher the reliability; the less agreement, the lower the reliability. Agreement is measured by computing a correlation coefficient, which serves as the reliability coefficient.

Another way of estimating reliability is to use equivalent or parallel forms of the test. Items on the two equivalent forms would not be identical, but they would cover similar content and need to be of about the same difficulty. Respondents could take the two forms of the test on, say, successive days and their scores then be correlated, producing a reliability coefficient. The equivalent forms approach appears reasonable, but it is not completely

satisfactory. The correlation between equivalent forms is affected, not only by chance factors in the scores, but also by differences in some of the items.

A third approach is to use what has come to be known as the 'split-halves' technique. This method can be used when the test is administered to a group of people on only one occasion. The content of the test is divided into equivalent halves: for example, by comparing odd and even numbered items. Two scores are formed for each respondent, one for each half. These scores are then correlated, and a reliability coefficient produced.

Reliability coefficients are probably most often computed from data collected from a single administration of a test. [22] However, splitting the test usually lowers reliability over what it would be if the test had not been divided. The coefficient needs to be adjusted to estimate what the reliability would be if the entire set of items was involved. The Spearman-Brown formula may be used to obtain such an estimate. This is as follows: [23]

$$rn = \frac{nr}{1 + (n-1)r}$$

where r = original reliability.

n = number of times test is increased in length.

rn = estimated reliability for lengthened test.

The reliability of summated rating scales, including Likert-type scale, should not be taken for granted. Research has shown that the reliability coefficient for different tests can vary enormously.[24] Reliability coefficients range from 0, which indicates no reliability to 1.00, which indicates perfect reliability. The closer the reliability coefficient is to 1.00, the greater the reliability of the test. Helmstadter,[25] has produced a list to compare reliability among different standardised tests. This is reproduced in the following table.

Table 6.1: Range and Medium Values of Reliabilities reported for Various Types of Measures

Type of Test	Number of Reliabilities	Low	Medium	High
Achievement batteries	32	.66	.92	.98
Scholastic ability	63	.56	.90	.97
Aptitude batteries	22	.26	.88	.96
Objective personality	35	.46	.85	.97
Interest inventories	13	.42	.84	.93
Attitude scale	18	.47	.79	.98

In respect of the particular survey under discussion, the test-re-test procedure proved impractical. When the possibility of adopting it was discussed, teachers and teacher trainers expressed their unwillingness to complete the questionnaire twice. The 'equivalent forms' method was not acceptable either. Not only would it have required developing an equivalent form of the questionnaire

(which, in practical terms, was probably not a realistic task) and then translating it into Arabic, but again respondents would have been required to complete two forms. Consequently, the 'split halves' method was used to test the reliability of the questionnaire in the study. The fifty items in the questionnaire were grouped into two haves: according to whether they were odd or even numbered. Two scores were thus obtained for each respondent and then correlated. Reliability coefficient occurring was 0.63.

The Spearman-Brown formula was then used to calculate an estimate of the reliability of the whole test:

$$rn = \frac{2\ (.63)}{1+(2-1)\ .63}$$

$$rn = .77$$

A reliability coefficient for the whole test of 0.77 is acceptable.

6.5 The Population and the Sample

The population of the study consisted of practising compulsory and secondary school teachers in Jordan who were participating in INSET programmes during the summer of 1989, and the university lecturers and supervisors (teacher trainers) involved in these programmes. The executed sample of teachers for this study was 390, representing about 10 per cent of the population. One hundred and fifty teachers were from the north, 150 from the middle and 90 teachers from the south of the country. The sample of lecturers

and supervisors (teacher trainers) numbered 70, and represented those who were participating in INSET activities during August 1989, and whom it was possible to contact. Twenty-five were from the north, 25 from the middle, and 20 from the south.

6.6 The Major Research Questions

As was explained above, the main purpose of the investigation was to conduct an examination of the patterns of opinions, preferences and perceptions of practising teachers, and teacher trainers, towards in-service education. In trying to compare the perceptions and preferences of teachers and teacher trainers toward INSET, the independent variables used were sex, educational background, teaching experience and location. These four independent variables are reported in the literature as important demographic characteristics that affect perceptions. The research sought to identify what are the main perceptions of teachers and teacher trainers (lecturers and supervisors) and, perhaps more importantly, go on to answer the following major questions:

1) Is there a significant difference between the perceptions of practising teachers and teacher trainers (lecturers and supervisors) in respect of:

a) the content of INSET programmes;

b) the organisation of INSET programmes;

c) the format of presentation of INSET programmes;

d) nature and extent of participants' involvement.

2) Is there a significant difference in perceptions among practising teachers towards the INSET programmes based on the four variables of sex, educational background, teaching experience and location?

3) Is there a significant difference in preferences of practising teachers and teacher trainers toward the following:

a) teaching techniques used in INSET programmes;

b) demonstrators in INSET courses;

c) place and timing of INSET activities.

6.7 Data Collection Procedures

The content and distribution of the questionnaire needed the approval of the MOE and the MOHE. The approval of the two ministries was obtained and letters to all the directorates of education and colleges of education were sent asking for their co-operation. Appendix 6 comprises copies of this correspondence. The teachers and teacher trainers (lecturers and supervisors) samples were selected from three directorates to allow for investigation into the significance of nature and location: Irbid in the north (comprising rural and urban areas); Amman, the capital, in the

middle (comprising urban areas), and Karak in the south (comprising rural areas). Each of these directorates has a university, a branch of the higher certification college and a directorate of education, so all the major activities of INSET: short courses, certification courses, and the diploma courses were found in each directorate. To allow for adequate representation of each major activity, 130 teachers were randomly chosen from the three directorates as follows: 50 teachers from the north, 50 from the middle, and 30 from the south. This was considered the most practical and reasonable procedure as schools were, in fact, still closed for the summer holidays. Furthermore, seeing as the INSET facilities in each directorate serve several other directorates in each area, there is no reason to fear that the samples were not typical or not representative.

Questionnaires to teachers, lectures, and supervisors were distributed mostly by hand by the researcher and other educationists at teachers' centres, higher certification colleges, and universities. Three directors of education, the dean of the higher certification college, and the dean of the school of education at Jordan University helped in administering the instrument. This guaranteed a high return. It is worth commenting that in many developing countries, which are not research-oriented, it often happens that respondents do not pay much attention to questionnaires that reach them by mail. In such countries, and to a lesser extent more generally, personal contact and official support are the best guarantee for the co-operation of respondents.

Each questionnaire delivered was accompanied by a covering letter (Appendices 4 & 5) clarifying the purpose of the enquiry, and stressing the confidentiality and the voluntary nature of participation in the investigation. Brief instructions were provided as to how the respondent should fill in the closed questions (by ringing or ticking). Where open-ended questions were involved, respondents were asked to make their responses and comments as briefly and accurately as possible. Teachers and teacher trainers were requested to answer all the questions other than any that, for whatever reason, were patently inapplicable.

Given the structure of teacher education in Jordan, for example, certain questions in the survey (Nos. 10, 11 and Part C of the perception survey) would not be seen as relevant to be answered by teacher trainers. Lecturers and supervisors rarely join INSET programmes as participants.

After excluding the respondents who had not filled in the questionnaire properly, the main inquiry produced 397 completed questionnaires. Table 6.2 shows the composition of each group, and the number of questionnaires properly completed. The table shows that 85 per cent of teachers' questionnaires, and 92 per cent of teacher trainers' questionnaires were returned properly completed. This response rate can be considered high, and it should be pointed out that the respondents were very co-operative, and many of them expressed their desire to receive the results of the study.

Table 6.2: The Composition of the Main Sample and the Number of Questionnaires properly completed

Population	Total	North (Urban & Rural)	Middle (Mainly Urban)	South (Mainly Rural)
A. Teachers				
The number of Questionnaires sent out.	390	150	150	90
The number responding in each area.	343	126	142	75
Percent of those responding.	88%	84%	95%	83%
No. of Questionnaires not completed properly.	13	6	3	4
No. of Questionnaires completed properly	330	120	139	71
Percent completed	85%	80%	93%	79%
B. Teachers' Trainers (Lecturers and Supervisors)		25 (10 + 15)	28 (13 + 15)	20 (10 + 10)
The number of Questionnaires sent out.	73	25	28	20
The number responding.	67	23	25	19
Percent of those responding.	92%	92%	89%	95%
No. of Questionnaires not completed properly.	-	-	-	-
No. of Questionnaires completed properly.	67	23	25	19
Percent completed	92%	92%	89%	95%

For illustrations, see Appendix 7A.

The lowest response rate of teachers' questionnaire was in Karak (79 per cent) where it was difficult to contact teachers personally, while the highest response rate was in Amman, where the investigator used to work, and where he distributed the questionnaires personally. It is worth stressing that the successful administration of the instrument was possible because of the good working relationship between the investigator and the officials in the MOE and the MOHE. Furthermore, according to Townsend, [26] a very high response rate possibly gives some indication of the importance which teachers attach to INSET.

6.8 Personal Background Data

Table 6.3 shows the distribution of practising teachers, according to: Location, sex, age, qualifications, and teaching experience, while Table 6.4 shows the distribution of teachers according to: Location, type of the school, teaching subject, and size of the school.

Table 6.3 confirms that 42 per cent of the teachers worked in mainly urban areas, while only 21.5 per cent worked in predominantly rural areas. With regard to sex, there was a balance between male and female teachers, with each comprising about 50 per cent of the sample. However, it is worth noticing that female teachers constitute about 53 per cent of the sample in Irbid and Amman; while, in Karak, they constitute 41 per cent only. This may imply that circumstances discourage female teachers in rural areas to join INSET programmes. Quite what these could be may be fruitful ground for further research.

Table 6.3: Distribution of Practising Teachers according to Geographical Location, Sex, Age, Qualification, and Teaching Experience.

Variables	North (Urban & Rural) No.	%	Middle (Mainly Urban) No.	%	South (Mainly Rural) No.	%	TOTAL No.	%
1. Sex								
- Male	57	47.5	65	47.0	42	59.0	164	49.7
Female	63	52.5	74	53.0	29	41.0	166	50.3
TOTAL	120	36.4	139	42.1	71	21.5	330	100
2. Age								
- 25 yrs or less	13	10.8	13	9.4	5	7.0	31	9.4
- 26-30 yrs	46	38.3	61	43.9	26	36.6	133	40.3
- 31-40 yrs	49	40.8	55	39.6	30	42.3	134	40.6
- 41 & over	12	10.8	10	7.2	10	14.1	32	9.7
TOTAL	120	36.4	139	42.1	71	21.5	330	100
3. Qualifications								
Community College Dip.	80	66.7	96	69.1	48	67.6	224	67.9
BA/BSc	40	33.3	43	30.9	23	32.4	106	32.1
TOTAL	120	36.4	139	42.1	71	21.5	330	100
4. Teaching Experience								
- 5 yrs or less	25	20.8	24	17.3	7	9.9	56	17.0
- 6-10 yrs	42	35.0	56	40.3	30	42.3	128	38.8
- 11-15 yrs	30	25.0	37	26.6	21	29.6	88	26.7
- 16 & over	23	19.2	22	15.8	13	18.3	58	17.6
TOTAL	120	36.4	139	42.1	71	21.5	330	100

For illustrations, see Appendix 7B1-B4.

Table 6.4: Distribution of Practising Teachers according to Geographical Location, the Type of School, Main Teaching Subject, and Size of School

Variables	North (Urban & Rural) No.	%	Middle (Mainly Urban) No.	%	South (Mainly Rural) No.	%	TOTAL No.	%
1. Type of School								
Elementary	28	23.3	40	28.8	16	22.5	84	25.5
Preparatory	46	38.3	41	29.5	24	33.8	111	33.6
Secondary	46	38.3	58	41.7	31	43.7	135	40.9
TOTAL	120	36.4	139	42.1	71	21.5	330	100
2. Teaching Subject								
Islamic Education	3	2.5	3	2.2	10	14.3	16	4.9
Arabic Language	30	25.0	14	10.3	26	37.1	70	21.5
English Language	36	30.0	20	14.7	6	8.6	62	19.0
Science	12	10.0	28	20.6	2	2.9	42	12.9
Social	10	8.3	10	7.4	8	11.4	28	8.6
Social Sciences	5	4.2	7	5.1	6	8.6	18	5.5
Physical Education	2	1.7	3	2.2	1		6	1.8
Other	22	18.3	51	37.5	11		84	25.8
No indication given			3		1		4	
TOTAL	120	36.8	136	41.7	70	21.5	326	100
3. Size of School (No. of Classes)								
1-6	16	13.3	12	8.6	14	19.7	42	12.7
7-9	21	17.5	18	12.9	20	28.2	59	17.9
10 & over	83	69.2	109	78.4	37	52.1	229	69.4
TOTAL	120	36.4	139	42.1	71	21.5	330	100

Concerning age, the table shows that around 81 per cent of the teachers were between 30-40 years of age. About 10 per cent were over 40, and 9 per cent were under 25 years of age.

In relation to qualifications, about 68 per cent of the teachers held a community college diploma, while 32 per cent held the first university degree. The table also shows that about 44 per cent of the teachers had lengthy teaching experience - that is to say, more than 11 years. Another 38 per cent had more than 6 years experience, while the (mainly young) teachers with 5 years experience or less, represented 17 per cent of the sample.

Table 6.4 shows the distribution of teachers in relation to the type and size of schools in which they worked. Forty-one per cent of the teachers worked in secondary schools, while 33.6 per cent and 25.5 per cent worked in preparatory and elementary schools, respectively. About 70 per cent of the teachers worked in large schools with more than ten classes, while 30 per cent of the teachers worked in small schools with nine classes or less. The table also shows the distribution of teachers according to the subject they taught. Twenty-six per cent of the teachers pointed out that they taught subjects other than those mentioned in the questionnaire, including: Commercial studies and class teacher specialisation. Four of the respondents gave no indication about the subject they teach.

Table 6.5 shows the distribution of teachers' trainers, according to location, job title, sex, age, qualifications and teaching

Table 6.5: Distribution of Teachers' Trainers by Location, Job Title, Sex, Age, Qualifications and Teaching Experience.

Variables	North No.	%	Middle No.	%	South No.	%	Total No.	%
1. Location								
Supervisors	14	36.8	14	36.8	10	26.3	38	56.7
Lecturers	9	31.0	11	37.3	9	31.0	29	43.3
TOTAL	23	34.3	25	373	19	28.4	67	100.0

	Female No.	%	Male No.	%	Total No.	%
2. Sex						
Supervisors	2	5.3	36	94.7	38	56.7
Lecturers	2	6.3	27	93.1	29	43.3
TOTAL	4	6.0	63	94.0	67	100

	26-30 years No.	%	31-40 years No.	%	41 & over No.	%	Total No.	%
3. Age								
Supervisors	1	2.6	14	36.8	23	60.5	38	56.7
Lecturers	1	3.4	20	69.0	8	27.6	29	43.3

	C.C. Dip. No.	%	BA/BSc No.	%	BA & Dip. No.	%	M.A. No.	%	M.A.&Dip. No.	%	PhD No.	%	Total No.	%
4. Qualification														
Supervisors	1	2.6	5	13.2	21	55.3	5	13.2	5	13.2	1	2.6	38	56.7
Lecturers	-	-	2	6.9	1	3.4	1	3.4	5	17.2	20	69.0	29	43.3
TOTAL	1	1.5	7	10.4	22	32.8	6	9.0	10	14.9	21	31.0	67	100

	5 years or below No.	%	6-10 years No.	%	11-15 years No.	%	16 & over No.	%	Total No.	%
5. Teaching Experience										
Supervisors	-	-	6	15.0	12	31.6	20	52.6	38	56.7
Lecturers	4	13.8	9	31.0	14	48.3	2	6.9	29	43.3
TOTAL	4	6.0	15	22.4	26	38.8	22	32.8	67	100.0

* For illustrations see Appendix TC1 - C3.

experience. The most striking aspect in the sample is the small number of female teacher trainers. Only 6 per cent of the sample was female, and this is merely a reflection of the small number of females working as lecturers and supervisors in the educational institutions in Jordan, as a whole.

In respect of age, only 3 per cent of the sample were less than 30 years old, while 46.3 per cent were 41 years of age or older.

With regard to qualifications, 54.9 per cent of the sample held an M.A. or Ph.D. degree. As for teaching experience, the table shows that the majority of the sample (71.6%) had 11 years of teaching experience, or more.

The research sample was carefully chosen to represent a wider population, to which it could be generalised. Data distribution, according to the independent variables: Location, sex, qualifications, and teaching experience, confirms both the broadness of the sample and its representative nature.

6.9 Analysis of the Data

The data obtained from the returned questionnaires were examined for errors and missing information. Values were assigned to the five-point response scale. That is to say, a weight of 5 was given for 'strongly agree', 4 for 'agree', 3 for 'undecided', 2 for 'disagree', and 1 for 'strongly disagree'. Since the mid-point on the scale is 3, mean scores greater than three were assumed to

indicate favourable perceptions, while mean scores of less than 3.0 were assumed to indicate less favourable percentages.

The data analysis of this study was computed at the Computer Centre at Hull University, through the use of the statistical package for social sciences (SPSS) programme. For the purpose of testing, the research questions, evidence in the form of frequencies, percentages and means, were obtained. Further analysis of the data by chi-square was used to determine significant differences at the .05 level of confidence. Sophisticated statistical methods were avoided.

It is the intention of the investigator that the presentation of results should take a simple form to enable the focal audience of the study, teachers and administrators, to understand them and consequently, accept or reject the recommendations made.

Sophisticated statistical methods are more difficult to understand by readers and policy-makers. This is an approach with which Macintoch appears to share considerable sympathy:[27]

> "Very often, statistic information is presented in ways which are not easily comprehensible to non-numerate decision-makers. The use of elaborate statistical tests may be designed to impress fellow academicians. It is likely to be a barrier to the majority of the decision-makers."

Findings and interpretations of the data are reported in the chapter which immediately follows.

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CHAPTER SEVEN

PRESENTATION AND ANALYSIS OF DATA: PART ONE
PARTICIPATION AND PREFERENCES SURVEY

7.1 Introduction

This chapter and the next present the analysis of data obtained by administering a questionnaire to a sample of practising teachers and teachers trainers in three main areas in Jordan.

As indicated in the tables in Chapter Six, the sample consisted of 330 teachers, of whom 166 were females and 164 males, while the teachers trainers were 67, with only four (4) females. Two hundred and twenty four teachers had two years of teacher training, and usually teach at the compulsory stage (elementary and preparatory), while 106 teachers had four years of post secondary education, and usually teach at secondary schools. Forty seven of the teachers trainers had a Master's degree or a PhD degree.

The purpose of the study was to identify, categorise, and compare in-service preferences of teachers; their opinions and perceptions, and also those of their trainers in Jordan.

For the purpose of testing the research questions, evidence in the form of frequencies, percentages, and means was obtained. Further analysis of the data by chi-square was employed to determine significant differences. The critical level of significance for the chi-square test was set at the (05) level of

confidence. Differences that did not meet the (.05 level), in most cases, were not reported. The pattern of presentation will be as follows:

i) paraphrasing of questions;

ii) numerical results of sample responses;

iii) chi-square results;

iv) comments.

Part One of the questionnaire requests biographical data and information on respondent's experience and preferences in respect of INSET activities. Questions 1 to 8 are concerned with personal information. Questions 9 to 12 deal with participation in INSET activities and programmes. Questions 13 to 16 deal with the preferences of respondents concerning location, timing and teaching techniques of INSET.

Part Two of the questionnaire which is discussed in Chapter Eight, is a five point scale to identify the respondents opinions and perceptions on certain aspects of INSET. Items 1 to 10 deal mainly with the content of INSET, while items 11 to 20 deal with the organisation of INSET. Items 21 to 30 are concerned with teachers' involvement, while items 31 to 40 deal with presentation. The last ten items in the questionnaire deal with teachers satisfaction with present provision of INSET in Jordan.

7.2 Participation in In-Service Activities

This part of the questionnaire consists of four questions 9-12 focussing on participation in INSET, selection methods, and reasons of attendance.

7.2.1 Teachers' Participation:

Respondents were invited in question No.9 to say whether they had engaged in any INSET programme (other than the course they were currently following) during the last two years.

Table 7.1: Distribution of Frequency, Percentage and Chi-Square Results to Question No.9

Respondents	Yes		No		No Reply		Chi-Square Results
	f	%	f	%	f	%	
Teachers	164	49.7	163	41.4	3	0.9	X^2 = 25.22
Teachers Trainers	56	83.6	11	16.4	-	-	p < .001

Table 7.1 detailing the response pattern to this item shows that only 49.7 per cent of the teachers participated in any INSET programme during the previous two years and, although it is not a high percentage, it is almost identical to Cane's [1] survey results in Durham county. In another survey carried out by Bradely [2] in 1973 in the U.K., he found that one quarter of all teachers surveyed had no involvement at all in INSET, and 72 per cent had undertaken less than one week in

three (3) years. It is not possible to draw conclusions at this stage as to whether the low attendance was due to the wishes of the teachers not to attend or because they were not given the opportunity to attend. However, the questionnaire was designed in such a way as to make it likely that subsequent items would produce such answers. Only six of the teachers participated as lecturers or demonstrators, while the rest were only participants. In sharp contrast, the table shows a highly significant difference between the teachers and teachers trainers, as 84 per cent of the latter had participated in INSET programmes during the previous two years as lecturers and organisers. (X^2 = 25.22, $p < .001$).

Since an important aim of the survey was to discover to what extent teachers participate in INSET courses, it is important to take into account whether their participation varies between regions, and whether it is affected by the other independent variables.

Table 7.2 confirms that the highest percentage of participation in INSET programmes was in Amman, with 53.3 per cent, while the lowest percentage of participation among teachers was in Karak, with 45.7 per cent. This difference, while perhaps worth noting, cannot be demonstrated to be statistically significant (X^2 = 4.65 $p < .32$). Nevertheless, it may indicate among other things that there are more opportunities for teachers working in urban areas to join INSET programmes, than those teachers who work in rural areas.

Table 7.2: Distribution of Frequency and Percentage of Teachers Participation in INSET Programmes According to Location

Location	Attenders		Non-attenders		Total		Chi-Square Results
	f	%	f	%	f	%	
Irbid (Urban & Rural	59	49.2	61	50.8	120	36.7	$X^2 = 4.65$ $p < .32$ NS
Amman (Urban)	73	53.3	64	46.7	137	41.9	
Karak (Rural)	32	45.7	38	54.3	70	21.4	

Table 7.3: Distribution of Frequency, Percentage and Chi-Square Results of Teachers' Participation in INSET programmes According to Qualifications

Qualifications	Attenders		Non-attenders		Chi-Square Results
	f	%	f	%	
Diploma holders (Compulsory school teachers)	127	57	96	43	$X^2 = 13.74$ $p < .001$
B.A/BSc holders (Secondary school teachers	37	35.6	67	64.4	

The replies in Table 7.3 show that 57 per cent of compulsory school teachers (with two years of teacher training) had participated at least once in INSET programmes during the two year period, while only 35.6 per cent of secondary school teachers (with four years of post secondary education) participated in the same period. The value of chi-square is ($X^2 = 13.74$, $p < .001$) which indicates a significant difference between compulsory school teachers (Diploma holders) and secondary school teachers (BA, BSc holders), and their participation in INSET activities. These results are similar to the results in Cane's [3] survey, where he found that fewer secondary school teachers had attended training than primary school teachers. Some educationists drew a distinction between the nature and the needs of the two stages of education. Bolam, et al, [4] advocated that the nature of class teaching in primary schools force the teacher to consider the implications of new developments to the total curriculum. The secondary school teacher, on the other hand, is more likely to be a subject specialist and therefore, to have a strong tendency to think along narrow subject lines.

This explanation of the differing attendance rates is only a partial one. However, Bolam et al, [5] confirm that there is strong evidence pointing to the lower attendance by secondary teachers at INSET activities in many parts of the world. Why this should be the case is unclear and open to speculation. Secondary teachers may feel more secure within their subject disciplines, and may receive support from departmental colleagues, or they may be tired because of marking, preparation and extra-curricular activities. One of the

reasons for this phenomena in Jordan may be that teachers in the compulsory sector are offered more training programmes. The investigator, as a member of the Education Committee at the MOE, noticed that during the Summer of 1987, no short courses were offered to secondary school teachers.[6] The attendance results outlined above suggests many questions about provision of INSET for compulsory and secondary school teachers, which may need further research in this area before answers could be found.

The table 7.4 shows that 47.6 per cent of female teachers attended INSET courses, compared to 52.8 per cent of male teachers. This disparity is, however, slight and the chi-square results revealed no significant difference between female and male teachers, and their participation in INSET activities.

An examination of the results also shows that 57.1 per cent of young teachers with 5 years of experience or less had participated in INSET activities, compared to 40.4 per cent of teachers with 16 years experience or more. Although the chi-square results indicate no significant statistical differences, it would seem reasonable to assume that young teachers showed a stronger professional support for INSET activities than did older teachers, and that is an encouraging development for the future.

Table 7.4: Distribution of Frequency, Percentage and Chi-Square Results of Teachers' Participation in INSET Programmes According to Sex

Sex	Attenders f	Attenders %	Non-attenders f	Non-attenders %	Chi-Square Results
Female Teachers	78	47.6	85	51.8	$X^2 = 1.78$
Male Teachers	86	52.8	77	47.2	$p < .41$ NS

Table 7.5: Distribution of Frequency, Percentage and Chi-Square Results of Teachers' Participation in INSET programmes According to Teaching Experience

Teaching Experience	Attenders f	Attenders %	Non-attenders f	Non-attenders %	Chi-Square Results
5 years or below	32	57.1	24	42.9	$X^2 = 8.95$
6-10 years	71	55.9	56	44.1	$p < .17$ NS
11-15 years	38	43.7	48	56.3	
16- over	23	40.4	34	59.6	

7.2.2 Selection Methods:

In question No.11, respondents were invited to say how they find the present methods of selecting candidates for INSET programmes. Table 7.6 shows the sample response.

Table 7.6: Distribution of Frequency, Percentage and Chi-Square Results of Respondents' Answers to Question No.11 (Selection Methods)

Respondents	Satisfactory f	Satisfactory %	Unsatisfactory f	Unsatisfactory %	Undecided	Chi-Square
Teachers	179	55.1	102	31.4	44 13.5	$X^2 = 2.48$
Teachers trainers	35	52.2	18	26.9	14 20.9	$p < .29$ NS

The table shows that 55.1 per cent of the teachers and 52.2 per cent of teachers trainers are satisfied with the selection procedures. However, these results show at the same time that about 44.9 per cent of the teachers and 47.8 per cent of teacher trainers are either uncertain or unsatisfied with the present selection methods for INSET programmes. Some teachers added comments stating that there is a bias towards teachers with long years of experience, especially when selecting candidates for the upgrading course at the Higher Certification College (HCC), or for the Diploma course at universities. The selection procedure for (HCC) allocates ten marks for teaching experience, and that means teachers with long experience have better chances to be

selected. [7] According to simple logic of capital investment and returns, it is in the interest of the MOE and the MOHE to select those candidates who would provide the maximum returns first, and then provide for others later. It seems unwise to select candidates who will just retire from the service after graduation from the (HCC) or the Diploma course at universities. When a younger candidate is certified by the college, she/he is likely to provide higher returns in terms of length of service, whereas, on the other hand, when an old candidate who is near the retiring age is selected, the scarce resources invested in training are likely to be wasted. The statistics of HCC which runs the major INSET upgrading programme in Jordan show that only 30 per cent of the teacher students are 30 years or less in age, and only 30 per cent of its students are females, although female teachers are about 60 per cent of the total population of non-graduate teachers in Jordan. [8] There must be reasonable explanation for this disparity and whatever the reasons are, the situation causes concern and highlights the need for careful examination and evaluation of present selection procedures for INSET programmes.

Surprisingly, perhaps, Table 7.7 shows that female teachers in the sample are more satisfied with selection procedures than are their male colleagues. The replies in Table 7.7.indicate that 60.7 per cent of female teachers think that the present selection procedures for INSET programmes are satisfactory, compared with 49.4 per cent of male teachers. The chi-square results show a significant difference ($X^2 = 10.09$, $p < .006$).

Table 7.7: Distribution of Frequency, Percentage and Chi-Square Results of Teachers' Opinions about Selection Procedures According to Sex

Sex	Satisfactory f	Satisfactory %	Unsatisfactory f	Unsatisfactory %	Undecided f	Undecided %	Chi-Square Results
Female Teachers	99	60.7	38	23.3	26	16.0	$X^2 = 10.09$ $p < .006$
Male Teachers	80	49.4	64	39.5	18	11.1	

Table 7.8: Distribution of Frequency, Percentage and Chi-Square Results of Teachers' Replies to Question No.11 According to Qualifications

Qualifications	Satisfactory f	Satisfactory %	Unsatisfactory f	Unsatisfactory %	Undecided f	Undecided %	Chi-Square Results
Diploma holders (Compulsory school teachers)	129	58.6	58	26.4	33	15.0	$X^2 = 8.11$ $p < .017$
BA/BSc (Secondary school teachers)	50	47.6	44	41.9	11	10.5	

Table 7.8 shows that 58.6 per cent of compulsory school teachers (Diploma holders) are satisfied with the selection procedures, compared to 47.6 per cent of secondary school graduate teachers with first degrees. The chi-square results ($X^2 = 8.11$, $p < .01$) show a significant difference between the two groups. The other independent variables: Location and teaching experience, do not show any significant difference between compulsory school teachers and secondary school teachers, and satisfaction with the selection procedures of INSET.

7.2.3 Reasons for Attending INSET Programmes:

Respondents were asked in question No.10 to indicate, in order of preference, which reasons made them attend INSET programmes, and in question No.12 they were asked to indicate the reason/reasons which prevented them from attending. It is interesting to note that teacher trainers (supervisors and lecturers) did not see the two questions applying to them. This might be explained by the current structure of INSET in Jordan, whereby supervisors and lecturers are seen more as providers of INSET than participants. Most supervisors and university lecturers have had no training or preparation for their jobs. They usually prepare their lectures without consultation with colleagues, deliver them to an exclusively student audience and, in most cases, receive no systematic feedback about them. The new educational reform acknowledged the need for a national programme aiming at training the supervisors, administrators and educational leaders.

Table 7.9 shows the teachers responses to question No.10 in respect of the percentage of teachers who chose a particular reason as their first, second or third choice.

Table 7.9: Teachers' Reasons for Attending INSET Programmes

Reasons	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank
a. To improve knowledge of curriculum subjects.	34.1	31.1	17.2	30.0	2
b. To improve teaching methods.	42.8	31.9	17.2	34.7	1
c. To get promotion.	9.4	15.6	27.8	14.5	6
d. To comply with the request of superiors.	21.8	16.1	19.2	19.6	4
e. To obtain new qualifications.	39.4	18.9	21.7	29.6	3
f. To take new duties.	14.4	18.0	24.2	17.2	5
g. To mix with colleagues.	6.6	8.8	16.1	8.9	7
h. To get away from school.	2.0	2.9	21.6	5.5	8

(% indicates the percentage of sample choosing that reason)

A weighted mean* was produced to decide the rank of each reason.

*The weighted mean was calculated by multiplying the percentage of the first choice by three, the second choice by two, and the third choice by one, and then dividing the total by six.

The data presented in Table 7.9 indicate that "improving teaching methods" was considered the most preferred reason for teachers to attend INSET programmes, while the "improvement of curriculum subject" was ranked as the second most important reason for attending. The third most preferred reason was "to obtain new qualifications". Surprisingly, promotion as an independent reason was chosen by only 9.4 per cent of the teachers as their first choice, and was ranked as the sixth preferred reason. However, new qualifications in Jordan are usually converted to higher salary scales and promotion.

Ranking the "request of superiors" as the fourth reason for participation shows the important role of the administrators and supervisors in INSET. In Jordan, as in many developing countries, it is open to MOE and local directorates of education through supervisors and headteachers to make INSET a compulsory obligation for teachers. According to Johnston, [9] the use of compulsion seems to deny a major element of professional strengthto the teacher, and to his professional organisation. If this is the case, it is better to examine how teachers may be attracted to participate in INSET without feeling the pressure of statutory obligation.

The least preferred reason, according to the sample, was "to get away from school", which was chosen by only 2 per cent of the teachers as their first choice, which indicates generally that teachers in the sample take their participation in INSET activities

seriously. The results show that teachers feel a need for INSET, and a professional responsibility to undertake it.

Reasons (b & a) which were ranked as the first and second most preferred are about improving the personal performance for its own sake, which shows a high degree of motivation and professionalism. While reasons (c,d,e,f) have external rewards. It could be suggested on this examination that teachers are split between the intrinsic motivation of improving teaching methods and acquiring knowledge for its own sake, and the extrinsic motivation of acquiring qualifications which for many, would be seen as a necessary pre-requisite for furthering their career.

The responses of teachers in the sample to question No.10 are similar, in general, to the results obtained by Bradely, [10] and Baker et al, [11] but differs from the results obtained by Raggett et al, [12] and Burns. [13] In Bradely's survey, the teachers reasons for attending INSET programmes were as follows, in rank order of preferences: [14]

i) to improve teaching methods;

ii) to learn more about recent trends in educational research;

iii) to update knowledge of own subject;

iv) to take new duties.

While in Baker et al's survey, the teachers preferences were as follows, in rank order: [15]

i) to improve knowledge;
ii) to improve teaching methods;
iii) to widen experience;
iv) to obtain higher qualifications.

In Raggett et al's survey, the teachers preferences were as follows, in rank order: [16]

i) to increase knowledge;
ii) to obtain further qualifications;
iii) to get promotion;
iv) to get away from school;
v) to take new duties;
vi) to increase salary;
vii) personal satisfaction;
viii) to keep abreast of new trends.

In Burns [17] study, teachers ranked "promotion" as the most important reason for attending, followed by "improving subject matter", "self-esteem", "financial prospects", and "improving teaching skills".

In analysing the differences between location, sex, qualifications and teaching experiences, and the responses to question No.10, the chi-square test was used for this purpose. The results show a

significant difference between groups of teachers and one reason only "To obtain new qualifications", as reported in the Table 7.10.

The responses in Table 7.10 show that 63.3 per cent of teachers working in rural areas, 45.1 per cent of male teachers, 46.2 per cent of secondary teachers, and 53.7 per cent of teachers with 16 years of teaching experience and over, had all chosen the reason of "acquiring new qualifications" as their first choice. While only 28.6 per cent of teachers working in urban areas, 33.9 per cent of female teachers, 35.4 per cent of compulsory school teachers, and 34.8 per cent of young teachers with 5 years teaching experience or below, did the same. This may imply that acquiring new qualifications through participation in INSET courses is more important: to teachers working in rural areas than teachers working in urban areas; to male teachers than female teachers; to compulsory school teachers than secondary school teachers; to older teachers with long experience than to young teachers with little experience. The chi-square results show a significant difference with the first three independent variables; location, sex and qualifications.

Respondents to question No.10 were given the opportunity to add any other reason for attending INSET programmes, or add any necessary comment. Only a few responded, and the following comments are fairly representative of the spectrum of opinion. One respondent wrote: "I just want to obtain a higher qualification", another added: "I am bored with teaching, I want to be a headmaster". Improving social relations by meeting other colleagues and developing self-confidence

Table 7.10: Teachers' Responses to the Reason "To Obtain New Qualifications" According to the Independent Variables

Variables	First choice %	Second choice %	Third choice %	Chi-Square Results
Location				$X^2 = 34.85$
Irbid (rural & urban)	39.8	15.9	23.9	$p < .001$
Amman (urban)	28.6	19.6	27.7	
Karak (rural)	63.3	22.4	4.1	
Sex				
Female teachers	33.9	17.3	26.0	$X^2 = 13.86$
Male teachers	45.1	20.5	17.2	$p < .05$
Qualifications				
Diploma holders (compulsory teachers)	35.4	15.2	24.7	
BA/BSc holders (secondary teachers)	46.2	25.3	16.5	
Teaching Experience				
5 years or below	34.8	13.0	21.7	$X^2 = 28.68$
6-10 years	33.3	24.2	19.2	$p < .12$ NS
11-15 years	42.9	19.0	25.4	
16- over	53.7	12.2	22	

were mentioned by other teachers as important reasons for participation in INSET programmes.

7.2.4 Reasons for Non-Attendance:

Teachers were asked, in question No.12, to identify the reason/reasons which prevented them from attending INSET activities in the previous two years. Table 7.11 shows their replies in order of preference:

Table 7.11: Teachers' Reasons for Non-Attending INSET Programmes

Reasons for Non-attendance	First choice %	Second choice %	Third choice %	Weighted Mean %	Rank
a) Not given the opportunity to attend	70.6	10.7	7.9	40.2	1
b) Travel daily/live away from home	26.3	28.6	23.4	26.5	3
c) Family problems/ illness	13.0	38.9	24.7	23.6	6
d) I had another job	27.0	21.7	27.8	25.3	5
e) I did not need training	28.7	23.1	23.8	26.0	4
f) INSET courses are useless	9.2	20.8	21.7	15.0	8
g) No courses in my field	31.2	24.8	24.0	27.8	2
h) No incentives	12.2	17.6	36.7	18.0	7

It is very interesting to notice from the data presented in Table 7.11 that 70.6 per cent of the teachers indicated that they were not given the opportunity to attend INSET courses. They ranked this as the most important reason for non-attendance. The second most important reason for non-attendance was: "No courses in my field". These results may explain the low rate of participation in INSET activities, as shown in question No.10. It seems safe to conclude from these results that there is not enough provision of INSET activities in Jordan to deal with the professional needs of teachers. In a similar fashion to question No.10, it is possible to group the reasons for non-attendance into categories. Reasons (a) and (g) are significant for future provision of INSET, while reasons (b, c, d) can be interpreted as indicating personal and family difficulties in attending, and this possibly accounts for the similar response in percentage terms. The fact that teachers marked "travel daily/and residence away from home" as the third most important reason, gives an idea about the importance of personal factors in the involvement of teachers in INSET, and may suggest that the provision of local, rather than regional or national opportunities for INSET, is of great importance. The reasons (e, f, h) deal mainly with the perceived irrelevancy of the courses provided. Ranking "no incentives" as the seventh mean that the majority of teachers do not link participation in INSET programmes with incentives or promotion, while ranking "INSET courses are useless" as the eighth, indicates that teachers in Jordan "value" the courses of INSET, which means that the prospects for support of

future training seem to be bright if sufficient courses on the right topics can be provided with suitable arrangements.

When the responses of teachers for non-attending INSET courses were examined, according to the independent variables, little correlation was noticed between the two. The following results were obtained where the relationship between the independent variables and teachers responses showed a significant difference.

Table 7.12: Teachers' Responses to Reasons b,c,d in Question No.12 According to Sex

Reasons for Non-Attendance	First choice %	Second Choice %	Third Choice %	Chi-Square Results
b) Travel daily/live away from home				
Female teachers	33.0	28.7	19.1	$X^2 = 11.65$
Male teachers	18.5	28.4	28.4	$p < .11$ NS
c) Family problems/illness				
Female teachers	14.3	49.5	18.7	$X^2 = 15.56$
Male teachers	11.3	25.4	32.4	$p < .02$
d) I have other job				
Female teachers	17.1	28.6	20.0	$X^2 = 17.68$
Male teachers	31.3	18.8	31.3	$p < .01$

The data in Table 7.12 indicate that "travelling daily" and "family problems" are more important reasons for non-attendence for female teachers than male teachers. While "having another job" is more important reason for male teachers than female teachers. The chi-square results show a significant difference between the two groups

in reasons c and d (X^2 = 15.56, $p < .02$, X^2 = 17.68 $p < .01$).

The data in Table 7.13 shows that the value of X^2 for items b, and c are: 15.66 $p < .02$ and 20.55 $p < .004$, which reflect a highly significant difference between teachers with different qualifications. Although the chi-square results for items (d) and (e) do not show statistical significant difference, yet the percentage results show a difference between the response of compulsory school teachers and secondary teachers.

The chi-square results in Table 7.14 show a significant difference between the responses of young teachers with five years experience or below, and old teachers with 16 years experience, and items (b) and (h).

As in question No.10, respondents were given the freedom to add their comments or add any other reason for non-attendance. Only 25 teachers chose to add their comments and, in spite of this small number, some genuine problems and difficulties experienced by the teachers came to the surface, which included:

i) the timing of some courses was not convenient;

ii) many teachers have to pay university fees when joining the Diploma course;

iii) teachers have to pay transport expenses;

iv) most short courses were held at schools were teachers had to sit uncomfortably for long hours in the students' chairs.

Teachers' reasons for not attending INSET courses in this study differs to a certain extent in content and order from the results obtained by Bradely, [18] and Burns. [19] Teachers in Bradely's

Table 7.13: Teachers' Responses to Reasons b,c,d,e in Question No.12 According to Qualifications

Reasons for Non-attendence	First choice %	Second choice %	Third choice %	Chi-Square Results
b) Travel daily/live away from home				
Diploma holders	30.3	28.6	22.7	$X^2 = 15.66$
BA/BSc holders	17.9	28.6	25.0	$p < .02$
c) Family problems/illness				
Diploma holders	15.9	46.0	20.4	$X^2 = 20.55$
BA/BSc holders	6.1	22.4	34.7	$p < .004$
d) I have other job				
Diploma holders	22.4	25.4	26.9	$X^2 = 8.55$
BA/Bsc holders	33.3	16.7	29.2	$p < .28$ NS
e) I do not need training				
Diploma holders	33.0	20.4	24.3	$X^2 = 8.20$
BA/BSc holders	17.5	30.0	22.5	$p < .31$ NS

Table 7.14: Teachers Responses to Reasons b,e,h in Question No.12 According to Teaching Experience

Reasons for Non-Attendence	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
b) Travel daily/live away				X^2= 33.99 p < .03
5 years and below	34.2	34.2	5.3	
6-10 years	27.8	25.0	29.2	
11-15 years	21.1	26.3	21.1	
16- over	18.5	33.3	37.0	
e) I do not need training				X^2= 27.9 p < .14 N.S.
5 years and below	20.8	20.8	20.8	
6-10 years	25.9	22.2	27.8	
11-15 years	31.4	17.1	22.9	
16- over	36.7	33.3	20.0	
h) No incentives				X^2= 32.45 p < .05
5 years and below	2.5	15.0	37.5	
6-10 years	13.3	17.3	37.5	
11-15 years	7.1	14.3	52.4	
16- over	29.0	25.8	12.9	

sample represented their opinion about the major discouragement from undertaking INSET courses in the following order: [20]

i) home circumstances;

ii) difficulty in finding replacement;

iii) pupils' disadvantage;

iv) costs and expenses;

v) travel daily.

In Burns' [21] survey, teachers cited "lack of time" as the main reason for non-attendance, followed by "no encouragement", "other commitments", "no relevant courses" and "lack of inclinations".

7.3 Preferences of Respondents

There are many different arrangements for the location, duration, techniques and timing of INSET activities, yet there has been little attempt to find out which attract the largest attendences. It may be worth establishing the patterns of teachers' preferences concerning location, timing and teaching techniques of INSET courses as a basis for future planning. Emerging research reviews, according to Zirkel et al, [22] identify several factors such as time, location and money as important incentives for maximising teachers' participation in INSET, yet little has been done about these kinds of data in planning INSET programmes. This study attempts to shed light on the problem. Questions 13 to 16 deal with the respondents' preferences as <u>when</u>

they like INSET to take place; where; which technique is best; and by whom should it be provided?

7.3.1 The Timing of INSET Courses:

Respondents were asked, in question No.13 to indicate, in order of preference, when do they prefer to attend INSET courses? Teachers' responses are shown in the following table:

Table 7.15: Teachers' Preferences Concerning the Timing of INSET Activities

Time	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank
School-time	56.8	18.5	11.2	36.4	1
Evenings	20.7	25.7	27.4	23.5	4
Weekends	12.3	29.0	33.3	21.3	5
School vacation	20.9	32.0	27.1	25.7	3
Summer holidays	46.6	26.7	12.9	34.4	2

The data in Table 7.15 shows that teachers preferred most, training to be held in school-time, followed by summer holidays, and other school vacations. Of the options offered, weekend courses appealed least, followed by evenings. These findings are similar to Garnham et al [23] survey in the U.K., where "in school time" was the most preferred, and weekends the least. Zirkel et al, [24] in the U.S.A., found also that teachers preferred school-time for attending INSET courses, but perceived weekends and school vacations as negative training time.

It seems that teachers prefer to use the school-time for training, instead of using their own free time, which means that those teachers who undertake INSET during school-time, will be freed from teaching commitments. Clearly, course organisers must know what is acceptable to teachers when considering possible times.

Table 7.16: Teachers' Trainers Preferences Concerning the Timing of INSET Activities

Time	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank
School-time	20.6	5.9	32.4	17.6	3
Evenings	17.2	6.9	24.1	14.9	4
Weekends	3.8	11.5	30.8	10.8	5
School vacations	16.7	69.4	5.6	32.4	2
Summer holidays	70.0	20.0	7.5	42.9	1

Addressing the controversial question of when INSET should be provided, teachers' trainers favour "summer holidays" most, followed by "school vacation", while "school-time" (the most preferred time for teachers) was ranked third, which represents a highly significant difference ($X^2 = 35.6$, $p<.001$) between the two groups. It is worth noting here that, while teachers who attend INSET courses during school-time are expected to be freed from teaching commitments, teacher trainers do receive additional payments for lecturing at INSET courses during summer holidays, and this may explain the reason

behind the two groups different preferences. The unpopularity of "school-time" with the trainers could be explained with the difficulty of supplying a replacement to safeguard the interests of the pupils and schools. The following table shows the chi-square results of the responses of teachers and trainers.

Table 7.17: Chi-Square Results of Responses to Question No.13

Time	Chi-Square Results
During school-time	$X^2 = 35.61$ $p < .001$
Evenings	$X^2 = 22.89$ $p < .001$
Weekends	$X^2 = 23.53$ $p < .001$
School vacation	$X^2 = 20.39$ $p < .001$
Summer holidays	$X^2 = 8.92$ $p < .06$ NS

When the independent variables were considered as predictors for preferences of teachers concerning the timing of INSET courses, surprisingly, statistical analysis reveals no significant differences between different groups of teachers according to location, sex qualifications and teaching experiences in most cases. However, the investigator felt that the following differences among different groups of teachers to be significant. (For details, see Appendix 8).

i) Teachers in Irbid (North) preferred "Evening Courses" (27.5 per cent) more than teachers in Amman (Middle) (14.7 per cent) or in Karak (South) (19.0 per cent);

ii) Teachers with 6-10 years teaching experience expressed more satisfaction with "Evening Courses" (30.0 per cent) more than other groups of teachers (10.3 per cent; 20.5 per cent, 11.5 per cent);

iii) Compulsory school teachers (Diploma holders) were more enthusiastic (52.7 per cent) about "Summer holiday" courses than secondary school teachers (First degree holders) (35.4 per cent). They also preferred INSET courses during "School vacation" (25.0 per cent) more than secondary school teachers did (13.8 per cent).

7.3.2 Location of INSET Courses:

Respondents were asked in question No.14 where they would most like INSET courses to take place? Teachers replies were as follows:

Table 7.18: Teachers' Responses to Question No.14

Location	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank
Local school	47.8	15.7	8.4	30.5	2
Teachers' centre	21.5	34.1	32.5	27.5	3
Community college	3.4	43.0	39.6	22.5	4
University	57.3	15.4	8.3	35.1	1

The table clearly shows that the majority of teachers (57.3 per cent) prefer the university, followed by 47.8 per cent who prefer INSET courses to be held at the local school. It could be argued that the preference

of the university by the majority of teachers shows a predictable correlation between the desire for award-bearing courses, and the choice of university. While the preference of the local school shows, in a way, an indirect support for school-based and school-focussed INSET. Teachers' centres came as the third locational preference, which shows that teachers' centres are facing strong competition in trying to attract teachers, particularly secondary school teachers. Thus, the teachers' preferences were quite definite: they would like the bulk of INSET to take place, either at the university or at the local school, preferably during school hours.

Teachers trainers differed in their preferences as the following table shows:

Table 7.19: Teachers' Trainers Responses to Question No.14

Location	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank %
Local school	27.8	16.7	16.7	22.2	4
Teachers' centre	29.7	35.1	32.4	31.9	2
Community college	-	51.5	33.3	22.7	3
University	58.1	11.6	14.0	35.2	1

The results in the above table show that, while the trainers agreed with the teachers to choose university as the most preferred place for holding INSET courses, and the community college as the least preferred, there

was a significant difference between the two groups concerning their second choice. Teachers chose the local school as their second preferred place, with 47.8 per cent, while only 27.8 per cent of the trainers chose the local school as their first choice, and they rank it the least preferred (fourth), which shows a significant difference between the two groups (X^2 = 13.7 $p < .01$). The Teachers' Centre was the second most preferred place to conduct INSET courses for the trainers, with 29.7 per cent, while the teachers ranked it as their third choice, with only 21.5 per cent. The importance of the location may well go beyond simple familiarity. For example, where substantial equipment requirements occur, as in educational technology or computing courses, then the use of classroom equipment may be important to the validity and credibility of INSET.

When the independent variables were considered as predictors for the preferences of teachers concerning the location of INSET courses, there were significant differences between various groups of teachers, as follows: (See Appendix 8)

i) There was a significant difference between teachers in Amman (Urban area) and teachers in Karak (Rural area), and their preference to conduct INSET in local schools (X^2 = 23.99, $p < .01$). Teachers in urban areas preferred the local school (56.9 per cent), more than teachers in the rural areas (28.3 per cent). One reason for this difference may be that schools in urban areas are more suitable for conducting INSET courses, than schools in rural areas

(better buildings and better facilities, including libraries and laboratories). At the same time, teachers in Karak (rural area) show a stronger preference to conduct INSET programmes at the university (77.4 per cent), more than teachers in Amman (urban area), which shows a highly significant difference between the two groups (X^2 = 23.35, $p < .01$);

ii) Male teachers show a stronger preference to conduct INSET courses at universities (64.8 per cent), more than female teachers (49.6 per cent), which shows a significant difference between the two groups (X^2 = 9.48, $p < .05$);

iii) Secondary school teachers (BA/BSc holders) are more favourable (71.3 per cent) to attending INSET at university than compulsory school teachers (Diploma holders) (50.0 per cent), which shows a highly significant difference between the two groups (X^2 = 28.9, $p < .01$). At the same time, a larger proportion of compulsory school teachers (25.4 per cent) prefer to conduct INSET courses at a community college, than did secondary school teachers (12.3 per cent);

iv) There was no significant difference between teachers with different teaching experience and their preferences concerning the location of INSET courses.

7.3.3 Teaching Techniques Preferences:

Teachers may attend courses arranged at times and places that suit their individual circumstances, but the most effective INSET is likely to occur when teachers are strongly motivated to attend. They may enjoy the training and find the course convenient; they may be disappointed or they may feel that the course opens a door to promotion. Whatever the reason, enthusiasm for attendence is likely to be increased by course teaching methods that appeal to the maturity and experience of teachers, and match their desire to make the most of the training in terms of immediate classroom benefits for their pupils.

The respondents in the survey were asked to indicate in order of preference which teaching technique they feel to be more effective in INSET courses. The outcome is given in Table 7.20. This shows that the most preferred teaching technique for the teachers is the "workshop", followed by "demonstration lessons", and "a combination of the above methods". While the least preferred teaching technique is "radio broadcast", followed by "TV". The teacher trainers also ranked "workshop" as their first most preferred technique, followed by "a combination of the above methods" as second, "demonstration lessons" third, and "lecture" fourth. The results in this survey show that the respondents support techniques, which include: practice, and active working teams. Almost the same results were found in Schreiber's [25] study which involved social studies teachers, as well as administrators in the Canadian province of Alberta. He found that

Table 7.20: Teaching Method Preferences: Distribution of Percentage, Rank and Chi-Square Results of the Sample

Teaching Technique	t/T	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank	Chi-Square Results
Lecture	t	12.7	11.1	17.1	12.9	6	$X^2 = 12.75$
	T	20.6	17.2	25.4	18.7	4	$p < .07$ NS
Seminar	t	10.6	24.0	24.0	17.3	4	$X^2 = 8.09$
	T	6.7	35.0	20.0	18.3	5	$p < .32$ NS
Workshop	t	41.2	23.7	19.4	31.7	1	$X^2 = 9.52$
	T	34.8	37.9	21.2	33.5	1	$p < .14$ NS
Micro Teaching	t	15.6	14.6	20.3	16.0	5	$X^2 = 27.0$
	T	5.1	17.9	23.1	12.3	6	$p < .01$
Demon-strations	t	33.0	33.0	17.4	30.4	2	$X^2 = 10.18$
	T	24.1	34.5	22.4	27.3	3	$p < .17$ NS
Radio Broadcast	t	9.0	8.4	12.0	9.3	8	$X^2 = 13.61$
	T	2.6	5.3	10.5	4.8	7	$p < .09$ NS
T.V.	t	10.0	11.6	16.2	11.4	7	$X^2 = 28.17$
	T	-	9.8	4.9	4.2	8	$p < .01$
A Combi-nation of the above methods	t	33.1	11.8	15.8	23.1	3	$X^2 = 12.28$
	T	50.0	13.7	13.5	31.7	2	$p < .13$ NS

(T: teachers, T: Teacher Trainers, NS; Non Significant)

workshops ranked the highest, followed by demonstration lessons, and seminars. [26] In another survey carried out by Zirkel et al, [27] in the USA, they found that teachers preferred demonstrations, clinical practice, seminars and lectures, respectively, which reflects a liking for the "practical". On the other hand, a survey conducted in Gloucestershire in the U.K., showed different results: "Combination of methods" and "lectures" were given preferential ratings, followed by "demonstrations". [28]

The fact that teachers and trainers in the survey did not give considerable support for using radio and T.V. must not be taken as a rejection of these methods. The reason may be that many respondents were not familiar with using those methods in INSET. It is perhaps worth noticing how many teacher trainers (20.6 per cent) still prefer the traditional lecture method when so much criticism of its usefulness has been voiced for so long. [29] There was a significant difference between teachers and trainers concerning "Microteaching" and T.V. techniques as the chi-square results in Table 7.19 show ($X^2 = 27.0$, $p < .01$, and $X^2 = 28.17$, $p < .01$).

When the independent variables were considered, the following differences between different groups of teachers were identified:

i) Teachers mainly in rural areas (Irbid and Karak) show a stronger support for using the lecture method, more than teachers in urban areas (Amman), which shows a significant difference between the groups ($X^2 = 30.73$, $p < .01$);

ii) Teachers in Irbid show a stronger support for seminars (15.4 per cent) more than teachers in Amman (7.4 per cent), and Karak (9.1 per cent) (X^2 = 24.55 $p < .05$). They show also more support for using Microteaching (20.5 per cent) more than teachers in Amman (14.9 per cent) and teachers in Karak (7.5 per cent).

iii) Teachers in Amman (urban area) were less enthusiastic about using T.V. in INSET courses (5.5.per cent) , than teachers working mainly in rural areas in Irbid (15.1 per cent) and Karak (11.1 per cent) (X^2 = 31.73 $p < .01$).

iv) Male teachers show a stronger preference for workshops (43.0 per cent) than do female teachers (39.4 per cent) (X^2 = 16.39, $p < .01$).

v) Secondary school teachers (graduates) show a stronger support for using a combination of methods in INSET (44.7 per cent) than do compulsory school teachers (27.8 per cent) (Diploma holders) (X^2 = 21.44, $p < .01$), while compulsory school teachers show a stronger support (13.8 per cent) for using lectures in INSET, than do secondary school teachers (10.6 per cent) (X^2 = 14.17, $p < 0.05$).

vi) Teachers with 16 years of teaching experience or more, show less support for a combination of methods (25.8 per cent) than did other groups (39.2 per cent, 31.8 per cent, 39.6 per cent). (X^2 = 38.54 $p < .05$).

It may be argued here that around 50 per cent of the teachers in the sample did not attend INSET courses during the last two years, and were not in a position to make a choice. On the other hand, teachers who had been to several courses would have had direct knowledge of one or two methods only. So, the preferences given, especially by teachers, must therefore be taken as an indicator of what teachers would like rather than as an assessment of individual methods.

7.3.4 Conducting INSET Courses:

In question No.16, respondents were asked whom would they prefer to conduct an INSET programme on a new approach for teaching the basic skills? Table 7.21 shows the sample responses:

Table 7.21: Distribution of Percentage, Rank and Chi-Square Results of the Sample in Response to Question No.16.

Conductor of INSET	t/T	First Choice %	Second Choice %	Third Choice %	Weighted Mean	Rank	Chi-Square Results
Experienced teacher	t	55.6	28.0	13.1	39.3	1	$X^2 = 33.51$
	T	23.5	33.3	43.1	30.0	3	$p < .01$
Supervisor	t	22.5	43.9	32.4	31.3	3	$X^2 = 17.05$
	T	50.0	29.6	20.4	38.2	1	$p < .01$
Faculty member	t	36.5	29.7	37.7	33.6	2	$X^2 = 2.50$
	T	46.7	26.7	25.0	36.4	2	$p < .47$ NS

(t: Teachers, T: Teachers Trainers)

In expressing preferences as who should conduct INSET, teachers and trainers exhibit diametrically opposite views. The table shows that teachers preferences are as follows: Experienced Teacher first, Faculty member second, and Supervisors third, whilst the trainers put them in almost reverse order, and the chi-square results show highly significant differences between the two groups (X^2 = 33.51, $p < .01$, X^2 = 17.05, $p < .01$). It is worth noticing that there is a significant difference between the main two groups of teachers trainers: supervisors and lecturers. Supervisors, predictably, ranked "supervisors" as their first choice (69.4 per cent), followed by "faculty members" (21.9 per cent) as their second choice and "experienced teacher" (17.6 per cent) as their third choice; while lecturers preferences in order were: Faculty member (75 per cent), experienced teacher (35.3 per cent), and supervisors in the third place with (11.1 per cent) only. (X^2 = 1.98, $p < 0.37$; X^2 = 24.7, $p < 0.01$; X^2 = 20.08, $p < 0.01$).

It seems that there is no agreement among the different groups in the sample. Teachers prefer teachers, supervisors prefer supervisors, and lecturers prefer faculty members. These results some may argue, might be considered ample justification for a major reorganisation of INSET courses. Conducting INSET courses, at present, is a monopoly between supervisors, administrators and lecturers, while teachers are almost entirely excluded. Course planners need to take the preferences of teachers into consideration, and try to encourage more involvement of teachers in INSET courses as lecturers and demonstrators.

Clearly, more attention must be given to integrate the functions of these groups if teachers needs are to be met adequately. However, when the independent variables were considered as predictors for preference of teachers concerning conducting INSET courses, significant differences were identified between compulsory school teachers and secondary school teachers. Compulsory school teachers (Diploma holders) preferred supervisors (25.5 per cent) more than secondary school teachers (BA/BSc holders) (16.5 per cent) (X^2 = 10.78, $p<0.05$). While, secondary school teachers preferred faculty members (42.7 per cent) more than compulsory school teachers. (X^2 = 2.24, $p < .5$ NS).

Respondents to this question were given the opportunity to add other persons to the list if they prefer. Few teachers indicated that they would like to see the authors of school books and experienced retired teachers as lecturers and demonstrators at INSET courses.

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CHAPTER EIGHT

PRESENTATION AND ANALYSIS OF DATA: PART TWO: PERCEPTIONS SURVEY

8.1 Introduction

An important purpose of this study is to identify, determine and compare the perceptions, opinions and attitudes of teachers and their trainers towards INSET programmes in Jordan.

The assumption is that the perceptions of the respondents would represent useful evidence since it would be based on direct personal experience and observation. Respondents opinions were obtained by a Likert-type scale, consisting of 50 statements regarding INSET programmes. Response categories were: Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree. Values of 5, 4, 3, 2, 1 were assigned to these respectively.

Since the midpoint on the scale is 3, mean scores above 3.0 are assumed to indicate favourable perceptions, while mean scores that are lower than 3.0 are assumed to indicate less favourable perceptions of the respondents. The first forty items in the instrument were grouped into four INSET components: content, organisation, participant involvement, and presentation. The last ten items of the questionnaire are trying to measure the degree of satisfaction of the respondents with the present INSET programmes in Jordan. It is recognised that there may be differing opinions about the selected grouping of certain items, and it is also recognised that no simplified type of categorisation would eliminate an overlap of some items between groups.

Respondents were asked to react to each statement. A mean value was determined for each item of the perceptions survey, together with the percentage of the respondents who agree or disagree. The one-way analysis of variance was utilised to determine if there is significant difference between different groups of teachers, and their perceptions towards INSET when the independent variables are used.

8.2 Content of INSET

Teachers generally attach the highest priority to the content of INSET. [1] Yet, in many countries, investigators found some grounds for concern about the content of INSET courses. The impression that teachers have of INSET, usually helps to determine their participation, so it is important to see if the content of INSET meets the expectations and preferences expressed by teachers. Table 8.1 presents teachers' and trainers' responses to items No.1 to 10 which deals with the content of INSET. Their replies show what importance they attach the content of INSET.

Table 8.1 indicates the general pattern of teachers' and teacher trainers' perceptions towards the content of INSET.

Respondents were asked in item No.1 to indicate the extent of their agreement or disagreement with the notion that INSET activities should be centred around matters of instructional content. The results in Table 8.1 show that a large majority of teachers (88.8 per cent) and trainers (92.5 per cent) agreed with the statement.

Table 8.1: Respondents' Opinions on the Content of INSET

Item	Statements	t T	S.A. %	A %	U %	D.A. %	S.DA %	Mean $\bar{X}$
1	INSET activities should be centred around matters of instructional content.	t	41.2	47.6	3.3	5.5	2.4	4.21
		T	34.3	58.2	4.5	3.0	-	4.24
2	The real test of INSET is whether it helps the teacher to cope with his tasks more successfully.	t	46.4	44.5	5.5	3.0	0.6	4.33
		T	46.3	53.7	-	-	-	4.46
3	Many INSET activities do not appear relevant to any felt needs of the teacher.	t	20.0	33.0	15.5	25.2	6.4	3.35
		T	6.0	32.8	26.9	29.9	4.5	3.06
4	The content of INSET programmes should be centred around new knowledge in various subjects.	t	36.4	50.9	5.5	6.1	1.2	4.15
		T	17.9	67.2	9.0	4.5	1.5	3.96
5	The content of INSET should provide the best possible means of disseminating new ideas.	t	53.6	41.2	3.6	1.2	0.3	4.46
		T	46.3	49.3	3.0	1.5	-	4.40
6	Teachers feel that most INSET activities are repetition of what the supervisors discussed at schools.	t	24.5	37.6	13.3	19.4	5.1	3.59
		T	4.5	20.9	32.8	41.8	-	2.88
7	The content of INSET should focus on altering teachingg attitudes and beliefs regarding good teaching.	t	30.6	51.5	10.6	5.8	1.5	4.04
		T	55.2	41.8	3.0	-	-	4.52
8	Transfer of concepts presented and skills taught in INSET programmes to the problems of classroom and school operation is minimal.	t	13.3	42.7	21.2	17.6	5.2	3.42
		T	1.5	40.3	35.8	19.4	3.0	3.18
9	The content of INSET should be designed to increase teachers' depth in their subject matter.	t	50.0	39.7	3.0	6.7	0.6	4.32
		T	23.9	64.2	6.0	6.0	-	4.06
10	The content of INSET should focus on topics which teachers think important.	t	27.3	56.7	9.4	5.2	1.5	4.03
		T	31.3	47.8	6.0	14.9	-	3.96

(t: teachers, T: teacher trainers, SA: strongly agree, A: agree, U: uncertain, DA: disagree, S DA: strongly disagree, $\bar{X}$: mean)

Only 7.9 per cent of teachers and 3.0 per cent of trainers disagree. With a mean score of 4.21 for the teachers and 4.24 for the trainers, which indicates that the respondents exhibited a strong positive reaction to the statement.

Item No. 2 tested the reaction to the statement that the real test of INSET is whether it helps the teacher to cope with his tasks more successfully. About ninety-one per cent of teachers and 100 per cent of the trainers agreed to a greater or lesser degree with the statement which shows a very strong support for the statement (teachers score mean 4.33 ,and trainers score mean 4.46).

In item No.3, respondents were invited to indicate the extent to which they agree or otherwise that many INSET activities do not appear relevant to any felt needs of the teachers. Fifty three per cent of the teachers agreed with the statement, 20.0 per cent doing so strongly, while only 38.8 per cent of the trainers agree, which shows a significant difference between the two groups (X^2 = 11.19 $p < .02$).

It seems that more trainers than teachers think that INSET activities are relevant to the teachers needs.

Item No.4 asked the respondents if the content of INSET programmes should be centred around new knowledge in various subjects. Eighty seven point three per cent of the teachers agreed,

with 36.4 per cent doing so strongly. While 85.1 per cent of the trainers agreed, with only 17.9 per cent doing so strongly, which shows a stronger support from the teacher to this statement (mean scores: t (4.15), T (3.96).

Item No.5 asked the respondents if the content of INSET activities should provide the best possible means of disseminating new ideas. Teachers and trainers gave a very strong support to this item (t (94.8 per cent), mean score (4.46), T (95.6 per cent), mean score (4.40).

Item No.6 sought respondents' reaction to the statement that teachers feel that most of INSET activities are repetition of what the supervisors discussed at schools. Sixty-two point one per cent of the teachers agreed with the statement, and 24.5 per cent disagreed. While the trainers showed a different reaction, only 25.4 per cent agreed, but 41.8 per cent disagreed, and 32.8 per cent were uncertain. It seems that the majority of teachers feel that many INSET activities, especially in short courses, are repetition of what the supervisors discussed at school, while the majority of trainers do not agree or are uncertain. This point is clearly important for the participation of teachers in INSET, because it will be difficult to persuade teachers that INSET courses are necessary if they feel that little is being added. There is a significant difference between teachers and trainers concerning this item ($X^2 = 43.30$ $p < .001$).

Item No.7 asked respondents if the content of INSET should focus on altering teaching attitudes and beliefs regarding good teaching. A large majority of teachers agreed (82.1 per cent), with(30.6 per cent) doing so strongly. Trainers showed even a stronger support for this item. Ninety seven per cent with a mean score (4.52) in the strongly agree category, which shows that trainers exhibited the strongest positive reaction to the statement in the whole group.

In Item No.8, respondents were invited to indicate the extent to which they agree or otherwise that "transfer of concepts presented and skills taught in INSET courses to the problems of classrooms and schools is minimal." As Table 8.1 shows, 56 per cent of the teachers agreed with this statement, while only 41.8 per cent of trainers agreed, which shows a significant difference between the two groups ($X^2 = 12.64$, $p < .01$). The majority of teachers expressed their feelings that they cannot use what they gained from INSET courses in the classroom. It may be argued that the courses were not designed to meet the real needs of teachers and schools, or it may be that administrators did not give enough support to the teachers to enable them to use their new skills properly.

Item No.9 tested the reaction to the statement that the content of INSET should be designed to increase teachers depth in their subject matter. A majority of 89.7 per cent of the teachers agreed with the statement, 50.0 per cent of them doing

so strongly, which indicates that most teachers participate in INSET courses to increase and extend their knowledge which is bound, according to Johnston, [2] to improve their professional performance. A similar majority of trainers (88.1 per cent) agreed with the statement, with only 23.9 per cent doing so strongly, which shows that teachers expressed more support to this item than trainers (t: mean score (4.32) T mean score (4.06)).

Item No.10 asked the respondents if the content of INSET should focus on topics which teachers think important. A majority of 84.0 per cent of teachers, together with 79.1 per cent of trainers in the sample, either agreed or strongly agreed with this statement. This suggests that the majority of respondents prefer some sort of individualised INSET courses. This result is similar to the findings of Brimm et al. [3]

The trends of respondents' perceptions towards the content of INSET could be clearly identified by examining three statements with highest mean scores, and three statements with lowest mean scores, as Table 8.2 shows:

Table 8.2 : Content of INSET: High and Low Mean Scores for Teachers and Trainers

Preferences	Teachers		Trainers	
	Statement No.	Mean Score	Statement No.	Mean Score
High	5	4.46	7	4.52
	2	4.33	2	4.46
	9	4.32	5	4.40
Low	6	3.59	8	3.18
	8	3.42	3	3.06
	3	3.35	6	2.88

The table indicates that the perceptions and opinions expressed by teachers towards INSET content are more favourable towards acquiring new ideas (No.5), helping the teacher to cope with his tasks more successfully (No.2), and increasing the depth in subject matters (No.9). The trainers attached the highest support for altering teaching attitudes (No.7), followed by helping the teacher to cope with his tasks more successfully (No.2) and acquiring and disseminating new ideas (No.5).

On the other hand, teachers and trainers expressed the lowest support to statement (No.3), which indicates that many INSET activities do not appear relevant to any felt needs of the teacher. Statement No.6, which indicates that teachers feel that most INSET activities are repitition of what the supervisors discussed at schools, and statement (No.8), which indicates that the transfer

of concepts and skills taught at INSET courses to the problems of classrooms and schools, are minimal. The three statements are negative statements which imply that teachers and trainers have positive perceptions towards the content of INSET.

In order to determine if there are significant differences of perceptions of teachers toward content of INSET when the independent variables are considered (Location, sex, qualifications and teaching experience), one way analysis of variance was used.

Analysis of variance in Table 8.3 shows that there were no significant differences among different groups of teachers, and their perceptions towards the content of INSET when the following independent variables were considered:

Variable 1 - Location:

According to the analysis of variance, the probability of $p < .19$ does not demonstrate a statistically significant difference between the perceptions of teachers who work in the north, middle or south of the country, concerning the content of INSET. However, the mean scores show that teachers in Amman expressed slightly more positive perceptions than teachers in Karak (38.90 : 38.21).

Variable 2 - Sex:

The results in Table 8.3 show that there is no significant difference between male and female teachers and their perceptions toward the content of INSET ($p < .08$).

Table 8.3: One-Way Analysis of Variance of Teachers' Perceptions towards Content of INSET according to Location, Sex, Qualifications and Teaching Experience

Variables	Number of Teachers	Mean $\bar{X}$	F ratio	P
1) Location:				
- Irbid	120	38.62		
- Amman	139	38.90	1.66	p < .19 N.S.
- Karak	71	38.21		
TOTAL	330	38.65		
2) Sex:				
Female	166	38.90	3.04	p < .08 N.S.
Male	164	38.40		
TOTAL	330	38.65		
3) Qualifications:				
- Diploma holders	224	38.77	1.43	p < .23 N.S.
- BA/Bsc holders	106	38.40		
TOTAL	330	38.65		
4) Teaching Experience:				
5 years or below	56	38.64		
6-10 years	128	38.65	0.15	p < .99 N.S.
11-15 years	88	38.69		
16 years & over	58	38.60		
TOTAL	330	38.65		

Variable 3 - Qualifications:

There is no statistically significant differences of perceptions of teachers with different educational backgrounds ($p < .23$ N.S.). A closer look at the result in Table 8.3 reveals that compulsory school teachers have higher mean scores than secondary school teachers (38.77 : 38.40).

Variable 4 - Teaching Experience:

The probability of $p < .99$ does not demonstrate any statistically significant differences between the perceptions of practising teachers who have different experience in teaching.

8.3 Organisation of INSET

This part of the survey consists of ten items, 11-20, focussing on the organisation of INSET. Table 8.4 represents teachers' and trainers' responses.

Respondents were asked in item No.11 to indicate the extent of their agreement or disagreement with the statement that INSET programmes should be a continuing process, not a one-off effort. The results in Table 8.4 show that a large majority of teachers (92.7 per cent) agreed with the statement, 48.2 per cent doing so strongly. The trainers even showed a stronger support, with 98.5 per cent agreeing with the statement, 68.7 per cent doing so strongly. The mean for this item was 4.37 for the teachers, and

Table 8.4: Respondents' Opinions on the Organisation of INSET

Item		t T	S.A %	A %	U %	D.A %	Sda %	Mean $\bar{X}$
11	An INSET programme should be a continuing process.	t T	48.2 68.7	44.5 29.8	3.9 1.5	3.0 -	0.3 -	4.37 4.67
12	The headteacher should be responsible for INSET in his school	t T	13.6 11.9	27.9 38.8	14.2 20.9	30.6 28.4	13.6 -	2.97 3.34
13	INSET should be flexible to permit individualisation.	t T	39.4 31.3	46.1 61.2	7.6 1.5	4.8 6.0	2.1 -	4.16 4.18
14	There is no follow-up to determine the effects of INSET on teachers' performance.	t T	27.6 16.4	40.6 65.7	11.5 11.9	16.4 6.0	3.9 -	3.72 3.93
15	Teachers should be released during school-time to attend INSET activities.	t T	33.6 4.5	37.9 46.3	6.4 14.9	15.8 34.3	6.4 -	3.77 3.21
16	Most lecturers of INSET are well-qualified.	t T	13.3 10.4	30.0 59.7	23.3 25.4	27.9 4.5	5.5 -	3.18 3.76
17	INSET programmes should be continuously evaluated.	t T	35.8 50.7	57.0 46.3	5.2 3.0	2.1 -	- -	4.26 4.48
18	There should be a professional teacher tutor in every school responsible for co-ordinating INSET	t T	17.6 7.5	51.5 40.3	12.1 13.4	15.2 38.8	3.6 -	3.64 3.16
19	Assessment would undermine INSET.	t T	11.2 7.5	36.1 9.0	21.8 13.4	25.5 58.2	5.5 11.9	3.22 2.42
20	INSET activities should be carried on within the area where the teacher works.	t T	27.0 23.9	41.5 43.3	10.0 10.4	17.6 22.4	3.9 -	3.70 3.69

4.67 for the trainers, which suggests that the overwhelming majority of teachers and trainers prefer the continuity of INSET programmes. The chi-square results show a significant difference between the two groups ($X^2 = 10.55$ $p < .03$).

Respondents in item 12 were asked if the head teacher should be responsible for INSET in his school. Only 41.5 per cent of the teachers agreed, while 44.2 per cent disagree with the statement, which shows that the relationship and confidence between teachers and head teachers need to be improved. Teachers feel that many head teachers are not well-qualified for this job. The trainers showed a stronger support for this item; 50.7 per cent agreed, while only 28.4 per cent disagreed, which shows a significant difference between the two groups ($X^2 = 13.19$ $p < .01$).

Item No.13 tested the reaction to the statement that INSET should be flexible to permit individualisation. A large majority of teachers (85.5 per cent) and (92.5 per cent) of the trainers either agreed or strongly agreed with this statement, which suggests that the majority of teachers and prefer some sort of individualised INSET programmes.

In Item No.14, respondents were invited to indicate the extent to which they agree or otherwise that "there is no adequate follow-up to determine the effects of INSET on teachers' performance in the classroom." Table 8.4 shows that 68.2 per cent of the teachers

agreed, while the trainers showed a stronger emphasis on this item, with 82.1 per cent either agreed or strongly agreed. Trainers appear to feel more strongly that not enough follow-up for INSET is available. The evidence may suggest that more could be done in the way of follow-up for INSET activities. Classroom visits by supervisors, head teachers and administrators, could help to identify the needs for INSET, and develop follow-up activities. The chi-square results show a significant difference between teachers and trainers ($X^2 = 17.27$, $p < .001$).

Item No.15 asked the respondents if teachers should be released during school-time to attend INSET courses. A large majority of the teachers (71.5 per cent) agreed or strongly agreed with this statement, compared to only 50.8 per cent of the trainers. The divergence of perceptions is probably related to the replacement problem. Usually, teachers who attend INSET programmes during the school-time are relieved from their teaching duties and the burdens likely to be placed on the remaining staff. Trainers are more aware of the administrative difficulties which may explain the difference between the two groups ($X^2 = 37.15$, $p < .001$).

Respondents were asked in item No.16 to indicate their agreement or disagreement with the statement that "most lecturers of INSET are well qualified." Results in Table 8.4 show that only 43.3 per cent of the teachers agreed, while 33.4 per cent disagreed. Not unexpected, a large majority of the trainers

agreed (70.1 per cent), while only 4.5 per cent disagreed, which shows a significant difference between teachers and trainers ($X^2 = 30.89$, $p < .001$). It seems that trainers consider themselves well-qualified in spite of teachers' opinions.

Item No.17 asked respondents if INSET programmes should be continuously evaluated. An overwhelming majority of teachers (93.8 per cent) and trainers (97.0 per cent) either agreed or strongly agreed with the statement.

Item No.18 asked teachers to indicate their views as to whether or not there should be a professional teacher tutor in every school responsible for INSET. Teachers showed more support to this statement (69.1 per cent) than the trainers did (47.8 per cent). In a centralised system of education like Jordan, administrators tend to exclude teachers from any major role in planning INSET ($X^2 = 23.97$, $p < .001$).

In Item No.19, respondents were asked to indicate the extent to which they agree, or otherwise, that "assessment would undermine INSET." The results in Table 8.4 show that 47.3 per cent of teachers agreed, while only 18.8 per cent disagreed. The majority of trainers disagreed with the statement (70.1 per cent), which indicates how strong the trainers feel; only 16.5 per cent agreed. The results show the difference of opinion between teachers and trainers about the place of assessment in INSET, with the teachers

generally considering it inappropriate, while the trainers insisting on its importance ($X^2 = 38.52$, $p < .001$).

Item No.20 asked if INSET activities should be carried on within the area where the teacher works. The results in Table 8.4 show that a majority of teachers (68.5 per cent) and trainers (67.2 per cent) either agreed or strongly agreed with this statement. These findings suggest that the provision of local, rather than regional or national, opportunities for INSET is of great importance. The findings could be interpreted also as a support for school-based INSET.

The trends of respondents' perceptions towards the organisation of INSET could be identified clearly by examining three items with highest mean scores, and three statement with lowest mean scores, as the following table shows:

Table 8.5: Organisation of INSET: High and Low Mean Scores for Teachers and Trainers Perceptions

Preferences	Teachers		Trainers	
	Statement No.	Mean Score	Statement No.	Mean Score
High	11	4.37	11	4.67
	17	4.26	17	4.48
	13	4.16	13	4.18
Low	19	3.22	15	3.21
	16	3.18	18	3.16
	12	2.97	19	2.42

Concerning the organisation of INSET, it seems that teachers' perceptions and trainers' perceptions are favourable as mean scores in Table 8.4 show grand mean score is 33.81, while trainers' grand mean score is 36.84. However, results in Table 8.5 indicate that both teachers and trainers are more favourable towards the continuity of INSET programmes (11), evaluation of INSET (17), and the flexibility of INSET courses to permit individualisation (13). On the other hand, teachers expressed the lowest support to statement No.12 which indicates that the head teacher should be responsible for INSET in his school, to statement No.16 which states that most lecturers of INSET are well-qualified, and statement No.19 which indicates that assessment would undermine INSET. While the trainers attach their lowest support for statement No.19, to statement No.18 which indicates that there should be a professional tutor in every school to co-ordinate INSET, and to statement No.15 which states that teachers should be released during school-time to attend INSET activities.

To investigate the extent of association between the independent variables and teachers' perceptions towards the organisation of INSET, one-way analysis of variance was used.

Variable 1 - Location:

According to the analysis of variance in Table 8.6, there is a significant difference between teachers working in different geographical areas and their perceptions towards the organisation

Table 8.6: One-Way Analysis of Variance of Teachers' Perceptions towards Organisation of INSET according to Location, Sex, Qualifications, and Teaching Experience

Variables	Number of Teachers	Mean X	F ratio	P
1) Location:				
- Irbid	120	35.50		
- Amman	139	36.63	3.58	$p < .03$
- Karak	71	36.13		
TOTAL	330			
2) Sex:				
Female	166	36.60	6.79	$p < .01$
Male	164	35.62		
TOTAL	330			
3) Qualifications:				
- Diploma holders	224	36.37	4.0	$p < .05$
- BA/BSc holders	106	35.57		
TOTAL	330			
4) Teaching Experience:				
5 years or below	56	35.96		
6-10 years	128	36.27	0.16	$p < .92$ N.S.
11-15 years	88	36.03		
16 years & over	58	36.01		
TOTAL	330			

of INSET ($p < .03$). It seems that teachers working in Amman (urban area) have more favourable perceptions towards the organisation of INSET ($\bar{X} = 36.63$) more than teachers working in Irbid ($\bar{X} = 35.50$) and Karak ($\bar{X} = 36.13$), which are mainly rural areas.

Variable 2 - Sex:

The results in Table 8.6 show a significant difference between male and female teachers and their perceptions towards organisation of INSET ($p < .01$). Female teachers ($\bar{X} = 36.60$) appear to be generally more favourable towards the organisation of INSET than male teachers do ($\bar{X} = 35.62$).

Variable 3 - Qualifications:

There is a significant difference of perceptions towards the organisation of INSET among teachers who have different educational backgrounds ($p < .05$). The results in Table 8.6 show that compulsory school teachers (Diploma holders) have more favourable perceptions towards the organisation of INSET ($\bar{X} = 36.37$) more than the secondary school teachers do ($\bar{X} = 35.57$).

Variable 4 - Teaching Experience:

The results show that there are no statistically significant differences of perceptions towards the organisation of INSET among teachers who have different experiences in teaching.

8.4 Teachers' Involvement

Literature on INSET suggests that teachers' involvement in planning, organisation, and evaluation of INSET programmes is vital to the effectiveness and success of in-service education. [4] Statements No.21-30 were formulated to determine respondents' perceptions toward teachers' involvement in INSET programmes.

Respondents were asked in item No.21 to indicate the extent of their agreement or disagreement with the statement that "teachers should have the *opportunity to select* INSET *courses which will strengthen his performance.*

The results in Table 8.7 show that a vast majority of teachers (94.9 per cent) and all the trainers (100 per cent) agreed with this statement, which reflects the strongest endorsement by respondents to any item in the group (t $\bar{x}$ = 4.42, T $\bar{x}$ = 4.42). The strength of the support suggests that teachers and trainers prefer some sort of individualised INSET activities. This result is similar to the findings of Brimm et al, [5] where this item received the strongest support.

Item No.22 tested the reaction to the statement that INSET seems to be more effective when the total school staff is engaged in a given activity. A majority of teachers (70.6 per cent) agreed with this statement, 21.5 per cent doing so strongly. The trainers

Table 8.7: Respondents' Opinions on Teachers' Involvement in INSET

Item	Statements	t / T	S.A %	A %	U %	D.A %	S da %	Mean $\bar{X}$
21	Teachers should have the opportunity to select the kind of INSET which he feels will strengthen his performance.	t	49.1	45.8	3.3	1.2	0.6	4.42
		T	41.8	58.2	-	-	-	4.42
22	INSET seems to be more effective when the total school staff is engaged in a given activity.	t	21.5	49.1	16.1	11.2	2.1	3.78
		T	16.4	47.8	32.8	3.0	-	3.78
23	INSET programmes should provide opportunities for talented teachers to use their expertise as lecturers and demonstrators.	t	31.8	53.6	9.1	4.5	0.9	4.11
		T	43.3	53.7	1.5	1.5	-	4.39
24	Most teachers do not like to attend INSET activities.	t	12.7	34.5	26.7	20.0	6.1	3.28
		T	3.0	25.4	32.8	37.3	1.5	2.91
25.	Supervisors and faculty members are more qualified than teachers in identifying the need for INSET.	t	10.0	25.5	15.8	37.3	11.5	2.88
		T	16.4	43.3	25.4	14.9	-	3.61
26.	Teachers should be involved in developing methods of evaluation for INSET programmes.	t	30.6	63.0	4.5	1.5	0.3	4.22
		T	31.3	67.2	1.5	-	-	4.28
27.	If teachers were involved in planning INSET activities, teachers committment to them would be greater.	t	37.3	53.3	6.1	3.3	-	4.25
		T	32.8	65.7	1.5	-	-	4.31
28.	Every teacher should be required to participate in some INSET activities every year.	t	15.8	45.8	12.1	22.4	3.9	3.47
		T	20.9	61.2	13.4	3.0	1.5	3.97
29.	There must be incentives for attending INSET activities to encourage teachers.	t	47.6	46.7	3.0	2.1	0.6	4.39
		T	41.8	50.7	1.5	6.0	-	4.28
30.	The implementation of innovations presented in INSET depends upon support from the headmaster.	t	30.6	50.3	9.4	7.3	2.4	3.99
		T	46.3	43.3	9.0	1.5	-	4.34

showed a weaker support, with 64.2 per cent agreeing, which shows that negative reaction to this statement also exists.

Respondents in item No.23 were asked if INSET should provide opportunities for talented teachers to participate as lecturers and demonstrators in INSET activities. Surprisingly, trainers showed a stronger support (97 per cent) to this statement than teachers did (85.4 per cent). However, the results show a positive agreement in the sample with this statement.

Respondents were asked in item No.24 to indicate the extent of their agreement or disagreement with the notion that most teachers do not like to attend INSET activities. Only 47.2 per cent of teachers and 28.4 per cent of the trainers agreed with this statement. This low expression of agreement with the statement reflects a positive perception toward INSET. The results in Brimm et al's [6] survey show that 63 per cent of the teachers agreed with the statement, which reflects a more negative perception toward INSET in his sample. The chi-square results show a significant difference between teachers and trainers ($X^2 = 16.43$ $p < .01$). Trainers appear unaware of many teachers' reluctance to attend INSET courses.

Item No.25 tested the reaction to the statement that "supervisors and faculty members are more qualified than teachers in identifying the need for INSET. The results in Table 8.7 show a

different reaction from teachers and trainers to this statement. A minority of teachers (35.5 per cent) agreed, while 48.8 per cent disagreed. Unsurprisingly, the majority of trainers (59.7 per cent) agreed with the view. Only 14.9 per cent of them disagreed, which shows a significant difference between the two groups ($X^2 = 27.27$, $p < .001$).

Item No.26 asked respondents if teachers should be involved in developing methods of evaluation for INSET programmes. An overwhelming majority of teachers (93.6 per cent) and trainers (98.5 per cent) agreed.

Respondents were asked in item No.27 to indicate the extent of their agreement or disagreement with the statement that "if teachers were involved in planning INSET activities, teachers' committment to them would be greater." The results in Table 8.7 show that a vast majority of teachers (93.6 per cent) and trainers (98.5 per cent) agreed with the statement, which indicates the need to include teachers in the planning committees for INSET, which usually are composed of administrators.

Item No.28 asked respondents if teachers should be required to participate in some INSET activities every year. Trainers gave more support (82.1 per cent) to the statement more than the teachers (61.6 per cent) did. The chi-square results show a significant difference between the two groups ($X^2 = 15.64$, $p < .01$).

Item No.29 tested the reaction to the statement that "there must be incentives for attending INSET activities to encourage teachers participation." Teachers (94.3 per cent) and trainers (92.5 per cent) showed a strong support to this statement, which reflects the importance of incentives in participation in INSET activities.

In item No.30, respondents were invited to indicate the extent to which they agree, or otherwise, with the statement that "the implementation of innovations presented in INSET depends upon support from the head teacher. A large majority of teachers (80.9 per cent) and trainers (89.6 per cent) either agreed or strongly agreed with the statement, which indicates the importance of the head teacher's role in INSET.

The trends of respondents' perceptions towards teachers' involvement in INSET could be clearly identified by examining three statements with highest mean scores, and three statements with lowest mean scores.

Table 8.8: Teachers' Involvement: High and Low Mean Scores for Teachers' and Trainers' Perceptions

Preferences	Teachers		Trainers	
	Statement No.	Mean Score	Statement No.	Mean Score
High	21	4.42	21	4.42
	29	4.39	23	4.39
	27	4.25	30	4.34
Low	28	3.47	22	3.78
	24	3.28	25	3.61
	25	2.88	24	2.91

Concerning teachers' involvement in INSET, it seems that both teachers and trainers have favourable perceptions as the mean scores in Table 8.7 show. The figures show also that trainers' perceptions are more favourable than teachers' perceptions toward teachers' involvement in INSET. However, results in Table 8.8 show that teachers' perceptions are more favourable toward individualisation of INSET (21), offering incentives to encourage teachers' participation in INSET (29), and having more teacher involvement in planning INSET (27). While trainers' perceptions are more favourable toward individualisation of INSET, involvement of teachers as lecturers and demonstrators in INSET courses (23) and the importance of the head teacher's role in INSET (30).

On the other hand, teachers expressed less favourable perceptions toward teachers' yearly participation (28), the notion that supervisors and faculty members are more qualified than teachers in identifying the need for INSET (25), and to the view that most teachers do not like to attend INSET activities (24). The trainers, on the other hand, attach their lowest support for statements (24), (25) and statement (22).

In order to determine if there are significant differences of perceptions of teachers toward participant involvement when the independent variables are considered, one-way analysis of variance was used, as Table 8.9 shows.

Table 8.9: One-Way Analysis of Variance of Teachers' Perceptions toward Participant Involvement in INSET according to Location, Sex, Qualifications and Teaching Experience

Variables	Number of Teachers		F ratio	P
1) Location:				
- Irbid	120	36.78		
- Amman	139	38.39	10.11	p < .001
- Karak	71	38.28		
TOTAL	330			
2) Sex:				
Female	166	37.80	0.16	p < .90 N.S.
Male	164	37.76		
TOTAL	330			
3) Qualifications:				
- Diploma holders	224	37.66	1.05	p < .3 N.S.
- BA/Bsc holders	106	38.04		
TOTAL	330			
4) Teaching Experience:				
5 years or below	56	37.32		
6-10 years	128	37.95	1.01	p < .3 N.S.
11-15 years	88	38.05		
16 years & over	58	37.41		
TOTAL	330			

Analysis of variance results in Table 8.9 shows that there were no significant differences among different groups of teachers and their perceptions toward participants' involvement in INSET when the following variables were considered: sex, qualifications and teaching experience. However, the results show a significant difference among teachers working in different geographical areas and their perceptions toward participant involvement in INSET.

8.5 Presentation of INSET

Respondents were invited to express their agreement or disagreement with ten statements (No.31-No.40) about different teaching methods and presentation of INSET. Table 8.10 shows teachers' and trainers' responses.

Respondents were asked in item No.31 to express their agreement or disagreement with the notion that lecture method is boring and less effective than group discussion. Table 8.10 shows that 87.2 per cent of teachers agreed, 44.5 per cent of them doing so strongly. Seventy-four point six per cent of the trainers agreed with the statement, whilst there is a significant difference in the strength of feelings between the two groups ($X^2 = 24.28$, $p < .001$), there appears a general conscencus that the lecture method is less effective than other teaching methods.

Item No.32 asked the respondents if there should be opportunities for teachers to work in collegial fashion in INSET courses.

Table 8.10: Respondents' Opinions on the Presentation of INSET

Item	Statement	t / T	S.A %	A %	U %	D.A %	S da %	Mean $\bar{X}$
31	Teachers feel that the lecture method is boring and less effective than group discussion.	t	44.5	42.7	4.2	6.4	2.1	4.21
		T	20.9	53.7	16.4	9.0	-	3.87
32	In INSET programmes, there should be opportunities for teachers to work in a collegial fashion.	t	30.3	61.8	5.2	2.1	0.6	4.19
		T	19.4	80.6	-	-	-	4.19
33	Practical techniques are more useful than theory in INSET.	t	58.2	37.6	2.7	1.2	0.3	4.52
		T	46.3	52.2	1.5	-	-	4.43
34	INSET should be patterned around both specific and general techniques.	t	29.7	65.5	3.0	1.2	0.6	4.22
		T	31.3	67.2	1.5	-	-	4.30
35	In INSET programmes, there should be opportunities for teachers to engage in a variety of activitiex other than just attending lectures or reading.	t	30.3	60.0	7.0	1.2	1.5	4.16
		T	31.3	68.7	-	-	-	4.31
36	There should be a close relationship between observation and practice in INSET.	t	34.8	57.3	5.5	2.1	0.3	4.24
		T	20.9	77.6	1.5	-	-	4.18
37	When a theoretical explanation accompanies the demonstration, teachers gain a conceptual understanding that helps them to adapt the technique to their own situation.	t	42.1	49.7	4.2	3.0	1.0	4.29
		T	47.8	47.8	4.5	-	-	4.43
38	It is better to follow the lectures of INSET on TV at home instead of travelling to the college or university.	t	13.9	27.9	20.0	26.7	11.5	3.06
		T	1.5	10.4	9.0	67.2	11.9	2.22
39	The use of educational technology in INSET activities is minimal.	t	33.3	43.3	13.3	7.0	3.0	3.97
		T	14.9	64.2	16.4	3.0	1.5	3.88
40	INSET programmes should not be conducted in a formal way, like college or university courses, but in more informal fashion.	t	22.1	49.1	12.7	10.0	6.1	3.71
		T	9.0	62.7	13.4	10.4	4.5	3.61

An overwhelming majority of teachers agreed (92.1 per cent), together with all the trainers (100 per cent), which shows the strength of support to this item.

In item No.33, respondents were invited to indicate the extent to which they agree, or otherwise, that practical techniques are more useful than theory in INSET. An overwhelming majority of teachers (95.3 per cent) and trainers (98.5 per cent) agreed, which shows the strength of support for the practical elements in INSET courses.

In item No.34, respondents were asked if INSET should be patterned around both specific and general techniques. Again, over 95 per cent of the respondents agreed, which shows a very strong support for using different techniques in INSET.

In item No.35, respondents were asked if there should be opportunities for teachers in INSET courses to engage in a variety of activities other than attending lectures or reading. All the trainers (100 per cent) agreed, together with 90.3 per cent of teachers.

Item No.36 asked the respondents if there should be a close relationship between observation and practice in INSET courses. Over 92 per cent of the respondents agreed with the statement.

Item No.37 tested the reaction to the statement that "when a theoretical explanation accompanies the demonstration, teachers gain understanding that helps them to adapt the technique to their own situation. A vast majority of teachers (91.8 per cent) and trainers (95.6 per cent) agreed with the statement, which shows a very strong support for mixing theory with practice.

Respondents in item No.38 were asked if it is better to follow the lectures on the T.V. at home, instead of travelling to the college or university. Teachers were divided on this issue, 41.8 per cent agreed, while 38.2 per cent disagreed. The trainers rejected this statement, with 79.1 per cent disagreed. Only 11.9 per cent agreed with the statement, which shows a significant difference between teachers and trainers ($X^2 = 45.09$, $p < .001$).

In response to item No.39, the majority of teachers (79.6 per cent) and trainers (79.1 per cent) agreed that the use of technology in INSET activities is minimal, while in response to item No.40, 71.2 per cent of teachers, together with 71.7 per cent of trainers, agreed that INSET programmes should be conducted in more informal fashion.

Table 8.11 shows some statements that received the strongest support from respondents, together with statements that received the lowest support.

Table 8.11: Presentation of INSET: High and Low Mean Scores for Teachers and Trainers

Preferences	Teachers		Trainers	
	Statement No.	Mean Score	Statement No.	Mean Score
High	33	4.52	33	4.43
	37	4.29	37	4.43
	36	4.24	35	4.31
Low	39	3.97	31	3.87
	40	3.71	40	3.61
	38	3.06	38	2.22

Results in Table 8.11 show that both teachers and trainers expressed their strongest support for using practical techniques in INSET (33), and mixing theory with practice (37). Teachers emphasised this issue further by giving strong support to the notion that there should be a close relationship between observation and practice (36). Trainers almost did the same by supporting the idea that there should be opportunities for teachers attending INSET courses to engage in a variety of activities, other than attending lectures and reading (36).

On the other hand, teachers and trainers expressed their lowest support to statement No.38 which suggests that it is better to follow lectures on T.V. at home, instead of travelling to the university , and to statement No.40 which suggests that INSET programmes should not be conducted in a formal way, like college or university courses, but in more informal fashion. Teachers added statement No.39 to their least supported statements, which states

that the use of educational technology in INSET courses is minimal, while trainers added statement No.31, which states that teachers feel that lecture method is boring and less effective than group discussion.

In order to determine if there are significant differences of perceptions of teachers toward presentation of INSET when the independent variables are considered, one-way of analysis of variance was used. (See Table 8.12)

Results in Table 8.12 show that there were no significant differences among different groups of teachers and their perceptions toward the presentation of INSET when the following variables were considered: Location, sex, qualifications and teaching experience. However, the results show slight differences between the following groups:

i) Teachers working in Amman (urban area) appear to be generally more favourable toward presentation of INSET ($\overline{X}$ = 38.47) than teachers in Irbid and Karak ($\overline{X}$ = 37.78, $\overline{X}$ = 37.97) (mainly rural areas).

ii) Secondary school teachers (BA/BSc holders) appear to be more favourable ($\overline{X}$ = 38.55) toward presentation of INSET than compulsory school teachers (Diploma holders) ($\overline{X}$ = 37.91) do.

Table 8.12: One-Way Analysis of Variance of Teachers' Perceptions toward Presentation of INSET according to Location, Sex, Qualifications and Teaching Experience

Variables	Number of Teachers	Mean X	F ratio	P
1) Location:				
- Irbid	120	37.78		
- Amman	139	38.47	1.96	p < .14 N.S.
- Karak	71	37.97		
TOTAL	330			
2) Sex:				
Female	166	38.15	0.07	p < .78 N.S.
Male	164	38.07		
TOTAL	330			
3) Qualifications:				
- Diploma holders	224	37.91	3.49	p < .06 N.S.
- BA/Bsc holders	106	38.55		
TOTAL	330			
4) Teaching Experience:				
5 years or below	56	38.36		
6-10 years	128	38.04	0.24	p < .87 N.S.
11-15 years	88	37.99		
16 years & over	58	38.22		
TOTAL	330			

One way analysis of variance was used to investigate the differences between the general perceptions of teachers and trainers towards the four components of INSET.

Table 8.13: One-way Analysis of Variance of Teachers' and and Trainers' Perceptions toward the four Components of INSET.

Component of INSET	Teachers n = 330 $\bar{X}$	Trainers n = 67 $\bar{X}$	Standard Deviation	F ratio	P
Content	38.65	38.78	t 2.60 T 2.37	0.13	p $<$ .71 NS
Organisation	36.11	35.75	t 3.43 T 2.74	0.68	p $<$ .41 NS
Participant involvement	37.78	38.82	t 3.15 T 2.30	6.60	p $<$ .01
Presentation	38.11	39.24	t 2.92 T 1.81	9.24	p $<$ .01

The results in Table 8.13 show that there is no significant difference in perceptions of teachers and trainers toward the content and organisation of INSET. However, the one-way analysis of variance results show a significant difference at the .01 level between the two responding groups toward participant involvement and presentation of INSET.

8.6 Teachers' Satisfaction

Part C of the questionnaire consists of ten statements which were formulated to try to examine the degree of satisfaction of current

participants with the present INSET programmes in Jordan. Although the trainers were given the opportunity to answer this part of the questionnaire, the majority of them declined, so the investigator will report teachers' responses only. Fifteen teachers did not answer this part also, which represents 4.5 per cent of the teachers' sample. Table 8.14 shows teachers' responses.

Item No.1: I think the course is useful for teachers. A large majority of teachers (83.9 per cent) agreed with this statement, 33.0 per cent of them doing so strongly; which reflects a general satisfaction with INSET programmes.

Item No.2: The programme objectives are clear and specific. Only 59.1 per cent of the teachers agreed, which implies that more efforts are needed to make the objectives of INSET programmes more clear and specific.

Item No.3: The content of the programme achieves a balance between the theoretical and practical aspects. Many teachers (39.7 per cent) disagreed with the statement, while only 37.6 per cent agreed, which resulted in the low mean scores ($\bar{X}$ = 3.05). This result highlights the complaint of many teachers that the contents of many INSET programmes concentrate on theory and neglect practice.

Item No.4: I find the course useless and a waste of time. Only 12.4 per cent of teachers agreed with the statement, while the

Table 8.14: Teachers Opinions on their Satisfaction with INSET Courses

Item		S.A %	A %	U %	D.A %	S da %	Mean $\bar{X}$
1	I think the course is useful for the teachers	33.0	50.9	6.4	4.8	0.3	4.17
2	The programme objectives are clear and specific.	17.6	41.5	23.6	11.5	1.2	3.68
3	The content of the programme achieves a balance between the theoretical and practical aspects.	8.8	28.8	18.2	37.6	2.1	3.05
4	I find the course useless and a waste of time.	2.4	10.0	16.7	45.5	20.9	2.24
5	I feel the amount of work of the course is adequate.	5.5	27.0	28.2	29.7	5.2	2.98
6	The programme has emphasised the principle of lifelong education as an integral part of teacher education in Jordan.	16.1	47.9	21.5	7.9	2.1	3.74
7	The course needs some reorganisation to make it more effective.	23.0	50.3	11.2	8.5	2.4	3.87
8	The necessary references, books and printing materials are always available.	7.3	16.7	11.5	47.0	13.0	2.56
9	There is not enough field supervision for the trainees.	26.7	36.1	10.3	17.3	5.2	3.65
10	The lecturers are competent and helpful.	14.8	48.2	16.1	13.3	3.0	3.61

majority (66.4 per cent) disagreed, which shows that teachers rejected this statement. In other words, teachers were saying that INSET programmes are definitely considered useful.

Item No.5: I feel the amount of work of the course is adequate. Teachers were split on this issue, with 32.5 per cent of them agreeing with the statement, while 34.6 per cent disagreeing, which reflects the need to investigate the matter thoroughly.

Item No.6: The programme has emphasised the principle of life-long education as an integral part of teacher education in Jordan. The majority of teachers (64 per cent) agreed with the statement, with only 10 per cent disagreed. The results show that the majority of teachers consider INSET programmes as a phase of life-long education.

Item No.7: The course needs some reorganisation to make it more effective. A large majority of teachers (73.3 per cent) agreed with the statement, while only 10.7 per cent disagreed; which reflects the need for continuing evaluation for INSET courses.

Item No.8: The necessary references, books and printing materials are always available. Sixty per cent of the teachers disagreed with the statement, while only 24 per cent agreed, which reflects the need for more efforts to make sure that the necessary books and materials are available for the teachers at INSET courses.

Item No.9: There is not enough field supervision for the trainers. The responses of teachers emphasised the complaints that there is not enough follow-up for the trainers. More than 63 per cent of the teachers agreed with the statement, while only 22.5 per cent disagreed.

Item No.10: The lecturers are competent and helpful. A majority of the teachers (63 per cent) agreed with the statement, which reflects a general satisfaction with the lecturers. Only 16.3 per cent disagreed.

As for teachers' general satisfaction with INSET, results in Table 8.14 show that teachers expressed their strongest support to item No.1, which states that INSET courses are useful; to item No.7, which states that some INSET courses need reorganisation, and to item No.6, which indicates that INSET courses have emphasised the principle of life-long education as an integral part of teacher education in Jordan. At the same time, teachers rejected statement No.4 which indicates that INSET courses are useless, and rejected also statement No.8 which states that books and printing materials are always available in INSET courses. They expressed uncertainty about whether the amount of work required at INSET courses is adequate or not. ($\bar{X} = 2.98$).

To investigate the extent of association between the independent variables and teachers' satisfaction with INSET programmes, one-way analysis of variance was used. (See Table 8.15).

According to analysis of variance in Table 8.15, there were no significant differences among different groups of teachers and their satisfaction with INSET programmes when the following variables were considered: Location, sex, and teaching experience. However, the results show a significant difference between compulsory school teachers and secondary school teachers and their satisfaction with INSET programmes ($p < .01$). Compulsory school teachers (Diploma holders) appear to be slightly more satisfied ($\bar{X} = 32.53$) with the present INSET programmes than secondary school teachers (BA/BSc holders) do, ($\bar{X} = 31.04$), which indicates that there is a significant relationship between teachers' qualifications and their satisfaction with INSET programmes. However, the mean scores are generally near the neutral point (3.0), which indicates that teachers are uncertain (more than satisfied) about the current INSET courses. This point was emphasised by the remarks which some teachers made at the end of Part C of the survey. Teachers were given the opportunity to express their views and add *any comment they feel necessary. Only 47 teachers* chose to respond, and their opinions and suggestions are summarised as follows:

i) Many teachers feel that teaching at INSET courses is highly authoritative and theoretical;

ii) Curricula, in many INSET courses, do not meet the real needs of the teachers or schools;

iii) Courses usually are compulsory, and teachers have no option to choose courses that they feel more appropriate to their needs.

Table 8.15: One-Way Analysis of Variance of Teachers' Perceptions toward Satisfaction with INSET according to Location, Sex, Qualifications and Teaching Experience

Variables	Number of Teachers	Mean $\bar{X}$	F ratio	P
1) Location				
- Irbid	120	32.24		
- Amman	139	31.99	0.28	$p < .76$ N.S.
- Karak	56	31.66		
TOTAL	315			
2) Sex:				
Female	156	31.87	0.35	$p < .55$ N.S.
Male	159	32.19		
TOTAL	315			
3) Qualifications:				
- Diploma holders	209	32.53	6.78	$p < .01$
- BA/BSc holders	106	31.04		
TOTAL	315			
4) Teaching Experience:				
5 years or below	54	32.22		
6-10 years	121	31.32	1.64	$p < .17$ N.S.
11-15 years	83	32.31		
16 years & over	57	32.92		
TOTAL	315			

iv) Lecturers are out of touch with the difficulties in schools which the teachers have to deal with.

v) Timing of many INSET courses is not convenient.

vi) Teachers complain that MOE does not provide any incentives for participants in INSET programmes, and even transport expenses have to be met by the teachers themselves.

vii) There is no real co-operation or co-ordination between the MOE, the university and HCC, which results in many difficulties facing teachers participating in INSET courses.

viii) Selection procedures for HCC are biased against female teachers and teachers with short teaching experience.

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CHAPTER NINE

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

9.1 Introduction

In this final chapter of the thesis, the writer will deal with three areas of discussion:

i) a synopsis of the thesis, highlighting the major discussions and findings;

ii) a number of conclusions arrived at as a result of the research;

iii) a series of recommendations put forward with a view to improving the quality of INSET in Jordan.

9.2 Synopsis

Although the focus of the thesis deals with INSET in Jordan, this was underpinned by a series of contextual chapters from which a number of aspects emerged as significant.

The thesis is organised in nine chapters. In Chapter One, the nature and significance of the problem associated with INSET is examined. The major objectives of the study are to examine the education system in general, and INSET activities in Jordan, in particular. More specifically, the study is an attempt to determine

what perceptions and preferences teachers have about their own continued professional development, and to compare that to the perceptions which teachers' trainers have about continued professional development for teachers. By posing the same questions to both teachers and trainers, it was possible to determine if there were differences and similarities concerning the perceptions and preferences of the two groups towards INSET.

Chapter Two reviews the literature on INSET, and presents the theoretical framework of the study. Consideration is given to the definitions of INSET, a rationale for in-service education, provision, the characteristics associated with effective INSET programmes, and a summary of selected research findings on assessing teachers perceptions and preferences. The review of literature and research helped to develop the survey instrument.

The extensive review of literature pertaining to INSET shows that, until recently, there had been very few attempts to devise a philosophy of INSET. In-service activities seem to lack any theoretical explanation in the sense that they were not rooted in any theory. However, since the James Report in the U.K., discussions have tended to distinguish between two sets of needs - that of the teachers, and the needs of the education systems.

There is a general agreement among educators that INSET is

an essential factor in ensuring that schools are staffed by suitably qualified and experienced teachers. However, INSET in the past, failed to achieve its objectives because teachers felt that these kinds of INSET programmes did not meet their needs. Teachers needs must be placed in a wider context, which includes school needs and national needs. Educators seem to agree that to be effective, INSET should be planned on the basis of teachers' needs and with their involvement. Teachers' needs change because society changes, therefore INSET programmes should be designed to promote changes in teacher behaviour.

INSET, in early periods, was based on a 'defect perspective' built on the assumption that teachers have weaknesses in their teaching, or gaps in their knowledge that require correction. INSET was perceived as a way to correct a defect, rather than as a normal growth process. But as teachers developed knowledge and skills, the "inferior-superior" relationship between teachers and administrators began to disappear and 'defect INSET' was replaced by a new concept of promoting professional growth.

In reviewing the literature, several major trends were observed. A move from a compensatory to a complementary view of INSET, a progression from a discreet to a continuous view of INSET, a shifting from a relatively simple to a complex INSET, and from a narrow control of INSET by school administrators and/or university lecturers to a collaborative governance, including the

teachers. No single pattern of staff development provision is likely to be appropriate for all teachers in all schools. The complexity of teachers' needs and requirements for professional support requires a variety of provisions and approaches.

The significance of education is very deep seated in Jordan. Constrained by meagre natural resources, Jordanian planners have, for many years, placed high priority on the development of the country's human resources, through education and training. With a population of approximately 3 million people, Jordan has a higher percentage of children in schools than almost any other middle income country. The high investment in education has helped the country to expand its industry and develop its agriculture but, more importantly, it has enabled Jordan to place its well-qualified manpower in the neighbouring Arab oil countries. The resulting inflow of workers' remittances have contributed substantially to Jordan's domestic economic growth. But explosive demands for education resulted in mushrooming enrollments, and a qualitative decline in the standards at school.

There is a near consensus that the expansion of education in the past years has not, in general, been accompanied by a corresponding improvement in quality and has even been achieved at the expense of the latter. Accompanying this was the inadequate allocation of resources to provide the required new facilities to accommodate expanded enrollment. As a result, the education

system produced thousands of ill-equipped students at all levels. Unqualified and poorly motivated teachers, teaching large numbers of pupils along traditional lines, has become the norm in most cases. To remedy the situation, the country needs to inject a new vitality into the education system. It has not proved sensitive to the demands for change that have become even more urgent over the past few years with the changes in economic and political situations in the region. The situation represents a crisis which has to be dealt with. The country's prosperity depends on human capital earnings and exports of services. Since the mid-1980s, Jordan has been losing its comparative advantage in these two areas owing to changing economic conditions and the qualitative short-coming of its education system. Educationists realised that a total reform of the system of education in all its aspects is necessary if the numerous problems confronting education in Jordan are to be overcome. The aims, content, methods, concepts, administration and structure of education should change if education in Jordan is to find its sense of direction.

The government responded by introducing a sweeping Education Reform Programme, to be implemented in three phases over a ten year period, aiming at restructuring the school system, and improving the quality of teaching and learning. The reform programme is comprehensive and ambitious, but the major question is, "Can Jordan afford the high costs in the present critical economic situation?"

In Chapter Five, INSET activities in Jordan were described and analysed. The MOE, MOHE, and the Universities are the major providers of INSET. INSET policies assigned highest priority to the training of unqualified teachers, through upgrading programmes at the Higher College of Certification and the Diploma courses at the universities. MOE, through its training section and the supervisors at the directorates of education is responsible for remedial and updating programmes. School supervisors usually recommend both INSET courses and the trainees to be attending them. These short courses have been the responsibility of head trainers, who were assigned to develop and implement the curricula in co-operation with staff members nominated by them and approved by the MOE. This situation should be changed because it is rarely that the head trainers will be suitably qualified to develop a curriculum alone. The literature indicates that INSET, properly conceived, is not a monolithic entity carried on in one place, designed by one individual or group, following a common pattern. It needs to be more varied, carefully thought through, and must meet teachers' and schools' needs. However, short courses often lack incentives, functionality, and flexibility. Recruitment was virtually coercive and the lecture method was dominant.

The upgrading programmes for Diploma holders at the HCC and for BA/BSc holders at the universities have many weaknesses. No attempt to evaluate the programmes has been made recently, and the

MOHE and the universities have no effect on the schools to be sure that teachers can apply what they have learned. Teachers feel that lecturers are out of touch with what is going on in schools. The influence of the lecture method in most of the upgrading courses and the remoteness of the course organisers from teachers and schools made the courses too theoretical and academic.

The headteachers and supervisors are usually responsible for the follow-up of the trainees, but they agree that there had been very little follow-up of training, and that little INSET had been undertaken, especially in the secondary schools. The problems of INSET in Jordan could be summarised as follows:

i) Centralisation:

The first problem that appears in the organisation and administration of the provision of INSET is that of its centralisation. This is a reflection of the educational system, and the public administration as a whole. Many educationists believe that it is very dangerous to give the responsibility of provision of INSET to one organisation. Centralisation has led to unfair distribution of opportunities. The necessities of different directorates have not taken into consideration from the central authority.

ii) Unsystematic Provision:

Few in-service programmes in Jordan are offered on a systematic basis. It appears that the supervisors tend to arrange the courses

on an "ad-hoc" basis as the need for such courses becomes apparent. The danger exists that rarely will such courses be tied in with similar work in the same subject area.

iii) There is a lack of integration of curriculum courses and contents. INSET curricula is left sometimes to one person to plan. It consists of scattered unconnected courses usually taught by the lecture method.

iv) Short courses have no credit or financial incentives, while upgrading courses offer both credit and financial incentives to its trainees. This discrimination caused a high level of dissatisfaction among the trainees of short courses.

v) Schools and Teachers are excluded from planning or implementing INSET activities, which are designed to meet their needs. The related literature reveals the importance of involving schools and teachers in INSET activities.

vi) There is no real evaluation for INSET programmes in Jordan, and there is no systematic follow-up of INSET trainees.

vii) There is no real co-ordination between the MOE, MOHE, and the universities to direct the courses of INSET to deal with the real problems in schools.

However, the MOE is trying to improve INSET activities, and to deal with each of these weaknesses in the best way within its limited resources.

Description of the design, methodology, and instrumentation of the empirical dimension of the study provide the foci of Chapter Six, while Chapter Seven and Eight deal with presentation and analysis of data.

9.3 Summary of Empirical Findings:

9.3.1 Participation in INSET:

i) The survey found that 49.7 per cent of teachers and 83.6 per cent of trainers participated in a course at least during the two years period 1987-1989;

ii) The highest percentage of participation (53.3 per cent) was in Amman, and the lowest percentage of participation (45.7 per cent) was in Karak.

iii) There is a significant difference between compulsory school teachers and secondary school teachers, and their participation in INSET;

iv) Although there is no significant difference between male and female teachers, and their participation in INSET, more male

teachers participated in INSET than female teachers.

v) Young teachers with up to 5 years teaching experience participated in INSET, more than teachers with 16 years experience or more.

9.3.2 Selection Procedures:

i) Fifty-five point one per cent of teachers are satisfied with the selection procedures for INSET courses compared to 52.2 per cent of teachers' trainers.

ii) Female teachers (60.7 per cent) and compulsory school teachers (58.8 per cent) are more satisfied with selection procedures than male teachers (49.4 per cent) and secondary school teachers (47.6 per cent).

9.3.3 Reasons for Attending INSET:

i) Teachers ranked the following reasons as the most important for attending INSET:

a) to improve teaching method;

b) to improve knowledge of curriculum subjects;

c) to obtain new qualifications.

ii) Location, sex and qualifications affect the preferences of teachers' reasons for attending;

iii) The most important reasons for teachers' non-attendance were identified as follows:

a) not given the opportunity to attend;

b) no course in my field;

c) travel daily/live away from home.

iv) Sex and qualifications affect the perception of teachers towards non-attendance of INSET activities.

9.3.4 Teachers' Preferences:

i) Teachers indicated that they prefer INSET activities to take place during school-time, summer holidays, and school vacations respectively. While the trainers put their preferences in the following order: summer holidays, school vacations, and school-time.

ii) Teachers and trainers preferred the university for holding INSET courses, followed by the local school.

iii) Concerning teaching methods, both teachers and trainers preferred workshops, demonstrations, and a combination of methods.

iv) In expressing preferences as who should conduct INSET courses, teachers ranked their preferences as follows: experienced teachers, faculty members, and lastly, supervisors. While the

trainers expressed diametrically opposite views, which shows a significant difference between the two groups.

9.3.5 Content of INSET (Perception Survey):

i) Teachers' perceptions toward INSET content are more favourable toward acquiring new ideas, helping the teacher to cope with his task more successfully, and increasing the depth in his subject matter. The trainers attached the highest priority for altering teaching attitudes, and acquiring and disseminating new ideas.

ii) There were no significant differences among different groups of teachers and their perceptions toward the content of INSET when the independent variables: location, sex, qualifications, and teaching experience were considered.

9.3.6 Organisation of INSET:

i) Trainers' perceptions are more favourable than teachers' perceptions toward the organisation of INSET;

ii) The survey results show that both teachers and trainers are more favourable toward the continuity of INSET programmes, evaluation of INSET, and flexibility of INSET, to permit individualisation;

iii) When the independent variables were considered, the results show that there are significant differences between different groups of teachers when location, sex and qualifications were considered.

Teachers working in Amman have more favourable perceptions towards organisation of INSET than teachers working in Irbid and Karak. Female teachers appear to be generally more favourable toward the organisation of INSET than male teachers do. Compulsory school teachers have more favourable perceptions toward the organisation of INSET than secondary school teachers.

9.3.7 Teachers' Involvement:

i) Trainers perceptions are more favourable than teachers perceptions toward teachers' involvement in INSET;

ii) Teachers are more favourable toward individualisation of INSET, offering incentives to encourage teachers' participation and toward having more teacher involvement in planning INSET. While trainers' perceptions are more favourable toward the involvement of teachers as lecturers and demonstrators in INSET courses, and the importance of the head teacher's role in INSET;

iii) There were no significant differences among different groups of teachers and their perceptions toward participants' involvement in INSET when the following variables were considered: sex, qualifications and teaching experience. However, the results show a significant difference among teachers working in different geographical areas and their perceptions toward teachers' involvement in INSET.

9.3.8 Presentation of INSET:

i) Teachers and trainers expressed their strongest support for using practical techniques and mixing theory and practice in INSET courses;

ii) There were no significant differences among different groups of teachers, and their perceptions toward presentation of INSET when the independent variables were considered;

In general, there were no significant differences in perceptions of teachers and trainers toward the content and organisation of INSET. While there were significant differences at the (.01) level between the two responding groups toward teachers' involvement and presentation of INSET.

9.3.9 Teachers' Satisfaction:

i) Teachers expressed their strongest support to the notion that INSET courses are useful to the idea that some INSET courses need reorganisation, and to the view that INSET courses have emphasised the principle of life-long education:

ii) Teachers rejected the statement which indicates that INSET courses are useless, rejected the statement which states that books and printing materials are always available at INSET courses;

iii) There was a significant difference between teachers' qualifications and their satisfaction with INSET. Compulsory school teachers seem to be more satisfied with present INSET programmes than secondary school teachers do.

9.4 Conclusions

Jordan is a country that considers citizens as the most important resources. This policy was reflected on the emphasis it gave to education at all levels. The education system was developed to meet the needs of society in Jordan. When the educational enterprise is viewed as a whole, its expansion to meet the needs of the people

has been remarkable. But in the wake of economic recession in the region during the 1980s and the deterioration of educational standards, the government introduced a comprehensive ten-year, three-phase reform of education, aiming at restructuring the school system, and improving the quality of teaching and learning. Successful educational reform places the quality and commit ment of teachers at the centre of any improvement effort. The aim of the reform programme is to increase the effectiveness of teachers through INSET courses as one means of raising the level of pupil achievement in schools.

It is doubtful that the traditional face to face approach of training will succeed in familiarising all the teachers in Jordan with the content, methods and philosophy of the new curricula, and upgrading thousands of unqualified teachers to meet the new teaching requirements. The MOE has to consider an alternative approach build on distance education. This approach has clear advantages in terms of its potential for cost-effectiveness, and the provision of standardised high-quality materials.

The survey results show that there is a need for an immediate and substantial increase in the provision of INSET. About 50 per cent only of the teachers in the survey participated in the two-year period under observation. A large majority of teachers (70 per cent) indicated that they were not given the opportunity to attend. The survey has confirmed that the provision of courses

is generally inadequate in extent for both compulsory and secondary teachers. Almost half of the teachers and trainers are unsatisfied with the present selection methods for INSET programmes, which highlights the need for careful examination of the present selection procedures.

The most effective INSET is likely to occur when teachers are strongly motivated and involved. Enthusiasm for attendance is likely to be increased by course teaching methods that appeal to the teachers. The research on INSET shows that the success of INSET, to some extent, may depend on the technical arrangements such as location, time and approaches for INSET programmes. However, the learning process does not stop once a teaching skill has been obtained. The skill must be transformed when it is transferred into one's active teaching repertoire.

The conditions of classrooms are sufficiently different from training situations, that one cannot simply walk from a training session ihto the classroom with the skill, completely ready for use. It has to be changed to fit classroom conditions. The appropriate use of skill in its context requires an understanding of the student, subject matter, and the objectives to be achieved.

The provision of INSET may be excellent and the arrangement beyond reproach, but it can still be ineffective if the opportunities

for teachers to apply the training in their schools work are very limited or non-existent. Staff may soon forget the new methods or the alternative approaches if difficult circumstances, lack of equipment, or lack of encouragement, prevent them from putting the training into practice.

There are some indications that the follow-up and effectiveness of INSET in schools depends particularly on the leadership of the head, and on the school atmosphere. This emphasises the need for qualified head teachers in Jordan. Both teachers and trainers in the survey agreed on the importance of the head teacher's role. The head teacher is supposed to supervise his staff, and to encourage them to use innovation and introduce change.

The first step the MOE must take is to train the head teacher and supervisors so that they can train the other teachers, and encourage them to apply their training in the schools. To train teachers and to send them to work in schools where the headmasters are not trained is as 'putting the cart in front of the horse'.

The quality and quantity of INSET has been directly affected by the supervisors in Jordan. They have been responsible for recommending both short INSET courses, and the trainers for these courses. That responsibility has been discharged without the benefit of adequate planning. Consequently, long range planning

for continued in-service has been neglected or delayed. Coercive recruitment continued, and the discontent of trainers escalated. However, supervisors have been asked by the MOE to start systematic, diagnostic procedures, in recommending both courses and trainees in the light of actual needs. But one may ask, how are they going to achieve this without adequate training?

In-service programmes and curricula have been influenced by their pre-service counterparts in community colleges and universities. Furthermore, INSET programmes have been drawing upon the human resources, facilities, and equipment of these institutes, which inevitably has limited the expansion of INSET. However, the lack of participation of teachers spoils a lot of educational initiatives. Up to now, teachers have been mere instruments which passively have to accept and follow circulars, plans and programmes, which do not give them the opportunity to develop any initiative. The literature shows that the dissatisfaction of teachers with the provision of INSET courses was paralleled by their feelings that they were not consulted about the planning and organisation of INSET. However, the teacher ought to be the one who takes the initiative, and select the kind of course which he needs. An overwhelming majority of the sample agreed with this, which shows teachers' desire for individualisation of INSET.

During the last few years, INSET has experienced a rapid growth.

The year 1987 marked a turning point by adopting new policies and by establishing Higher Certification Colleges. Accreditation of INSET programmes, a reward system linked to these programmes and designed to stimulate voluntary recruitment, represent major changes and reforms. However, many problems remain without solutions. INSET, which has been planned and executed mainly by educators (supervisors and university lecturers) other than teachers, has suffered from inflexibility and centralism. The qualified teacher is perceived in terms of a specific number of credit hours earned in unrelated courses. Since there is no basis in policy that permits involvement of teachers in planning and implementing their INSET activities, they have no effective role to play. In most cases, they were presented with ready-made programmes which have no evaluation or follow-up afterwards. Teachers cannot be expected to meet their pupils' needs if their own needs were not met during INSET courses.

The picture of INSET in Jordan supports the idea that much has to be done. Many implications relative to INSET may be drawn from this study. Determination of needs of the teachers within the school system seems to be a pre-requisite for the planning of meaningful INSET programmes. Specific objectives should be developed and follow-up procedures established to determine if these objectives have been realised.

There is a dearth of information about preferences, personal and psychological characteristics of teachers who present themselves

for INSET courses, and those who do not; and a rare documentation of the reasons for undertaking or not undertaking such courses. The literature reveals a dramatic increase in the attention to INSET, but a notable lag in the empirical efforts to plan such programmes. If INSET in Jordan is to pass beyond the 'lip service' stage to become an equitable and effective reality, research must accompany development.

As a contribution to empirical efforts in this area, the investigator offered here a practical instrument and sample results as a preliminary assessment of teachers' preferences and perceptions toward INSET.

9.5 Recommendations

The writer suggests the following recommendations for the improvement of INSET in Jordan:

i) Decentralisation:

The strong centralisation of the provision of INSET, as well as the educational system, has been deliberately stressed as a weakness of the Jordanian system. The MOE needs to move quickly towards decentralisation of INSET. If this happens, the timing and location of INSET becomes more flexible, as adequate attention is given to particular local professional needs.

ii) Pre-Service-In-Service Connection:

Teacher education should be considered as a pre-service-in-service continuum. This requires the MOE and MOHE to adopt a strategy that takes into account that pre-service and in-service teacher education are dependent, inter-related, and interacting components of one system. The expansion of INSET must be accompanied by the expansion of pre-service education, which will reduce and eliminate the need to recruit unqualified teachers. This will allow INSET programmes to concentrate upon keeping teachers abreast of modern educational trends.

iii) Training the Headteachers and Supervisors:

Priority must be given to the training of head teachers and supervisors who play an important role in INSET activities. Head-teachers and supervisors should adopt a positive leadership role in relationship to INSET. The success of INSET depends largely on the co-operation between head teachers, supervisors and teachers. Teachers need the encouragement and help of heads and supervisors in order to apply what they learned in their schools.

iv) INSET Policy:

A written policy document setting out the senior management approach to INSET, the allocation of responsibilities and functions should be formulated in each secondary school. Staff development programmes must cater for requirements at the individual, group and whole school level. Secondary schools should appoint also an

INSET co-ordinator with responsibility for initiating and maintaining INSET programmes.

v) Subject Teachers' Associations:

Subject teachers' associations should be formed in every district directorate, so as to involve teachers and to stimulate experimentation in developing and updating curricula.

vi) Evaluation of INSET Programmes:

INSET programmes should be regularly updated to meet changing needs of teachers and schools. To be effective, INSET programmes must be subject to continuous modifications and development. MOE, MOHE, and Universities should provide systematic evaluation that will enable them to use the continuing flow of information or feedback for the improvements of the programmes. This needs the effective follow-up in the field, and requires the efforts of headmasters, supervisors and field tutors.

vii) Co-ordination:

INSET requires co-ordination among all the agencies concerned. Sometimes the courses conducted by one agency overlap with courses conducted by others. Better co-ordination should exist to avoid duplication and overlapping of courses. This could be achieved by establishing committees at national and local levels to co-ordinate INSET activities of all the organisations concerned. Local committees

should include administrators, teachers and other providers.

viii) Future Research:

There has been very little research on INSET in Jordan. Efforts should be made at different levels to conduct research in the different areas of INSET like the cost and efficiency of various types of programmes, the most appropriate role for different organisations concerned, methods of instruction and selection, and evaluation of major INSET programmes.

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The suggestions made above are derived from the experience gained by the writer in undertaking the research for this thesis, which is the first of its kind in respect of teacher education and training in Jordan.

APPENDICES

APPENDIX 1

Expansion of Compulsory Education 1977-1988

A. Primary Cycle B. Preparatory Cycle

Comparative Statistics of Schools By Sex and Controlling Authority for the Last Ten Years.

المدارس الخاصة Private Schools	وكالة الغوث U.N.R.W.A.	حكومية أخرى Other Gov. Authorities	وزارة التربية والتعليم Min. of Education	المجموع العام Grand Total	الجنس Sex	السنوات الدراسية Scholastic Years
2	45	-	290	337	M. ذكور	1978/1979
2	38	-	280	320	F. اناث	
89	14	-	316	419	Co-Ed. مختلطة	
3	44	-	288	335	M. ذكور	1979/1980
1	39	-	270	310	F. اناث	
89	12	-	349	450	Co-Ed. مختلطة	
1	47	-	283	331	M. ذكور	1980/1981
-	39	-	262	301	F. اناث	
90	13	-	380	483	Co-Ed. مختلطة	
1	49	-	290	340	M. ذكور	1981/1982
-	44	-	255	299	F. اناث	
96	9	-	405	510	Co-Ed. مختلطة	
3	50	-	269	322	M. ذكور	1982/1983
—	44	-	236	280	F. اناث	
99	10	-	418	527	Co-Ed. مختلطة	
1	51	-	266	318	M. ذكور	1983/1984
3	45	-	241	289	F. اناث	
105	9	-	427	541	Co-Ed. مختلطة	
2	45	-	260	307	M. ذكور	1984 / 1985
-	37	-	229	266	F. اناث	
109	10	-	448	567	Co-Ed. مختلطة	
2	43	—	190	235	M. ذكور	1985/1986
1	37	—	322	360	F. اناث	
152	8	1	483	644	Co-Ed. مختلطة	
2	44	—	263	309	M. ذكور	1986/1987
—	35	—	244	279	F. اناث	
163	10	2	510	685	Co-Ed. مختلطة	
—	43	—	273	316	M. ذكور	1987/1988
1	34	—	252	287	F. اناث	
192	9	2	554	757	Co.Ed. مختلطة	

Source: Ministry of Education (1988) The Statistical Educational Yearbook 1987/1988. Amman, MOE, pp.94-124.

A. Primary Cycle

Comparative Statistics of Students By Grade, Sex In The Last Ten Years

Students By Grade الطلبة حسب الصفوف							الجنس Sex		العام الدراسي Scholastic Year
السادس ابتدائي 6th. Grade	الخامس ابتدائي 5th. Grade	الرابع ابتدائي 4th. Grade	الثالث ابتدائي 3rd. Grade	الثاني ابتدائي 2nd. Grade	الاول ابتدائي 1st. Grade	المجموع Total			
60274	67450	69617	70688	70390	76071	414490	T.	مجموع	1978/1979
32535	36398	37223	37526	36944	39790	220416	M.	ذكور	
27739	31052	32394	33162	33446	36281	194074	F.	اناث	
63309	70870	73434	70138	72539	80817	431107	T.	مجموع	1979/1980
34359	37882	38979	36691	37837	42036	227784	M.	ذكور	
28950	32988	34455	33447	34702	38781	203323	F.	اناث	
66635	73844	74192	72911	78840	81989	448411	T.	مجموع	1980/1981
35930	39271	38678	38111	41015	42435	235440	M.	ذكور	
30705	34573	35514	34800	37825	39554	212971	F.	اناث	
69203	76527	75167	78357	80089	75048	454391	T.	مجموع	1981/1982
37155	40294	39202	40600	41550	39012	237813	M.	ذكور	
32048	36233	35965	37757	38539	36036	216578	F.	اناث	
73786	82999	87031	74232	75873	79106	473027	T.	مجموع	1982/1983
38944	43445	44982	38623	39461	41264	246719	M.	ذكور	
34842	39554	42049	35609	36412	37842	226308	F.	اناث	
79873	87200	82605	76130	78549	83533	487890	T.	مجموع	1983/1984
42102	45626	42647	39465	40792	43595	254227	M.	ذكور	
37771	41574	39958	36665	37757	39938	233663	F.	اناث	
81944	84092	83108	80873	82988	88334	501339	T.	مجموع	1984/1985
43382	43968	43310	42533	43545	45703	262441	M.	ذكور	
38562	40124	39798	38340	39443	42631	238898	F.	اناث	
80732	85577	87790	85199	90263	101345	530906	T.	مجموع	1985/1986
42320	44605	45471	44367	46266	54440	277469	M.	ذكور	
38412	40972	42319	40832	43997	46905	253437	F.	اناث	
79438	87401	91116	89322	93557	94741	535575	T.	مجموع	1986/1987
41868	46057	47635	45819	47954	48966	278299	M.	ذكور	
37570	41344	43481	43503	45603	45775	257276	F.	اناث	
81545	92173	96316	94125	94041	97336	555536	T.	مجموع	1987/1988
43144	48224	49541	48312	48672	49853	287746	M.	ذكور	
38401	43949	46775	45813	45369	47483	267790	F.	اناث	

A. Primary Cycle

Comparative Statistics of Teachers by Sex and Controlling Authority for the Last Ten Years

المدارس الخاصة Private Schools	وكالة الغوث U.N.R.W.A.	وزارة الدفاع Min. of Defence	وزارة التربية والتعليم Min. of Education	المجموع Total	الجنس Sex		السلطة المشرفة Controlling Authority / السنة الدراسية Scholastic year
1167	2187	62	9935	13351	T.	مجموع	1978/1979
113	1104	42	4446	5705	M.	ذكور	
1054	1083	20	5489	7646	F.	اناث	
1190	2221	61	10426	13898	T.	مجموع	1979/1980
104	1116	43	4513	5776	M.	ذكور	
1086	1105	18	5913	8122	F.	اناث	
1139	2370	66	10728	14303	T.	مجموع	1980/1981
97	1199	48	4543	5887	M.	ذكور	
1042	1171	18	6185	8416	F.	اناث	
1233	2383	69	11206	14891	T.	مجموع	1981/1982
95	1166	50	4466	5778	M.	ذكور	
1138	1217	19	6740	9114	F.	اناث	
2291	1282	69	11231	14873	T.	مجموع	1982/1983
1125	91	45	3925	5186	M.	ذكور	
1166	1191	24	7306	9687	F.	اناث	
1401	2268	71	11439	15179	T.	مجموع	1983-1984
91	1095	54	3829	5069	M.	ذكور	
1310	1173	17	7610	10110	F.	اناث	
1557	2158	84	12240	16039	T.	مجموع	1984 - 1985
151	1066	55	4200	5472	M.	ذكور	
1406	1092	29	8040	10567	F.	اناث	
1697	2045	102	13135	16979	T.	مجموع	1985/1986
216	960	78	4532	5786	M.	ذكور	
1481	1085	24	8603	11193	F.	اناث	
1995	2211	112	14065	18383	T.	مجموع	1986/1987
136	1073	79	4769	6057	M.	ذكور	
1859	1138	33	9296	12326	F.	اناث	
2200	2177	149	14760	19286	T.	مجموع	1987/1988
115	1062	92	4973	6242	M.	ذكور	
2085	1115	57	9787	13044	F.	اناث	

B. Preparatory Cycle

Comparative Statistics of Schools By Sex and Controlling Authority For The last Ten Years

المدارس الخاصه Private Schools	وكالة الغوث U. N. R. W. A.	حكومية أخرى Other Gov. Authorities	وزارة التربية والتعليم Min.of Education	المجموع العام Grand Total	الجنس Sex	السنة الدراسية Scholastic Year
2	52	3	375	432	ذكور M.	1978/1979
4	44	1	348	397	اناث F.	
16	7	4	140	167	مختلطة Co-Ed.	
2	51	3	365	421	ذكور M.	1979/1980
4	44	1	344	373	اناث F.	
17	8	4	169	198	مختلطة Co-Ed.	
2	53	4	379	438	ذكور M.	1980/1981
4	42	1	330	377	اناث F.	
18	8	3	160	189	مختلطة Co-Ed.	
3	54	4	384	445	ذكور M.	1981/1982
4	43	1	298	346	اناث F.	
19	9	3	180	211	مختلطة Co-Ed.	
4	54	4	399	461	ذكور M.	1982/1983
4	45	1	297	347	اناث F.	
19	7	2	200	228	مختلطة Co-Ed.	
5	55	2	406	468	ذكور M.	1983/1984
3	47	1	285	336	اناث F.	
20	6	2	234	262	مختلطة Co-Ed.	
3	55	4	419	481	ذكور M.	1984/1985
4	45	1	285	335	اناث F.	
23	6	1	238	268	مختلطة Co-Ed.	
12	54	7	437	510	ذكور M.	1985/1986
13	49	1	286	349	اناث F.	
15	4	—	221	240	مختلطة Co-Ed.	
6	53	5	442	506	ذكور M.	1986/1987
3	48	1	294	346	اناث F.	
29	6	1	234	270	مختلطة Co-Ed.	
6	54	4	422	486	ذكور M.	1987/1988
3	45	1	286	335	اناث F.	
34	10	3	233	280	مختلطة Co.Ed.	

B. Preparatory Cycle

Comparative Statistics of Students By Grade In The Last Ten Years

طلبة الصفوف الاعدادية Prep. Grades Enrolment			المجموع العام Grand Total	الجنس Sex		السنة الدراسية Scholastic Year
الثالث الاعدادي 3rd. Grade	الثاني الاعدادي 2nd. Grade	الاول الاعدادي 1st. Grade				
40735	49964	57630	148329	T.	مجموع	1978/1979
22848	27902	31352	82102	M.	ذكور	
17887	22062	26278	66227	F.	اناث	
45383	52356	60851	158590	T.	مجموع	1979/1980
25066	28480	32913	86459	M.	ذكور	
20317	23876	27938	72131	F.	اناث	
47198	54776	62720	164694	T.	مجموع	1980/1981
25691	29877	34013	89581	M.	ذكور	
21507	24899	28707	75113	F.	اناث	
49779	56988	66600	173367	T.	مجموع	1981/1982
26796	30955	35708	93459	M.	ذكور	
22983	26033	30892	79908	F.	اناث	
51517	60775	69140	181432	T.	مجموع	1982/1983
28123	32855	36448	97426	M.	ذكور	
23394	27920	32692	84006	F.	اناث	
54436	63739	72377	190552	T.	مجموع	1983/1984
29336	33773	38147	101256	M.	ذكور	
25100	29966	34230	89296	F.	اناث	
55085	65387	77888	198360	T.	مجموع	1984/1985
29168	34497	41191	104856	M.	ذكور	
25917	30890	36697	93504	F.	اناث	
56751	70775	81120	208646	T.	مجموع	1985/1986
29628	37269	42946	109843	M.	ذكور	
27123	33506	38174	98803	F.	اناث	
60919	71749	78042	210710	T.	مجموع	1986/1987
32328	37700	40707	110735	M.	ذكور	
28591	34049	37335	99975	F.	اناث	
64732	70841	79662	215235	T.	مجموع	1987/1988
34190	36981	41718	112889	M.	ذكور	
30542	33860	37944	102346	F.	اناث	

B. Preparatory Cycle

Comparative Statistics of Teachers by Sex and Controlling Authority for the Last Ten Years

المدارس الخاصة Private School	وكالة الغوث U.N.R.W.A.	حكومية اخرى Other Gov. Authorities	وزارة التربية والتعليم Min. of Education	المجموع العام Grand Total	الجنس Sex	السنة الدراسية Scholastic Year
290	1111	56	5820	7277	T. مجموع	1978/1979
151	691	45	3072	3959	M. ذكور	
139	420	11	2748	3318	F. اناث	
300	1151	58	6110	7619	T. مجموع	1979/1980
152	707	49	3185	4093	M. ذكور	
148	444	9	2925	3526	F. اناث	
305	1172	56	6322	7855	T. مجموع	1980/1981
155	698	47	3365	4265	M. ذكور	
150	474	9	2957	3590	F. اناث	
320	1192	60	6691	8263	T. مجموع	1981/1982
155	727	52	3485	4419	M. ذكور	
165	465	8	3206	3844	F. اناث	
316	1271	62	6871	8520	T. مجموع	1982/1983
128	774	57	3520	4479	M. ذكور	
188	497	5	3351	4041	F. اناث	
375	1277	66	6699	8417	T. مجموع	1983/1984
156	756	55	3307	4274	M. ذكور	
219	521	11	3392	4143	F. اناث	
368	1273	57	6607	8305	T. مجموع	1984/1985
149	755	47	3244	4195	M. ذكور	
219	518	10	3363	4110	F. اناث	
487	1585	63	7808	9943	T. مجموع	1985/1986
213	881	53	3858	5005	M. ذكور	
274	704	10	3950	4938	F. اناث	
474	1345	90	8505	10414	T. مجموع	1986/1987
183	779	83	4206	5251	M. ذكور	
291	566	7	4299	5163	F. اناث	
524	1295	111	8623	10553	T. مجموع	1987/1988
203	750	99	4239	5291	M. ذكور	
321	545	12	4384	5262	F. اناث	

APPENDIX 2

Expansion of General Secondary Education 1978-1988

Comparative Statistics of Schools for the Last Ten Years by Sex and Controlling Authority

المدارس الخاصة Private Schools	حكومية اخرى Other Gov. Authorities	وزارة التربية والتعليم Min.of Education	المجموع العام Grand Total	الجنس Sex	السنة الدراسية Scholastic Year
18	4	150	172	M. ذكور	1978/1979
10	1	106	117	F. اناث	
7	–	5	12	Co.Ed. مختلطة	
19	4	163	186	M. ذكور	1979-1980
10	1	126	137	F. اناث	
7	–	11	18	Co.Ed. مختلطة	
18	4	173	195	M. ذكور	1980/1981
9	1	138	148	F. اناث	
8	–	14	22	Co.Ed. مختلطة	
17	4	186	207	M. ذكور	1981/1982
9	1	159	169	F. اناث	
9	–	20	29	Co.Ed. مختلطة	
19	3	194	216	M. ذكور	1982/1983
8	1	168	177	F. اناث	
10	–	29	39	Co.Ed. مختلطة	
19	7	197	223	M. ذكور	1983/1984
9	1	167	177	F. اناث	
12	–	37	49	Co.Ed. مختلطة	
32	6	212	250	M. ذكور	1984 / 1985
6	1	173	180	F. اناث	
15	–	38	53	Co.Ed. مختلطة	
24	6	207	237	M ذكور	1985 / 1986
13	1	200	214	F. اناث	
10	—	24	34	Co.Ed. مختلطة	
25	6	215	246	M. ذكور	1986 / 1987
7	1	206	214	F. اناث	
20	—	32	52	Co Ed. مختلطة	
28	6	222	256	M. ذكور	1987/1988
9	1	219	229	F. اناث	
21	1	41	63	Co.Ed. مختلطة	

Source: Ministry of Education (1988) The Statistical Educational Yearbook 1987/1988. Amman, MOE, pp.157-180.

Secondary Cycle

Comparative Statistics of Students By Grade, Stream and Sex For the Last Ten Years

3rd.Grade الثالث الثانوي			2nd.Grade الثاني الثانوي			الاول الثانوي 1st.Grade	المجموع العام Grand Total	الجنس Sex	السنة الدراسية Scholastic Year
علمي Scientific	ادبي Literary	مجموع Total	علمي Scientific	ادبي Literary	مجموع Total				
10118	12461	22579	9559	12089	21648	29266	73493	T. مجموع	1978/1979
7440	6262	13702	6975	5786	12761	16424	42887	M. ذكور	
2678	6199	8877	2584	6303	8887	12842	30606	F. اناث	
10293	12095	22388	11859	15032	26891	30894	80173	T. مجموع	1979/1980
7509	6312	13821	8244	6897	15141	16329	45291	M. ذكور	
2784	5783	8567	3615	8135	11750	14565	34882	F. اناث	
12741	14640	27381	12014	15404	27418	32874	87673	T. مجموع	1980/1981
9085	7170	16255	7930	6710	14640	17058	47953	M. ذكور	
3656	7470	11126	4084	8694	12778	15816	39720	F. اناث	
12586	14673	27259	12603	16872	29475	33849	90583	T. مجموع	1981/1982
8187	7063	15250	7805	6980	14785	17075	47110	M. ذكور	
4399	7610	12009	4798	9892	14690	16774	43473	F. اناث	
13302	16254	29556	13297	15845	29142	35310	94008	T. مجموع	1982/1983
8840	7162	16002	8271	6411	14682	17331	48015	M. ذكور	
4462	9092	13554	5026	9434	14460	17979	45993	F. اناث	
13718	15606	29324	13953	17338	31291	34925	95540	T. مجموع	1983/1984
8791	6570	15361	8587	7004	15591	17889	48841	M. ذكور	
4927	9036	13963	5366	10334	15700	17036	46699	F. اناث	
13712	16171	29883	12975	17256	30231	36656	96770	T. مجموع	1984/1985
8720	6925	15645	7953	7417	15370	18180	49195	M. ذكور	
4992	9246	14238	5022	9839	14861	18476	47575	F. اناث	
13464	16043	29507	13799	17342	31141	35752	96400	T. مجموع	1985/1986
3340	7060	15400	8413	7036	15449	16545	47394	M. ذكور	
5124	8983	14107	5386	10306	15692	19207	49006	F. اناث	
12683	17147	29830	13196	18769	31965	34673	96468	T. مجموع	1986/1987
7988	7347	15335	7891	7505	15396	15436	46167	M. ذكور	
4695	9800	14495	5305	11264	16569	19237	50301	F. اناث	
13541	18379	31920	12793	19131	31924	36726	100570	T. مجموع	1987/1988
8388	7596	15984	7553	7029	14582	17210	47776	M. ذكور	
5153	10783	15936	5240	12102	17342	19516	52794	F. اناث	

Secondary Cycle

Comparative Statistics of Teachers by sex And Controlling Authority for the Last Ten Years

المدارس الخاصة Private Schools	حكومية اخرى Other Gov. Authorities	وزارة التربية والتعليم Min. of Education	المجموع العام Grand Total	الجنس Sex		السنة الدراسية Schoiastic Year
277	46	2754	3077	T.	مجموع	1978/1979
227	35	1648	1910	M.	ذكور	
50	11	1106	1167	F.	اناث	
376	48	3224	3648	T.	مجموع	1979/1980
303	36	1919	2258	M.	ذكور	
73	12	1305	1390	F.	اناث	
390	43	3711	4144	T.	مجموع	1980/1981
326	32	2128	2486	M.	ذكور	
64	11	1583	1658	F.	اناث	
407	55	3943	4405	T.	مجموع	1981/1982
342	45	2223	2610	M.	ذكور	
65	10	1720	1795	F.	اناث	
397	41	4160	4598	T.	مجموع	1982/1983
320	30	2244	2594	M.	ذكور	
77	11	1916	2004	F.	اناث	
383	62	4291	4736	T.	مجموع	1983/1984
306	50	2158	2514	M.	ذكور	
77	12	2133	2222	F.	اناث	
456	84	4610	5150	T.	مجموع	1984 / 1985
366	72	2320	2758	M.	ذكور	
90	12	2290	2392	F.	اناث	
467	82	6582	7131	T.	مجموع	1985/1986
313	58	3171	3542	M.	ذكور	
154	24	3411	3589	F.	اناث	
453	74	4930	5457	T.	مجموع	1986/1987
330	58	2344	2732	M.	ذكور	
123	16	2586	2725	F.	اناث	
543	79	5312	5934	T.	مجموع	1987/1988
374	65	2469	2908	M.	ذكور	
169	14	2843	3026	F.	اناث	

APPENDIX 3

The Headmaster's Responsibilities

"Job Description"

The Headmaster is required:

1. To study and carry out all of the laws, regulations and directives that come from the Ministry of Education.

2. To achieve a reasonable knowledge of school curriculum and its aims, and methods of instruction.

3. To set the school schedule in the light of the school needs, teachers' abilities and specialities.

4. To administer the extra-curricular activities and the mid-term and final exams.

5. To assure the availability of needed furniture and to maintain this furniture and the school building and facilities.

6. To assure the presence of teachers and other employees during school hours.

7. To co-operate with the teachers to assure students' achievement and discipline, and to contact parents when it is necessary.

8. To take care of his staff and students' health and contact local health authorities when it is needed.

9. To chair the teacher and discipline councils of his school.

10. To keep accurate records and accounts of staff and school expenditure.

11. To make classroom observations, especially for the newly appointed teachers and to offer them the guidance and the help they need.

12. To co-operate with local authorities and local educational committee.

13. To establish better relationships with parents and community, and to chair the PTA in his school.

14. To communicate with the local office of the directorate.

15. To report when it is necessary to the director of education.

16. To supply the directorate with all required official reports and any information the director needs from his school.

17. To fill out the annual evaluation report for all the staff.

Source: Ministry of Education 1970 (Collection of Educational Laws and Regulations) Amman, MOE, Vol.3, pp.85-87.

APPENDIX 4

Survey Instrument: English Version

SURVEY OF TEACHERS' PERCEPTIONS ON IN-SERVICE EDUCATION AND TRAINING IN JORDAN

Dear Participant

The researcher is undertaking a study of the organization and administration of in-service education and training of school teachers in Jordan as a part of a PhD research degree at the University of Hull in the U.K. This questionnaire is intended to collect data on the subject of INSET, to study the existing practices and to identify the difficulties encountered in the process in order to make some recommendations for the improvement in the existing programmes.

This questionnaire is completely anonymous (there is no need to write your name) and your response will be kept confidential. Most of the items in this questionnaire ask for your opinions. Your co-operation, by completing this questionnaire, will provide evidence of the opinions of educators about the present practices of INSET programmes and hopefully influence improvements in the future.

Thank you for your attention.

M Hani Halawani
Ministry of Education
Amman
JORDAN

NOTE

1. Some questions ask for open-ended answers. Please be as brief as you can, giving important details only.

2. Some items are statements that have five-point scale from "strongly agree" to "strongly disagree". Please choose the one that approximates most closely to your opinion.

SURVEY OF TEACHERS' PERCEPTIONS OF IN-SERVICE EDUCATION

A. GENERAL INFORMATION

Please read carefully and ring the appropriate choice.

1. Type of school in which you work:

Secondary	1
Preparatory	2
Elementary	3
Other (specify)	4

2. Number of classes in your school:

1-6	1
7-9	2
10-over	3

3. Job title (status):

Teacher	1
Headmaster	2
Supervisor	3
Lecturer	4
Other (specify)	5

4. Sex

Male	M
Female	F

5. Age

25 years or below	1
26-30 years	2
31-40 years	3
41-over	4

6. Highest qualification you have gained:

Community College Diploma	1
First University Degree	2
First University Degree + Diploma in Education	3
Masters Degree	4
Masters Degree + Diploma in Education	5
PhD Degree	6
Other (specify)	7

7. Teaching experience:

5 years or below	1
6-10 years	2
11-15 years	3
16-over	4

8. Main teaching subject:

Islamic education	1
Arabic language	2
English language	3
Science	4
Mathematics	5
Social sciences	6
Physical education	7
Other (specify)	8

9. Your experience of INSET activities:

Have you participated in any INSET programme, other than the course during the last two years?

Yes	1
No	2

If yes, please specify:

As a Participant	1
As a Lecturer	2
As an Organizer/Administrator	3
Other (specify)	4

10. Which of the following reasons made you attend INSET programmes?

Please indicate in order of preference. (Fill in with rank scores, i.e. 1 for the most important, 2 for the second important, 3 for the third important etc). You may choose more than one reason.

To improve my knowledge of curriculum subjects.	
To improve my own teaching methods.	
To get promotion.	
To comply with the request of my superiors.	
To obtain new qualifications.	
To enable me to take new duties.	
To mix with professional colleagues.	
To get away from the school.	

Other reasons (please specify) .....

.....

.....

On the basis of your answer, do you have any comments?:

.....

.....

11. How do you find the present methods of selecting candidates for INSET programmes?

Satisfactory	1
Unsatisfactory	2
Uncertain	3

Any Comments: .....

.....

12. If you have not attended any other INSET programme/ course during the last two years, what was/were the reason(s) which prevented you from attending? Please indicate in order of preference. (Fill in with rank scores, i.e. 1 for the most important, 2 for the second important, 3 for the third important etc.

I was not given the opportunity to attend.

I have to travel daily or live away from home for duration of the course.

Family problems or illness.

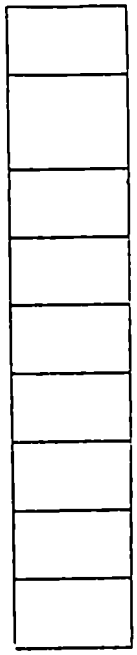
I didn't attend because I had another job.

I did not need any training.

INSET courses are useless.

There were no courses in my field.

There were no incentives.



Other reasons (please specify) .....

.....

.....

On the basis of your answer, do you have any comments?:

.....

.....

13. Indicate <u>when do you prefer to attend</u> in-service courses? Please indicate in order of preference (e.g. 1,2,3,4,5)

During school-time	
Evenings	
Week-ends	
School vacations	
Summer holidays	

14. <u>Where would you like the INSET course to take place</u>:

Local school	
Teachers' center	
Community college	
University	

15. <u>Which teaching technique(s)</u> do you feel to be more effective in INSET courses? Please indicate in order of preference.

Lecture	
Seminar (tutorial group)	
Workshop	
Micro-teaching sessions	
Demonstration lessons followed by discussion	
Radio-broadcasts	
TV	
A combination of the above methods	

16. Whom would you most prefer to conduct an in-service programme on a new approach for teaching the basic skills?

Experienced teacher	
Supervisor	
Faculty member	
Other	
No preference	

B. PERCEPTIONS SURVEY

The following five-point scale is for your opinion on certain aspects of INSET. Please indicate, based upon your personal experience, how strongly you agree or disagree with each statement by circling the appropriate number most closely to your opinion as follows:

Strongly Agree	5
Agree	4
Uncertain (neutral)	3
Disagree	2
Strongly Disagree	1

Item	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1	INSET activities should be centred around matters of instructional content.	5	4	3	2	1
2	The real test of an in-service programme is whether it helps the teacher to cope with his professional tasks more successfully.	5	4	3	2	1
3	Many INSET activities do not appear relevant to any felt needs of the teacher.	5	4	3	2	1
4	The content of INSET programmes should be centred around new knowledge in various school subjects.	5	4	3	2	1
5	The content of INSET should provide the best possible means of disseminating new ideas.	5	4	3	2	1
6	Teachers feel that most INSET activities are repetition of what the supervisors have discussed at schools.	5	4	3	2	1
7	The content of INSET should focus on altering teaching attitudes and beliefs regarding good teaching.	5	4	3	2	1
8	Transfer of concepts presented and skills taught in INSET programmes to the problems of daily classroom life and school operation is minimal.	5	4	3	2	1
9	The content of INSET should be designed to increase teachers depth in their subject matter.	5	4	3	2	1
10	The content of INSET should focus on topics which teachers think important.	5	4	3	2	1

Item	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
11	An in-service programme should be a continuing process not a "one-off" effort.	5	4	3	2	1
12	The headmaster should be responsible for INSET in his school.	5	4	3	2	1
13	INSET should be sufficiently flexible to permit individualization.	5	4	3	2	1
14	There is no adequate follow-up to determine the effects of INSET on teachers' performance in the classroom.	5	4	3	2	1
15	Teachers should be released during school time to attend INSET activities where necessary.	5	4	3	2	1
16	Most of the lecturers of INSET programmes are well qualified for the job.	5	4	3	2	1
17	INSET programmes should be continuously evaluated.	5	4	3	2	1
18	In every school, there should be a professional teacher tutor responsible for co-ordinating INSET activities.	5	4	3	2	1
19	Assessment would undermine the INSET courses.	5	4	3	2	1
20	Most INSET activities should be carried on within the area where the teacher works, and preferably even the school in question.	5	4	3	2	1

Item	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
21	The teacher should have the opportunity to select the kind of INSET which he feels will strengthen his professional performance.	5	4	3	2	1
22	INSET seems to be more effective when the total school staff is engaged in a given activity.	5	4	3	2	1
23	INSET programmes should provide opportunities for talented teachers to use their expertise as lecturers and demonstrators.	5	4	3	2	1
24	Most teachers do not like to attend INSET activities.	5	4	3	2	1
25	Supervisors and faculty members are more qualified than teachers in identifying the need for INSET.	5	4	3	2	1
26	Teachers should be involved in developing methods of evaluation for INSET programmes.	5	4	3	2	1
27	If teachers were involved in planning INSET activities, teachers commitment to them would be greater.	5	4	3	2	1
28	Every teacher should be required to participate in some INSET activities every year.	5	4	3	2	1
29	There must be incentives for attending INSET activities to encourage teachers.	5	4	3	2	1
30	The implementation of innovations presented in INSET programmes depends upon support from the headmaster.	5	4	3	2	1

Item	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
31	Teachers feel that the lecture method "which is dominant in INSET" is boring (and less effective than group discussions).	5	4	3	2	1
32	In INSET programmes there should be opportunities for teachers to work in a collegial fashion in the solution of problems.	5	4	3	2	1
33	Practical techniques are more useful than theory *in INSET*.	5	4	3	2	1
34	INSET should be patterned around both specific and general techniques.	5	4	3	2	1
35	In INSET programmes there should be opportunities for teachers to engage in a variety of activities other than just attending lectures or reading.	5	4	3	2	1
36	There should be a close relationship between observation and practice in INSET.	5	4	3	2	1
37	When a theoretical explanation accompanies the demonstration, teachers gain a conceptual understanding that helps them to adapt the technique to their own situation.	5	4	3	2	1
38	It is better to follow the lectures of INSET on TV at home instead of travelling to the college or university.	5	4	3	2	1
39	The use of educational technology in INSET activities is minimal.	5	4	3	2	1
40	INSET programmes should not be conducted in a formal way, like college or university courses, but in a more informal fashion.	5	4	3	2	1

NOTE: If you are currently following an INSET programme, please answer Section C below. If not, may I thank you for completing the survey up to this point.

C. SURVEY OF CURRENT PARTICIPANTS ONLY

Item	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
NB	If you are currently participating in a course/programme of INSET, thank you for completing the following ten items.					
1	I think the course is useful for the teachers.	5	4	3	2	1
2	The programme objectives are clear and specific.	5	4	3	2	1
3	The content of the programme achieves a balance between the theoretical and practical aspects.	5	4	3	2	1
4	I find the course useless and a waste of time.	5	4	3	2	1
5	I feel the amount of work of the course is adequate.	5	4	3	2	1
6	The programme has emphasized the principle of lifelong education as an integral element of teacher training in Jordan.	5	4	3	2	1
7	The course needs some re-organization to make it more effective.	5	4	3	2	1
8	The necessary references, books and printing materials are always available.	5	4	3	2	1

Item	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
9	There is not enough field supervision for the trainees.	5	4	3	2	1
10	The lecturers are competent and helpful.	5	4	3	2	1

11 Any further comments on the course? .....

.....

.....

.....

.....

.....

THANK YOU ALL MOST SINCERELY FOR YOUR CO-OPERATION

M.H.H.

" بسم الله الرحمن الرحيم "

APPENDIX 5

Survey Instrument: Arabic Version

استبيان لاراء المعلمين حول موضوع تدريب المعلمين أثناء الخدمة في الاردن

= = = = = = = =

يقوم الباحث بدراسة موضوع ادارة وتنظيم برامج تدريب المعلمين أثناء الخدمة في الاردن كجزء من دراسته للحصول على درجة الدكتوراه في الاداره التربوية من جامعة هل في المملكه المتحده . ويهدف الاستبيان المرفق الى جمع المعلومات والبيانات عن طبيعة هذه البرامج لدراسة الممارسات المعمول بها حاليا والتعرف على الصعوبات التي تعترض سير هذه البرامج من أجل تقديم بعض التوصيات لتحسين وتطوير المبرامج الموجوده .

ان هذا الاستبيان غيرمعين المصدر ولا داعي لكتابة اسمك ، واستجابتك له ستكون موضع تقدير الباحث وستحاط بالسريه . معظم البنود في هذا الاستبيان تطلب معرفة رأيك . ان تعاونك بتكميل الاستبيان سيوفر الدليل على اراء المربين حول الممارسات الحاليه لبرامج التدريب أثناء الخدمة ويؤمل ان يؤدي ذلك الى تطوير هذه البرامج وتحسينها في المستقبل .

أشكركم لحسن تعاونكم واهتمامكم ،،،

ملاحظة :-١) بعض الاسئلة تستوجب اجابه مكتوبه أرجو أن تجيب باختضار مع ذكر التفاصيل الهامة فقط .

٢) بعض البنود عباره عن جمل لها مقياس من خمس نقاط من (أوافق بشده) الى (لا اوافق بشده) اختر من فضلك النقطة التي هي أقرب الى رأيك ،

محمد هانئ الحلواني
وزارة التربية والتعليم

استبيان لآراء المعلمين حول موضوع التدريب أثناء الخدمة

أ - معلومات عامة

اقرأ بدقة من فضلك وضع دائرة حول الاختيار المناسب .

١ - نوع المدرسة التي تعمل بها : =

ثانوية ١ 1

اعدادية ٢ 2

ابتدائية ٣ 3

اخرى (حدد) ٤ 4

٢ - عدد الشعب (الصفوف) في مدرستك :-

١ - ٦ ..... ١ 1

٧ - ٩ ..... ٢ 2

١٠ فأكثر ٣ 3

٣ - الوظيفة

معلم ١ 1

مدير ٢ 2

موجه ٣ 3

محاضر ٤ 4

مركز أخر (حدد) ٥ 5

٤ - الجنس :-

ذكر ..... (ذ) ..... M

أنثى ..... (أ) ..... F

٥ - العمـــــر: -

٢٥ سنة أو أقـل ١ 1

٢٦ - ٣٠ سنـــة ٢ 2

٣١ - ٤٠ سنـــة ٣ 3

٤١ فمـــا فـــوق ٤ 4

٦ - أعلى المؤهلات العلمية التي حصلت عليها :-

دبلوم كلية مجتمع/دبلوم معهد التأهيل ١ 1

الدرجة الجامعية الاولى ٢ 2

الدرجة الجامعية الاولى + دبلوم في التربية ٣ 3

درجة الماجستيـر ٤ 4

درجة الماجستير + دبلوم في التربيـة ٥ 5

درجـــة الدكتوراه ٦ 6

درجة أخرى (حدد) ٧ 7

٧ - الخبـــرة التعليميـــة :-

٥ سنوات أو أقـــل ١ 1

٦ - ١٠ سنـــــوات ٢ 2

١١ - ١٥ سنـــــة ٣ 3

١٦ سنة فأكثـــــر ٤ 4

٨ - الموضوع الرئيسي الذي تدرّسه :-

التربية الاسلاميـــــة ١ 1

اللغة العربيـــــــة ٢ 2

اللغـــة الانجليزيـــــة ٣ 3

العلـــــــــوم ٤ 4

الرياضيـــــــات ٥ 5

العلوم الاجتماعيـــــة ٦ 6

التربيـــة الرياضيـــــة ٧ 7

مادة اخـرى (حـــدد) ٨ 8

٩ - خبراتك في فعاليات التدريب أثناء الخدمة :-

هل شاركت في أى من دورات / برامج التدريب أثناء الخدمة (باستثناء البرنامج الحالي) خلال السنتين الماضيتين . ؟

نعم ١ 1

لا ٢ 2

اذا كان الجواب بالايجاب ،الرجاء أن تحدد

شاركت كمتدرب ١ 1

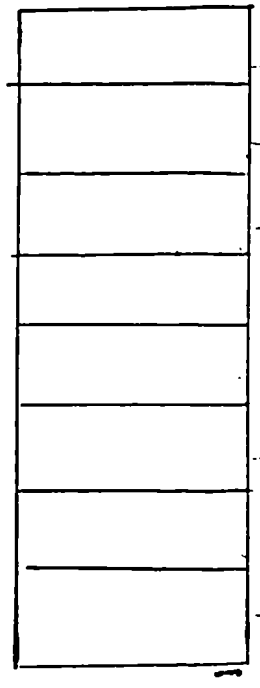
شاركت كمحاضر ٢ 2

شاركت كاداري / منظم ٣ 3

اخرى (حدد) ٤ 4

١٠- أى الاسباب التالية جعلتك تشارك في برامج التدريب أثناء الخدمة . ؟

بين من فضلك حسب الافضلية . ضع رقم ١ في المربع أمام أكثر الاسباب أهمية في رأيك ،ورقم ٢ أمام السبب الثاني في الاهمية ، ورقم ٣ أمام السبب الثالث في الاهمية وهكذا . (يمكنك اختيار أكثر من سبب واحد) .



لتحسين معرفتي بمواد المنهاج .....

لتحسين وتطوير اساليبي في التدريس .....

للحصول على ترقية .....

استجابة لطلب رؤسائي .....

للحصول على مؤهلات جديدة .....

لتمكيني من القيام بمهام جديدة .....

لاتمكن من الالتقاء بزملاء مهنيين .....

لاتمكن من الابتعاد عن المدرسة .....

اسباب أخرى (حدد) .....

على ضوء اجابتك هل هناك تعليقات أخرى تود ذكرها . ؟

١١ - كيف تجد الطرق الحالية لاختيار المرشحين للاشتراك في برامج التدريب أثنـــاء الخدمـــة . ؟

مرضيـــــة ١ 1

غير مرضيـــة ٢ 2

غير متأكـــد ٣ 3

هل لديك تعليقات اخـــرى . ؟ .....

.....

١٢- اذا لم تشارك في أى من برامج / دورات التدريب أثناء الخدمة خلال السنتين الماضيتين ،

ما هي الاسباب التي منعـتك من ذلك . ؟ بين حســـــب الاهمية من فضلك بوضع رقم ١ في المربع أمام اكثر الاسباب أهمية في رأيك ، ورقم ٢ أمام السبب الثاني في الاهمية ورقم ٣ أمـــــام السبب الثالث وهكذا . . .

- لم اعط الفرصة للمشاركـــة
- في حال المشاركة كان علي أن اسافر يوميـــا" أو اقيم بعيدا عن المنزل طيلة مدة الـــدوره
- أسباب عائلية / أو المرض
- لم اشارك لان لدى عمل آخر
- لم أكن بحاجة الى أى تدريب
- برامج التدريب عديمه الفائـدة
- لم يكن هناك دورات في مجال تخصصي
- لم تكن هناك حوافز لتشجيع الاشتراك في التدريب
- أسباب اخرى (حدد من فضلك) .....

.....

على ضوء اجابتك هل لديك تعليقات أخرى . ؟ .....

.....

١٣ - اذا كنت ترغب المشاركه في احد برامج التدريب، بين الوقت الذى تفضله لحضور الدوره مستخدما "١، ٢، ٣، .. ليدل على الافضلية

- أثناء الدوام المدرسي
- في المساء
- في نهاية الاسبوع
- أثناء الاجازة المدرسية
- في العطلة الصيفية

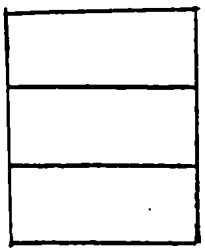
١٤ - أين ترغب ان يتم عقد دورة التدريب . ؟

استخدم الترتيب ١ ، ٢ ، ٣ ، ٤ ليدل على الافضلية برأيك

- في المدرسة المحلية
- في مركز التأهيل
- في كلية المجتمع
- في الجامعة

١٥ - أى من اساليب التدريس التاليه تعتقد انها أكثر فاعلية لاستخدامها في دورات / برامج التدريب أثناء الخدمة . الرجاء استخدام الترتيب ١، ٢، ٣، ... الخ لتدل على الافضلية .

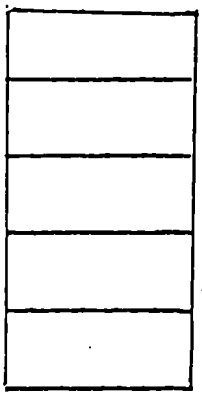
- اسلوب المحاضرة
- اسلوب الحلقة الدراسية
- اسلوب ورشة العمل
- اسلوب التعليم المصغر
- دروس توضيحية يتبعها النقاش



- دروس اذاعية بتواسطة الراديـــو
- دروس تليفزيونيـــــــــــــة
- اسلوب يجمع بين الطرق السابقـــة

١٦ - أى من الاشخاص تفضل اكثر للمحاضره في دورة تدريب حول استعمال اسلوب جديد لتعليم المهارات الاساسية في التدريس . ؟

استخدم الترتيب ١ ، ٢ ، ٣ . . . الخ ليدل على الافضلية حسب رأيك



- معلـــم متمـــــرس
- مـــوجـــــــه
- محاضر من الجامعة / الكلية
- شخـــص آخر (حـــدد) . . . . . .
- لا أفضـل أحـــدا ".

ب - استبيان الرأى

الاستبيان ذو الخمس نقاط التالي هو لمعرفة رأيك حول عـــدد من امور التدريب أثناء الخدمة. وضح من فضلك ، معتمداً على تجربتك ، درجة موافقتك أو عدم موافقتك على الجمل التالية بوضع دائرة على الرقم المناسب والاقرب الى رأيك حسب المقياس التالي :-

- اوافق بشـــدة ٥ 5
- اوافـــــق ٤ 4
- غير متأكـــد ٣ 3
- لا اوافـــق ٢ 2
- لا اوافق بشدة ١ 1

الرقم	العبـــــــارة	أوافق بشدة (5)	أوافق (4)	غير متأكد (3)	لا أوافق (2)	لا أوافق بشدة (1)
١ -	فعاليات التدريب أثناء الخدمة يجب ان تتركز حول طرق التدريس .	٥	٤	٣	٢	١
٢ -	ان الاختيار الحقيقي لبرنامج التدريب اثناء الخدمة هو فيما اذا كان البرنامج يساعد المعلم على القيام بواجباته المهنية بنجاح أكبر .	٥	٤	٣	٢	١
٣ -	ان كثيرا من فعاليات التدريب اثناء الخدمة لا تظهر انها وثيقة الصلة بأى من الحاجات التي يشعر بها المعلم .	٥	٤	٣	٢	١
٤ -	ان محتوى برامج التدريب أثناء الخدمة يجب ان يتركز حول المعلومات الجديدة في مختلف المواضيع المدرسية .	٥	٤	٣	٢	١
٥ -	ان محتوى برامج التدريب أثناء الخدمة يجب ان يقدم أفضل الوسائل لنشر الافكار الجديدة .	٥	٤	٣	٢	١
٦ -	يشعر المعلمون بأن معظم نشاطات برامج التدريب أثناء الخدمة هي تكرار لما كان الموجهون قد ناقشوه في المدارس .	٥	٤	٣	٢	١
٧ -	ان محتوى برامج التدريب أثناء الخدمة يجب ان يركز على تغيير مواقف ومفاهيم المعلمين فيما يتعلق بالتعليم الجيد .	٥	٤	٣	٢	١

الرقم	العبـــــارة	اوافق بشدة	اوافق	غير متأكد	لا اوافق	لا اوافق بشـدة
٨ -	ان نقل واستخدام المفاهيـم والمهارات المقدمة من خـلال برامج التدريب لاستخدامها في حل المشاكل المدرسية هي اقل ما يمكن .	٥	٤	٣	٢	١
٩ -	ان محتـوى برامج التدريب اثناء الخدمة يجب ان تصمم لزيـادة تعمق المعلمين في فهم موضوع تخصصهم .	٥	٤	٣	٢	١
١٠-	ان محتوى برامج التدريب اثناء الخدمة يجب ان تركز علـى المواضيع التي يعتقد المعلمون بانها مهمة .	٥	٤	٣	٢	١
١١-	يجب ان يكون برنامج التدريب اثناء الخدمة جزءا من عمليـة مستمرة وليس برنامجا واحـدا وانتهى الامر .	٥	٤	٣	٢	١
١٢-	يجب ان يكون المدير مسـؤولا عن نشاطات التدريب اثنـاء الخدمة في مدرسته .	٥	٤	٣	٢	١
١٣-	يجب ان يكون برنامج التدريب اثناء الخدمة مرنا وقابلا للتكيف ليسمح بالاهتمام بمشاكل المعلم الفردية .	٥	٤	٣	٢	١
١٤-	لا توجد متابعة كافية لمعرفة اثر التدريب اثناء الخدمة علـى اداء المعلم في الصف .	٥	٤	٣	٢	١
١٥-	يجب السماح للمعلمين بالتغيب عن المدرسة لحضور دورات التدريب اثناء الدوام المدرسي اذا كان ذلك ضروريا" .	٥	٤	٣	٢	١

الرقم	العبـــــارة	اوافـق بشـدة 5	اوافـق 4	غير متأكد 3	لا اوافق 2	لا اوافق بشـدة 1
١٦-	معظم المحاضرين في برامـج ودورات التدريب اثناء الخدمة مؤهلين جيدا" لهذا العمل .	٥	٤	٣	٢	١
١٧-	يجب ان تكون عملية تقييم برامج التدريب اثناء الخدمة عمليـة مستمرة .	٥	٤	٣	٢	١
١٨-	يجب ان يكون في كل مدرسـة معلم مسؤول عن تنسيـق نشاطات التدريب اثنـاء الخدمة .	٥	٤	٣	٢	١
١٩-	ان عملية تقييم المتـدرب (الامتحانات) يمكن ان تقلل الفائدة من برامج التدريب اثناء الخدمة .	٥	٤	٣	٢	١
٢٠-	معظم برامج / دورات التدريب اثناء الخدمة يجب ان تعقد في المنطقة التي يعمل بهـا المعلم ، بل من الافضل ان تعقد في المدرسة التي يعمل بها .	٥	٤	٣	٢	١
٢١-	يجب ان يعطى المعلم الفرصة ليختار نوع التدريب الذى يشعر بانه يقوى ويحسن أداءه المهني .	٥	٤	٣	٢	١
٢٢-	تبدو برامج التدريب اثناء الخدمة اكثر فاعلية عندما يشارك جميع اعضاء الهيئة التدريسية فـي نشاط تدريبي معين .	٥	٤	٣	٢	١

الرقم	العبـــــارة	اوافـق بشدة 5	اوافـق 4	غيرمتاكد 3	لا اوافق 2	لا اوافـق بشدة 1
٢٣-	يجب ان تعطي برامج التدريب اثناء الخدمة الفرصة للمعلمين المتميزين لاستخدام مهارتهم كمحاضرين ومدرسين في هـذه البرامج .	٥	٤	٣	٢	١
٢٤-	معظم المعلمين لا يرغبون في الاشتراك في برامج / دورات التدريب اثناء الخدمة .	٥	٤	٣	٢	١
٢٥-	ان الموجهين مؤهلين اكثـر من المعلمين لتحديد الحاجة الى التدريب اثناء الخدمة .	٥	٤	٣	٢	١
٢٦-	يجب ان يشارك المعلمون في تطوير طرق تقييم برامـــج التدريب اثناء الخدمة .	٥	٤	٣	٢	١
٢٧-	اذا شارك المعلمون فـــي التخطيط لبرامج ودورات التدريب اثناء الخدمة فـان التزام المعلمين بهذه البرامج سيكون اكبـر .	٥	٤	٣	٢	١
٢٨-	يجب ان يطلب الى كل معلـم الاشتراك في بعض برامـــج التدريب كل سنة .	٥	٤	٣	٢	١
٢٩-	يجب ان تكون هناك حوافـــز لمن يشارك في برامج التدريب اثناء الخدمة لتشجيع المعلمين على المشاركـة .	٥	٤	٣	٢	١

الرقم	العبارة	اوافق بشدة 5	اوافق 4	غير متأكد 3	لا اوافق 2	لا اوافق بشدة 1
٣٠-	ان تطبيق الافكار الجديدة التي تعرض في برامج التدريب اثناء الخدمة يحتاج الى دعم من مدير المدرسة .	٥	٤	٣	٢	١
٣١-	يشعر المعلمون ان اسلوب المحاضرة (وهو الاسلوب السائد في برامج التدريب) عمل واقل فاعلية من اسلوب النقاش .	٥	٤	٣	٢	١
٣٢-	يجب ان تكون هناك فرص في برامج التدريب اثناء الخدمة للمعلمين للعمل مع بعضهم لمعالجة المشاكل المدرسية .	٥	٤	٣	٢	١
٣٣-	الاساليب العملية اكثر فائدة من الامور النظرية في برامج التدريب اثناء الخدمة .	٥	٤	٣	٢	١
٣٤-	برامج التدريب اثناء الخدمة يجب ان تشتمل على اساليب عامة واساليب خاصة .	٥	٤	٣	٢	١
٣٥-	يجب ان تكون هناك فرص في برامج التدريب اثناء الخدمة للمعلمين للمشاركة في نشاطات مختلفه غير حضور المحاضرات والقراءة .	٥	٤	٣	٢	١
٣٦-	يجب ان تكون هناك علاقة وثيقة بين الملاحظة والتطبيق في برامج التدريب اثناء الخدمة .	٥	٤	٣	٢	١

الرقم	العبارة	اوافق بشدة 5	اوافق 4	غير متأكد 3	لا اوافق 2	لا اوافق بشدة 1
٣٧-	عندما يصاحب تفسير نظرى الاسلوب العملي ، يكتسب المعلمون مفاهيم تساعدهم على تطبيق الاسلوب في صفوفهم .	٥	٤	٣	٢	١
٣٨-	ان من الافضل متابعة محاضرات التدريب اثناء الخدمة على شاشة التلفاز في المنزل بدلا" من السفر لحضورها في الكلية او الجامعة .	٥	٤	٣	٢	١
٣٩-	ان استخدام تكنولوجيا التعليم في برامج التدريب اثناء الخدمة قليل الى درجة كبيرة .	٥	٤	٣	٢	١
٤٠-	لا يجب ان تدار برامج ودورات التدريب اثناء الخدمة بطريقة رسمية كفصول الكلية او الجامعة بل بطريقة غير رسمية لاتاحة المزيد من التفاعل .	٥	٤	٣	٢	١

ملاحظة : اذا كنت تشارك حاليا في احد برامج التدريب اثناء الخدمة اجب من فضلك على القسم (جـ) واذا لم تكن تشارك حاليا في اى من برامج او دورات التدريب اثناء الخدمة فاشكرك على تعبئة الاستبيان حتى هذه النقطة .

" جـ . استبيان للمشاركين حاليا في احد البرامج

الرقم	العبارة	اوافق بشدة 5	اوافق 4	غير متأكد 3	لا اوافق 2	لا اوافق بشدة 1
	اذا كنت تشارك حاليا في دورة / برنامج للتدريب اثناء الخدمة فالرجاء الاجابة على النقاط التالية:					
١ -	اعتقد بان البرنامج / الدورة مفيدة للمعلمين .	٥	٤	٣	٢	١
٢ -	اهداف البرنامج / الدورة واضحة ومحددة .	٥	٤	٣	٢	١
٣ -	ان محتوى البرنامج / الدورة يحقق توازنا" بين الامور النظرية والعملية .	٥	٤	٣	٢	١
٤ -	اجد البرنامج / الدورة غير ذى فائدة ومضيعة للوقت .	٥	٤	٣	٢	١
٥ -	اشعر بان كمية العمل المطلوبة للبرنامج غير مناسبة .	٥	٤	٣	٢	١
٦ -	اقد البرنامج على مبدأ التربية مدى الحياة كعنصر متمم لبرامج تدريب المعلمين في الاردن .	٥	٤	٣	٢	١
٧ -	يحتاج البرنامج الى اعادة تنظيم لجعله اكثر فاعلية وفائدة .	٥	٤	٣	٢	١
٨ -	ان المراجع والكتب والمذكرات المطبوعة اللازمة متوفرة دائما .	٥	٤	٣	٢	١
٩ -	لا يوجد اشراف كاف على المتدربين في الميدان .	٥	٤	٣	٢	١
١٠-	المحاضرون اكفاء ومحبون للمساعدة .	٥	٤	٣	٢	١

- هل لديك اية ملاحظات اخرى حول البرنامج / الدورة ؟ .....
.....
.....
.....
.....

شكـــرا" لتعاونكـــم

محمد هاني الحلوانـــي

APPENDIX 6A

(Correspondence concerning the Survey)

A letter from the MOE to the Directors of Education requesting their co-operation to conduct the survey

بسم الله الرحمن الرحيم

THE HASHEMITE KINGDOM
OF JORDAN

MINISTRY OF EDUCATION

Ref. No. ______________

Date ______________

المملكة الأردنية الهاشمية
وزارة التربية والتعليم

الرقم ١٠/٣ / ٤٦٩٤٦
التاريخ ٢٠/١/١٤١٠
الموافق ٢٠/٨/١٩٨٩

مدير التربية والتعليم لمحافظة / للواء

الموضوع : البحث التربوي

يقوم الباحث السيد محمد هاني الحلواني باجراء دراسة موضوعها "تدريب المعلمين اثناء الخدمة" ويحتاج الى توزيع استبيان على المشرفين والمعلمين التابعين لمديريتكم لتعبئته.

أرجو تسهيل مهمة الباحث المذكور وتقديم المساعدة الممكنة له.

واقبلوا الاحترام

/ وزير التربية والتعليم

الدكتور وجيه الفرح
مدير البحث التربوي والتطوير

نسخة / لمدير عام التخطيط والتطوير والبحث التربوي
نسخة / لمدير البحث والتطوير التربوي
نسخة / لرئيس قسم البحث التربوي
نسخة / للملف رقم ١٠/٣

ع.ح/٢٤/٨

APPENDIX 6B

(Correspondence concerning the survey)

A letter from the MOHE to all the Colleges requesting their co-operation in conducting the survey

THE HASHEMITE KINGDOM OF JORDAN
Ministry of Higher Education
P. O. Box 138 JUBEIHA
JORDAN

No. ———
Date ———

بسم الله الرحمن الرحيم

المملكة الاردنية الهاشمية
وزارة التعليم العالي
ص.ب (١٣٨) الجبيهة
الاردن

الرقم ١٧١/٨/٨٩هـ
التاريخ ١١ محرم ١٤١٠هـ
الموافق ١٢/٨/١٩٨٩م

عميد كلية

الموضوع: الزيارات الميدانية

أرجو تسهيل مهمة السيد محمد هادي الحلواني لتوزيع الاستبيان المتعلق بدراسته للحصول على درجة الدكتوراه في الادارة التربوية لمعرفة اراء المعلمين حول موضوع تدريبهم اثناء الخدمة في الاردن .

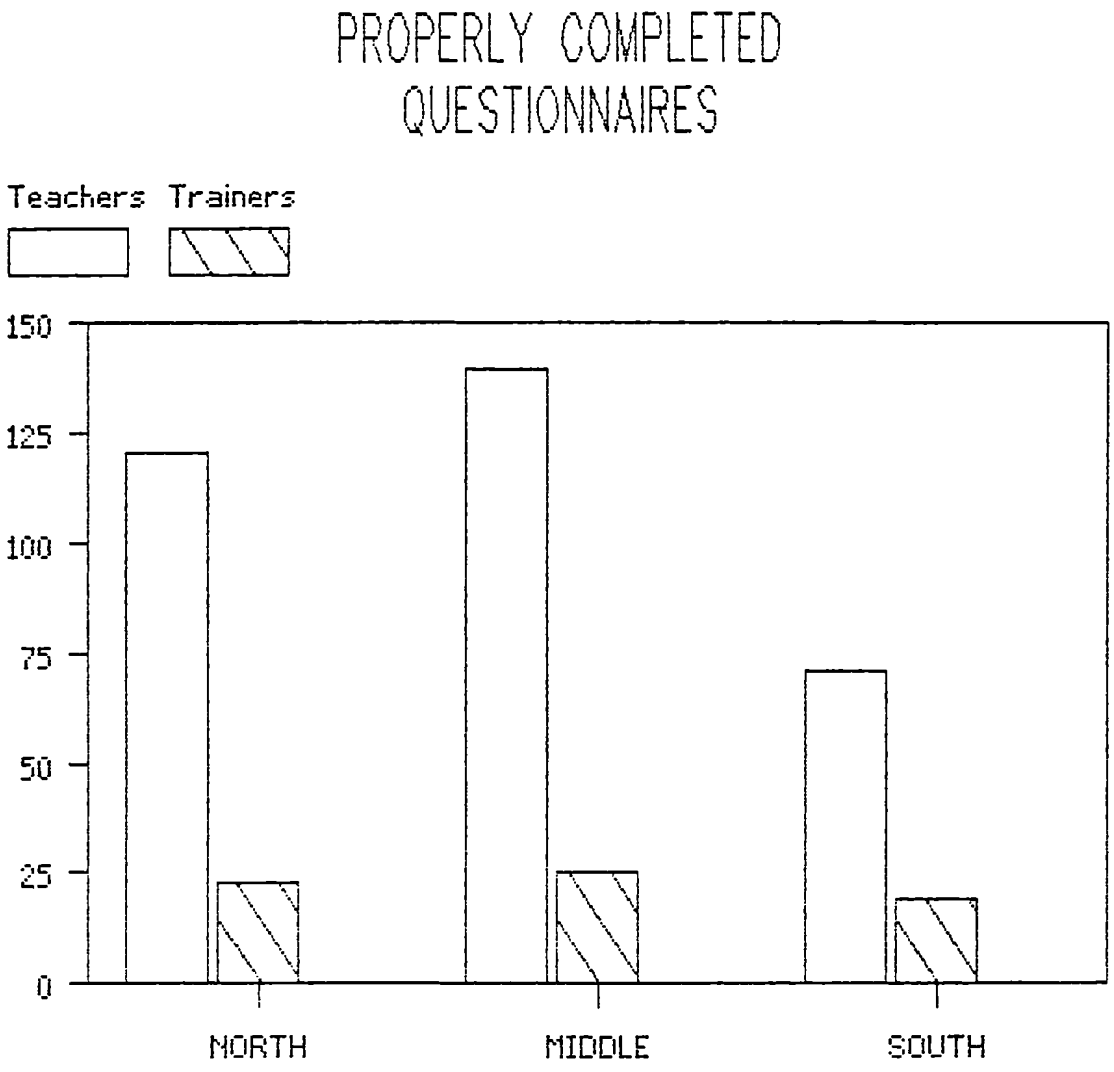
واقبلوا الاحترام.

مدير التعليم العالي

نسخة / مدير كليات المجتمع والمعاهد
- قسم الخطط الدراسية والمناهج
- الملف
ن.ع

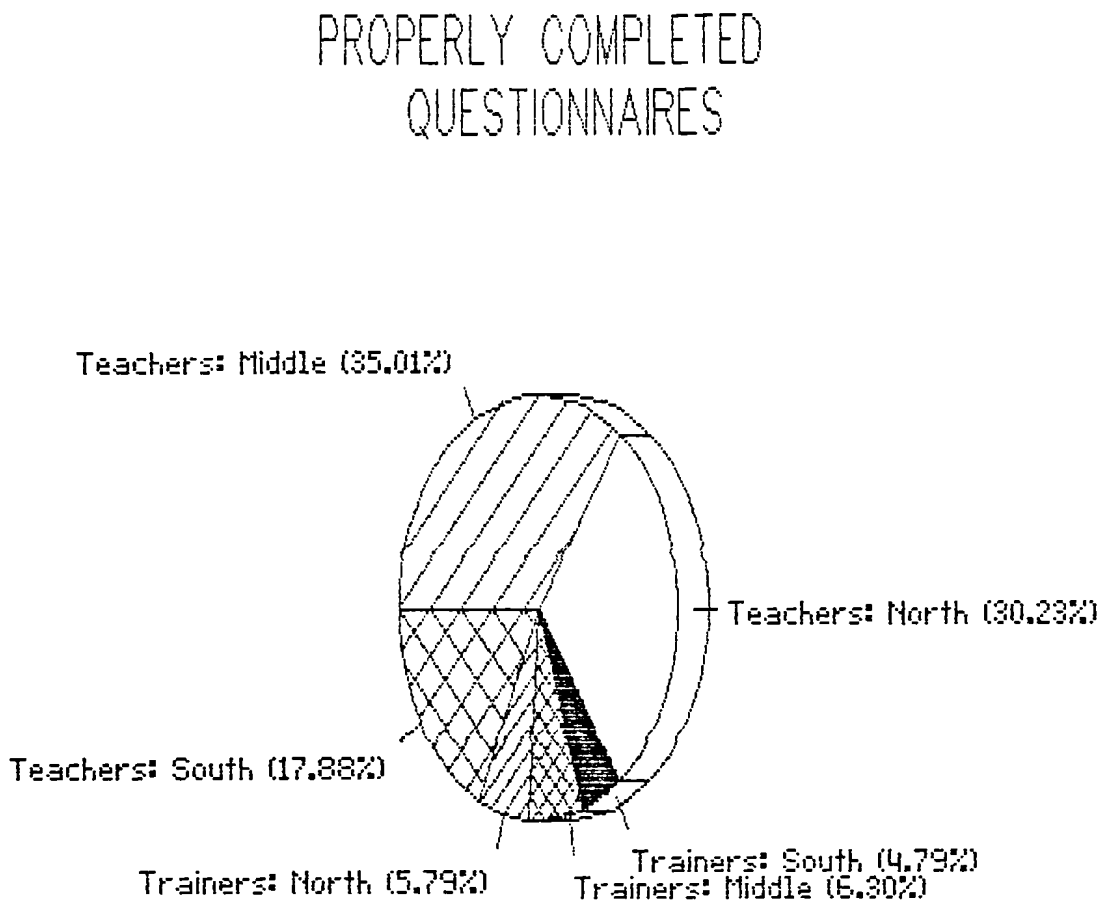
APPENDIX 7A: Data Illustrations

7A1: Properly Completed Questionnaires (Numbers)



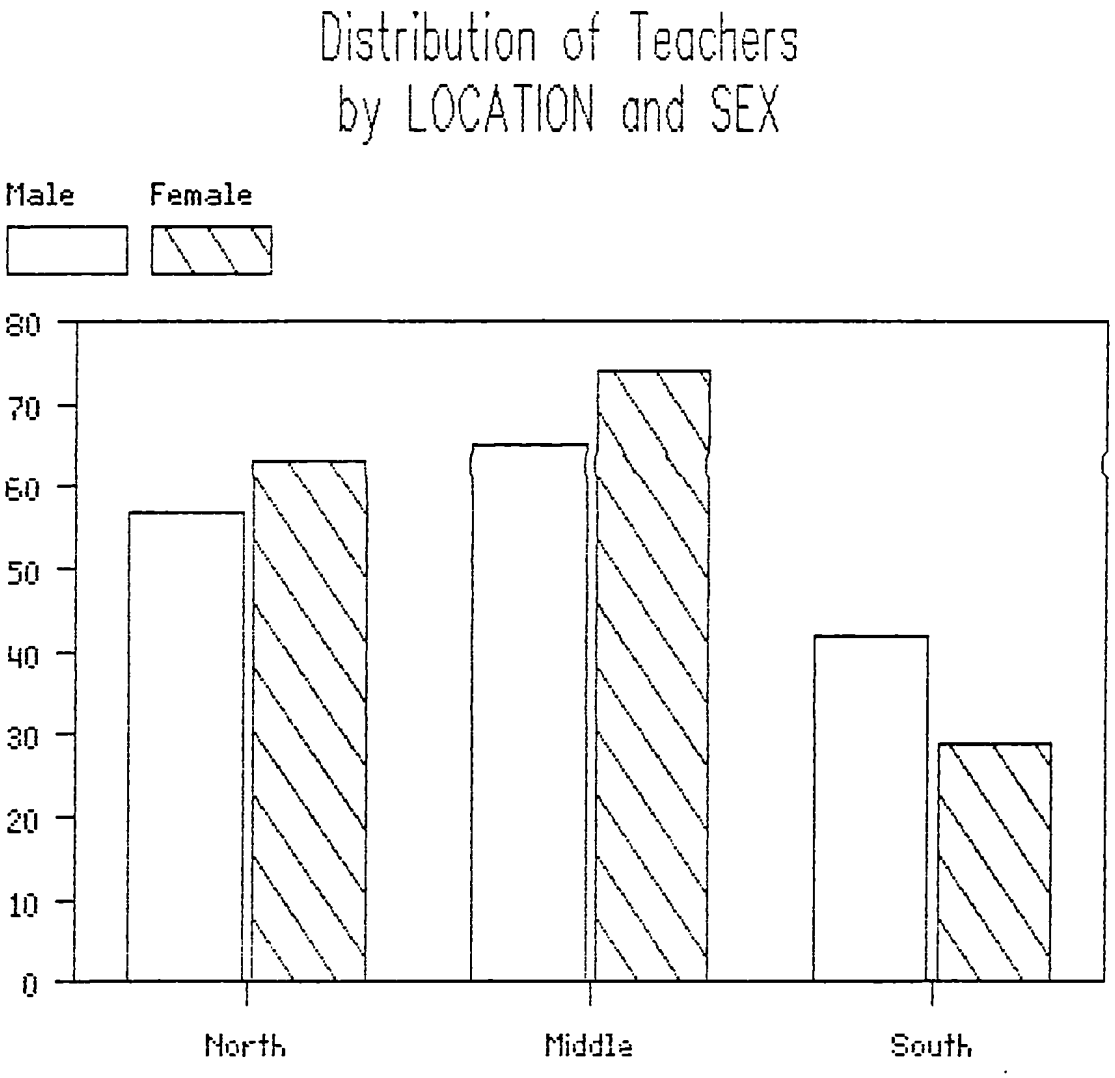
APPENDIX 7A

7A2: Properly completed questionnaires (Percentage)

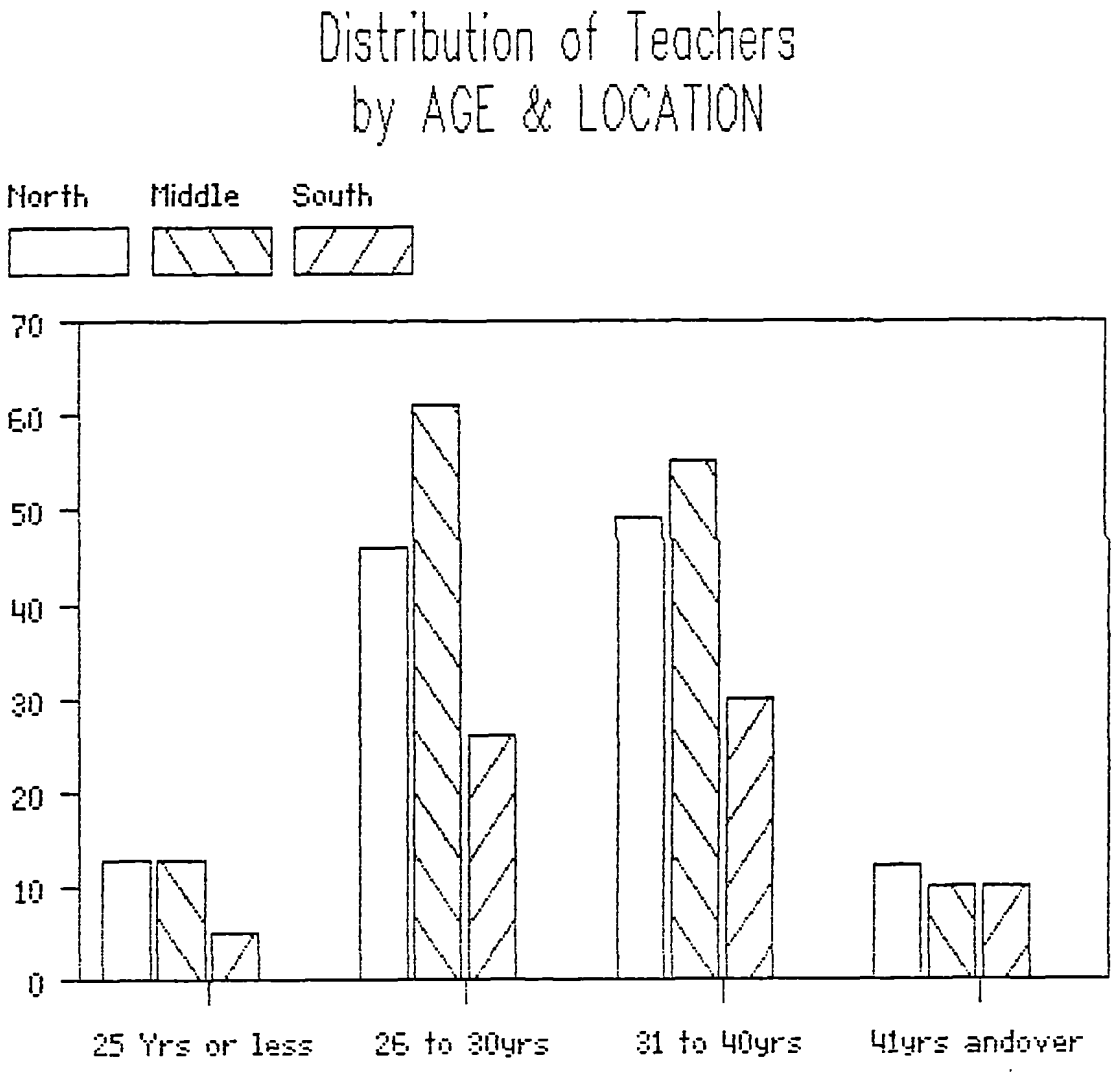


APPENDIX 7B: Teachers' Sample

B_1

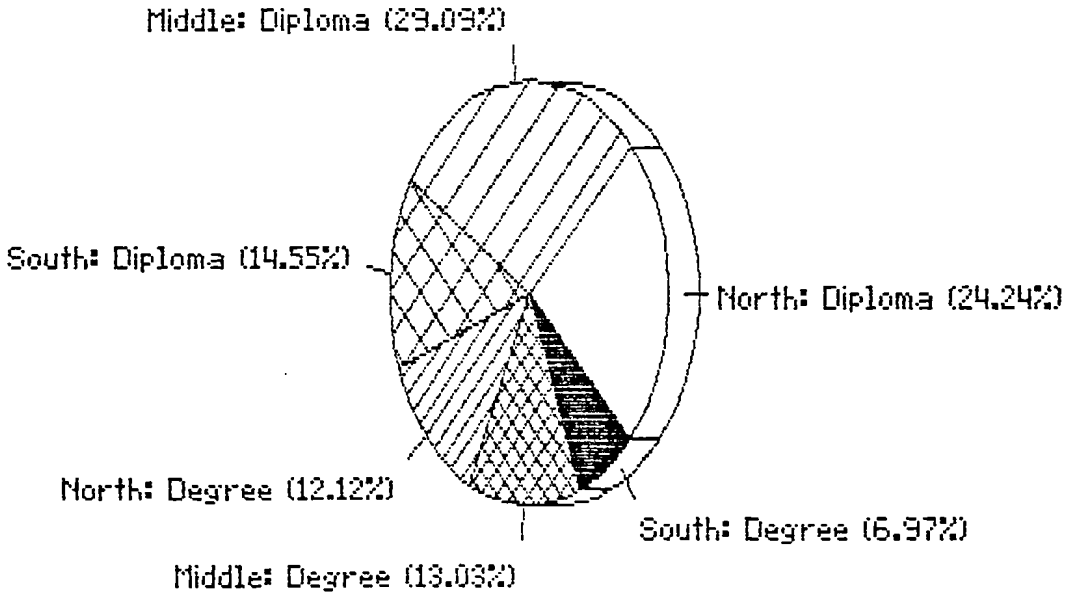


B_2

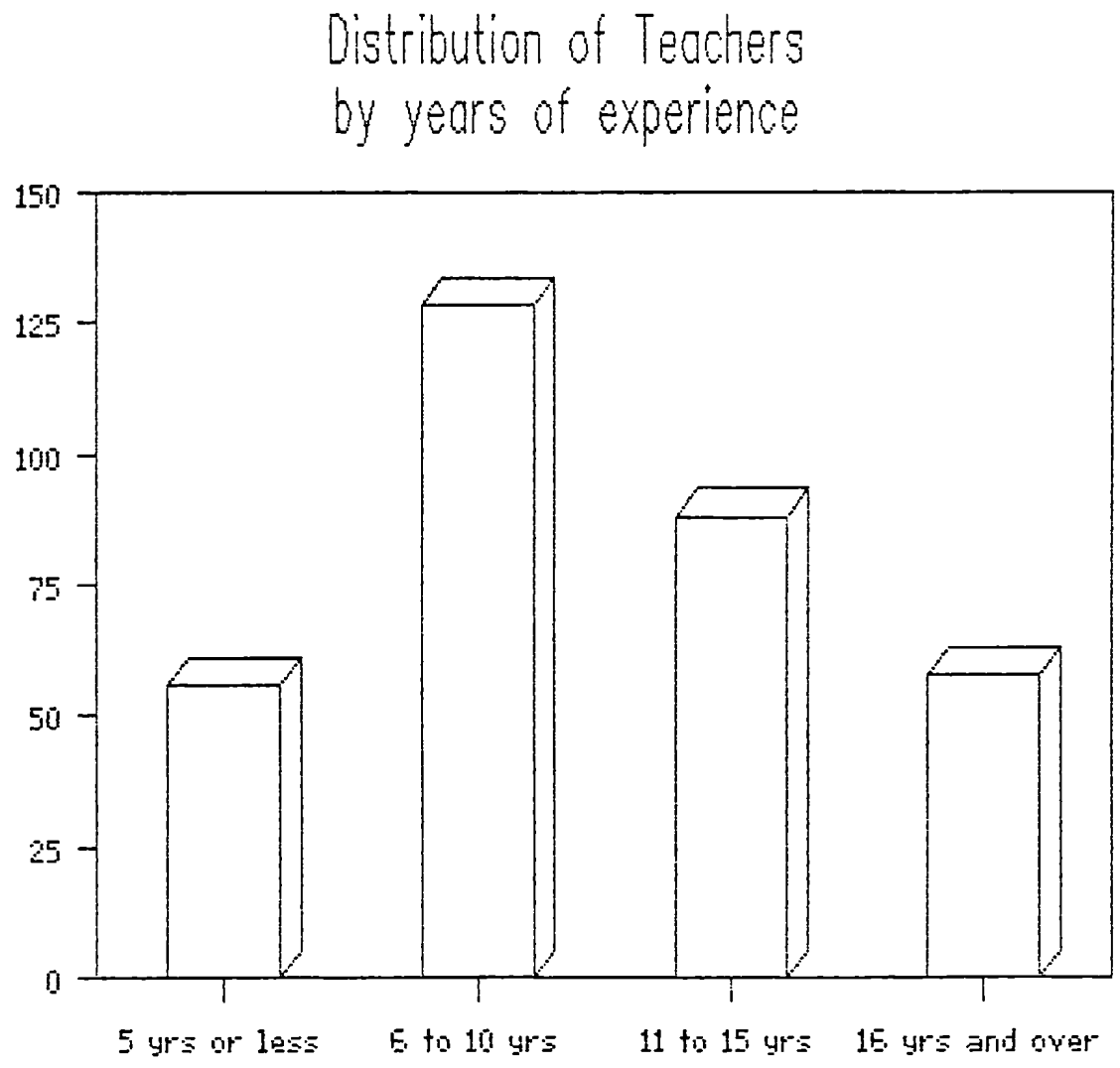

Distribution of Teachers
by AGE & LOCATION
North
Middle
South
70
60
50
40
30
20
10
0
25 Yrs or less
26 to 30yrs
31 to 40yrs
41yrs andover

B_3

Distribution of Teachers by QUALIFICATIONS & LOCATION



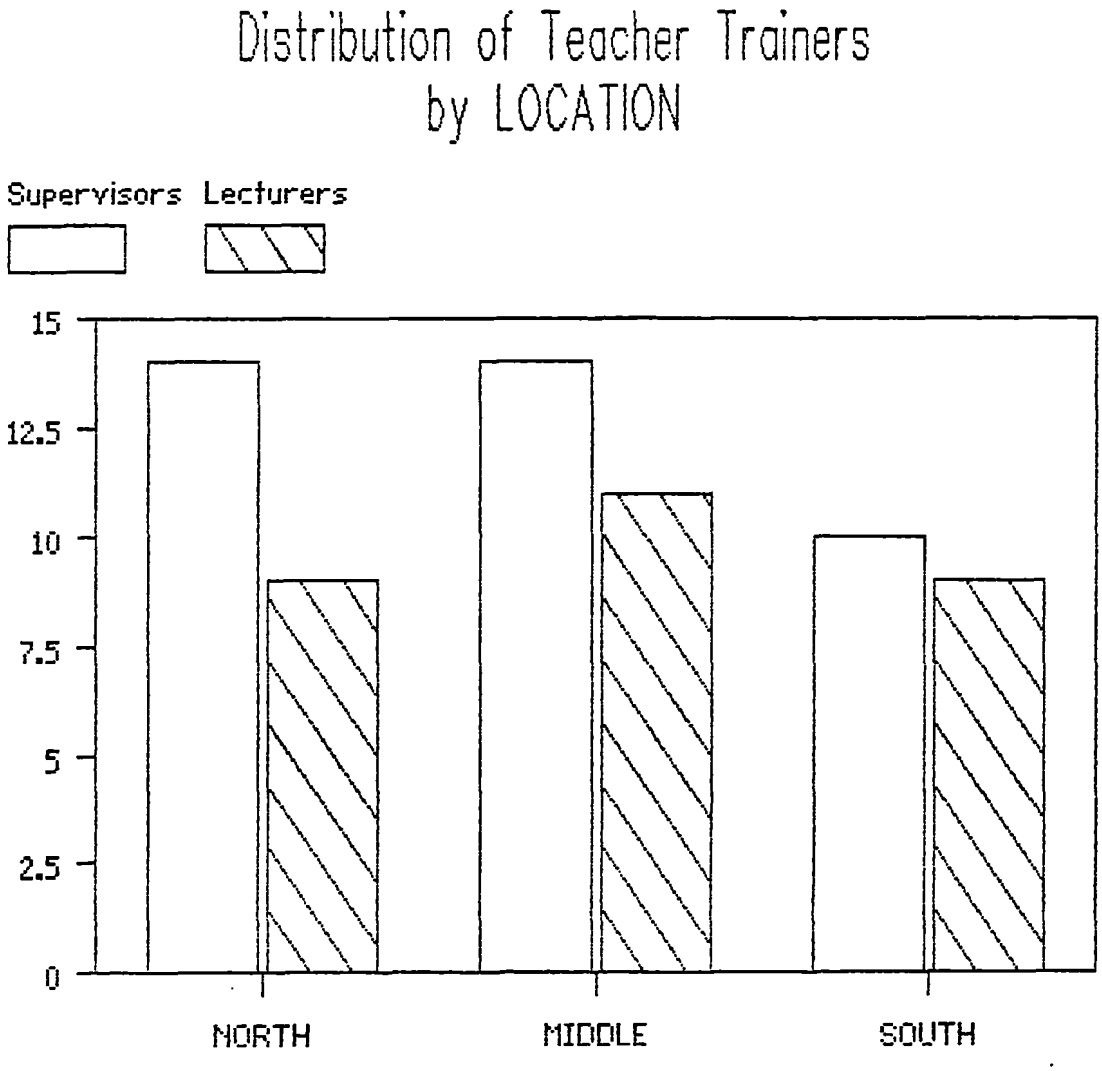
B_4


Distribution of Teachers
by years of experience
150
125
100
75
50
25
0
5 yrs or less
6 to 10 yrs
11 to 15 yrs
16 yrs and over

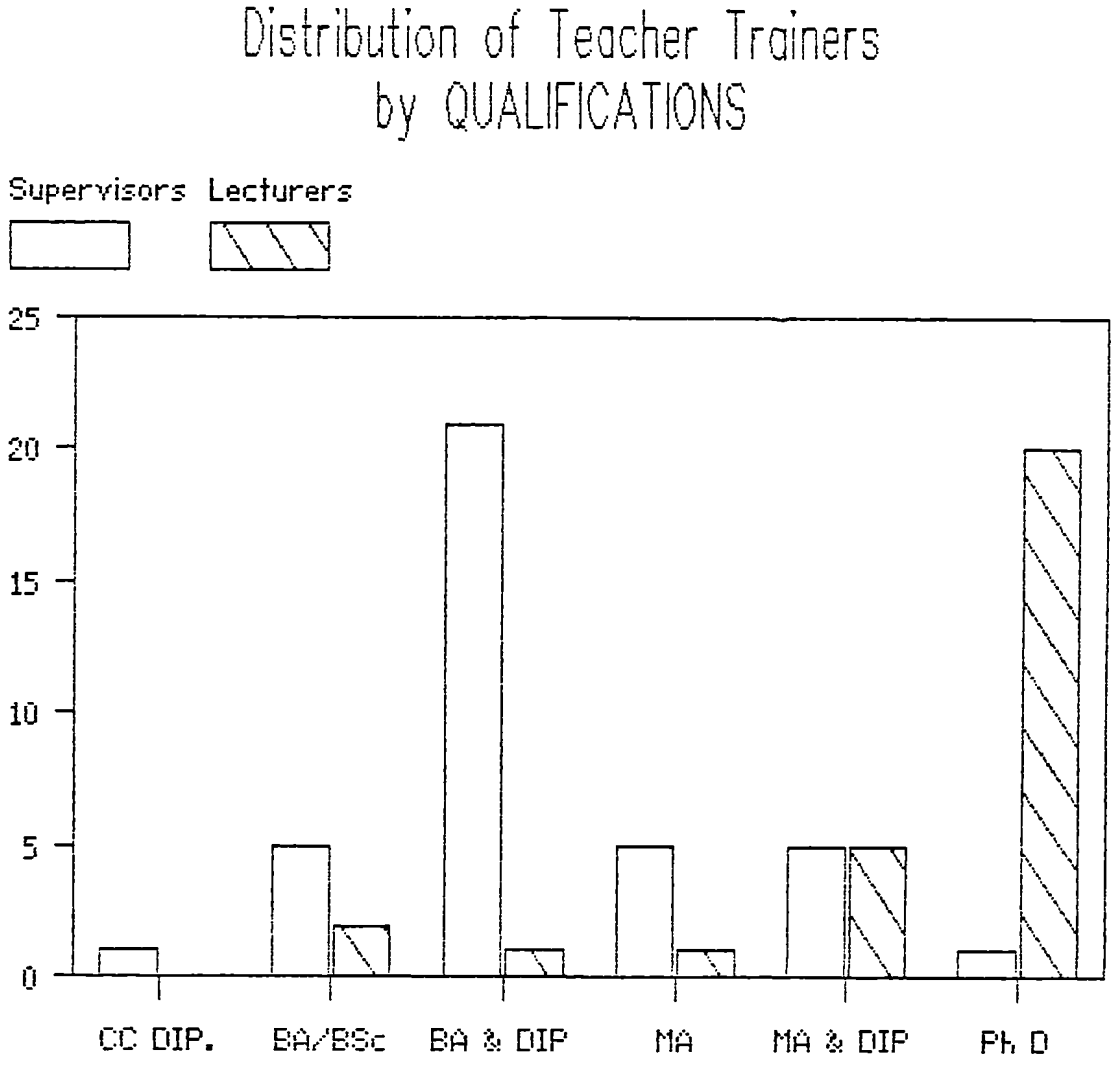
APPENDIX 7C:

Teachers Trainers Sample

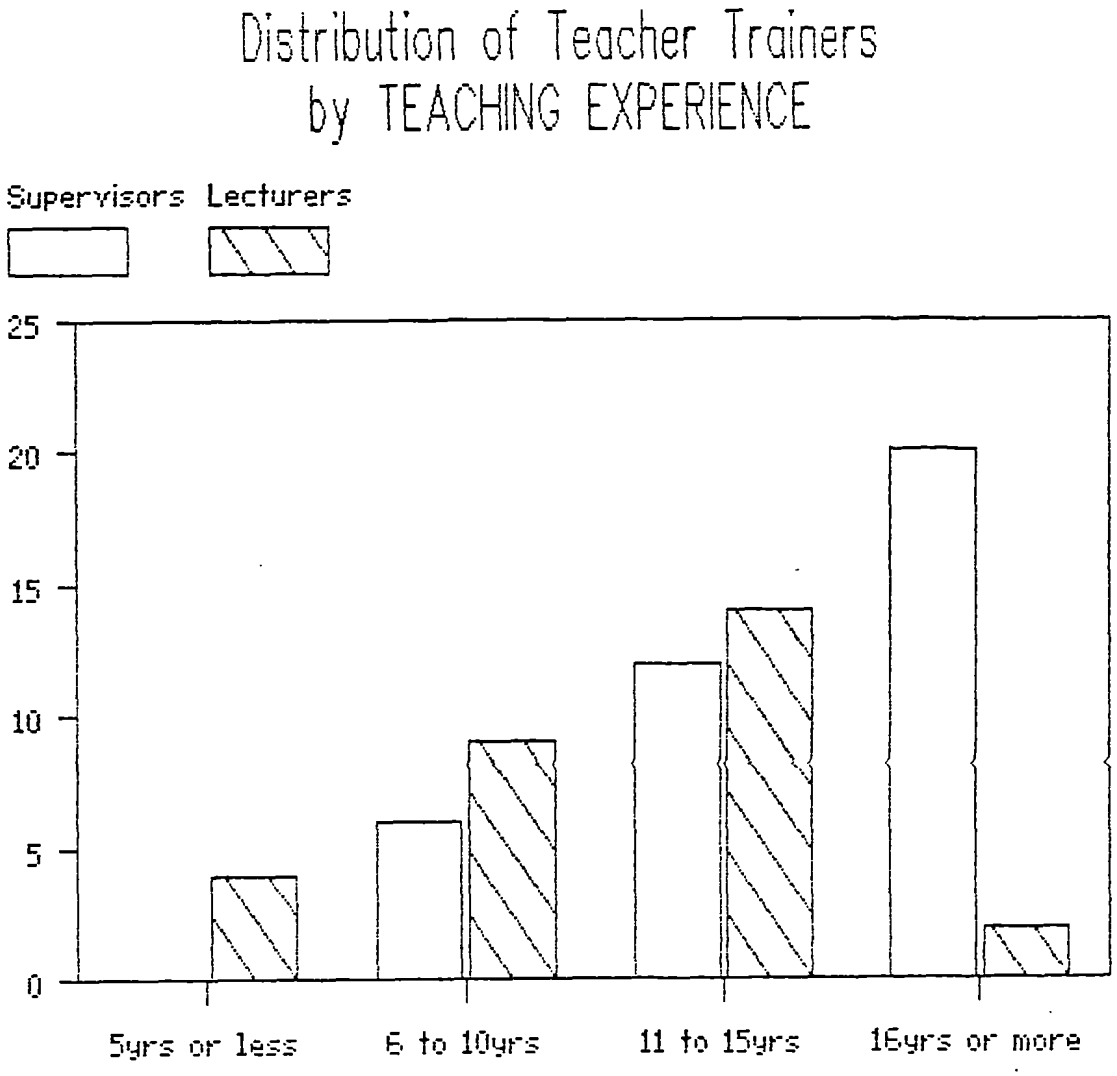
C_1



C_2


Distribution of Teacher Trainers
by QUALIFICATIONS
Supervisors
Lecturers
25
20
15
10
5
0
CC DIP.
BA/BSc
BA & DIP
MA
MA & DIP
Ph D

C_3


Distribution of Teacher Trainers
by TEACHING EXPERIENCE
Supervisors
Lecturers
25
20
15
10
5
0
5yrs or less
6 to 10yrs
11 to 15yrs
16yrs or more

APPENDIX 8

TABLE 1

Cross-Tabulation of Preference Questions by Location of Teachers

Question No.	Variable Location	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
13 1)	North Middle South	54.3 59.6 54.9	25.5 14.9 13.7	12.8 10.6 9.8	$X^2 = 10.55$ $p < .22$
2)	North Middle South	27.5 14.7 19.0	36.2 20.6 16.7	21.7 29.4 33.3	$X^2 = 18.28$ $p < 0.01$
3)	North Middle South	14.8 7.8 16.2	31.1 32.8 18.9	32.8 29.7 40.5	$X^2 = 5.94$ $p < 0.65$
4)	North Middle South	23.3 18.3 21.7	23.3 36.6 37.0	28.3 25.4 28.3	$X^2 = 7.72$ $p < .46$
5)	North Middle South	50.6 44.6 44.2	15.2 30.7 36.5	17.7 10.9 9.6	$X^2 = 14.65$ $p < .06$
14 1)	North Middle South	47.6 56.9 28.3	16.2 16.4 13.2	12.4 4.3 9.4	$X^2 = 23.99$ $p < .01$
2)	North Middle South	19.1 22.8 23.5	31.9 40.6 25.5	33.0 30.7 35.3	$X^2 = 8.10$ $p < .23$
3)	North Middle South	4.8 2.6 2.1	32.5 46.8 40.4	19.3 9.1 10.6	$X^2 = 8.05$ $p < .42$
4)	North Middle South	52.2 49.5 77.4	15.2 17.2 12.9	14.1 6.1 3.2	$X^2 = 23.35$ $p < .01$
15 1)	North Middle South	15.1 8.1 18.2	17.4 5.4 12.7	12.8 19.8 18.2	$X^2 = 30.73$ $p < .01$

Table 1 (Continued)

Question No.	Variable Location	First Choice	Second Choice	Third Choice	Chi-Square Results
15 2)	North	15.4	26.4	25.3	$X^2=24.55$
	Middle	7.4	24.1	14.8	$p < .03$
	South	9.1	20.0	40.0	
3)	North	36.7	24.5	20.4	$X^2=16.11$
	Middle	47.1	24.8	16.5	$p < .18$
	South	36.7	20.0	23.3	
4)	North	20.5	14.1	21.8	$X^2=27.59$
	Middle	14.9	13.5	21.6	$p < .01$
	South	7.5	17.5	15.0	
5)	North	40.6	29.2	15.1	$X^2=16.67$
	Middle	26.0	34.6	21.3	$p < .27$
	South	34.5	36.4	12.7	
6)	North	9.4	10.9	15.6	$X^2=25.10$
	Middle	3.1	4.7	9.4	$p < .06$
	South	17.9	10.3	10.3	
7)	North	15.1	10.5	7.0	$X^2=31.73$
	Middle	5.5	10.9	19.1	$p < .01$
	South	11.1	15.6	6.7	
8)	North	28.1	12.5	17.7	$X^2=10.08$
	Middle	29.7	12.7	15.3	$p < .25$
	South	48.3	8.6	13.8	
16 1)	North	21.3	45.7	31.9	$X^2=10.08$
	Middle	27.5	45.1	26.5	$p < .25$
	South	14.6	37.5	45.8	
2)	North	43.2	24.2	30.5	$X^2=10.20$
	Middle	27.3	32.7	39.1	$p < .11$
	South	43.1	32.8	24.1	
3)	North	28.6	-	35.7	$X^2 = 7.02$
	Middle	18.5	3.7	22.2	$p < .53$
	South	30.0	10.1	10.0	

APPENDIX 8

TABLE 2

Cross-Tabulation of Preference Questions by Sex of Teachers

Question No.	Variable Sex	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
13					
1)	F	56.1	18.2	9.8	$X^2=2.08$
	M	57.5	18.9	12.6	$p < .71$
2)	F	20.2	22.6	33.3	$X^2=3.51$
	M	21.1	28.4	22.1	$p < .47$
3)	F	11.6	37.2	30.2	$X^2=8.24$
	M	13.2	19.7	36.8	$p < .08$
4)	F	23.9	29.5	21.6	$X^2=5.50$
	M	18.0	34.8	3.26	$p < .23$
5)	F	48.7	21.2	12.4	$X^2=5.18$
	M	44.5	31.9	13.4	$p < .26$
14					
1)	F	52.1	14.3	10.6	$X^2=5.77$
	M	43.3	12.2	6.7	$p < .21$
2)	F	23.2	36.6	28.8	$X^2=1.67$
	M	19.8	32.2	36.4	$p < .64$
3)	F	1.9	42.7	41.7	$X^2=2.63$
	M	4.8	43.3	37.5	$p < .62$
4)	F	49.6	17.6	8.0	$X^2=9.48$
		64.8	13.3	8.6	p .051
15					
1)	F	13.8	12.2	16.3	$X^2=10.18$
	M	11.6	10.1	17.8	$p < .17$
2)	F	10.5	25.8	25.8	$X^2=9.60$
	M	10.8	22.3	22.3	$p < .21$
3)	F	39.4	27.0	15.3	$X^2=16.39$
	M	43.0	20.4	23.2	$p < .01$
4)	F	16.0	12.8	18.1	$X^2=5.77$
	M	15.3	16.3	22.4	$p < .56$

Table 2 (Continued)

Question No.	Variable Sex	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
15 5)	F	40.1	26.5	17.0	$X^2=12.92$
	M	25.5	39.7	17.7	$p<.07$
6)	F	12.8	9.3	12.8	$X^2=11.28$
	M	4.9	7.4	11.1	$p<.18$
7)	F	10.3	15.4	18.8	$X^2=10.41$
	M	9.7	8.1	13.7	$p<.16$
8)	F	31.3	9.9	19.1	$X^2=12.62$
	M	34.8	13.5	12.8	$p<.12$
16 1)	F	53.5	31.8	12.1	$X^2=3.92$
	M	57.7	25.0	14.1	$p<.56$
2)	F	26.3	36.4	35.6	$X^2=8.07$
	M	19.0	50.8	29.4	$p<.08$
3)	F	36.2	35.4	26.0	$X^2=9.36$
	M	36.8	24.3	39.0	$p<.24$

APPENDIX 8

TABLE 3

Cross-Tabulation of Preference Questions by Qualifications of Teachers

Question No.	Variable Qualification	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
13					
1)	Dip	56.6	20.8	8.7	$X_{2}=4.52$
	BA/BSc	57.0	14.0	16.3	$p < .34$
2)	Dip	20.8	25.8	30.0	$X^2=2.29$
	BA/BSc	20.3	25.4	22.0	$p < .68$
3)	Dip	11.8	30.0	34.5	$X^2=0.72$
	BA/BSc	13.5	26.9	30.8	$p < .94$
4)	Dip	25.0	30.4	25.0	$X^2=3.83$
	BA/BSc	13.8	35.4	30.8	$p < .42$
5)	Dip	52.7	21.3	12.6	$X^2=8.48$
	BA/BSc	35.4	36.6	14.6	$p < .07$
14					
1)	Dip	50.0	16.1	8.1	$X^2=3.61$
	BA/BSc	43.2	14.8	9.1	$p < .46$
2)	Dip	25.4	34.7	31.2	$X^2=9.25$
	BA/BSc	13.3	32.9	35.6	$p < .02$
3)	Dip	4.1	45.9	38.4	$X^2=4.77$
	BA/BSc	1.6	36.1	42.6	$p < .31$
4)	Dip	50.0	12.7	10.8	$X^2=28.90$
	BA/BSc	71.3	20.7	3.4	$p < .001$
15					
1)	Dip	13.8	12.6	19.8	$X^2=14.17$
	BA/BSc	10.6	8.2	11.8	$p < .05$
2)	Dip	10.2	23.5	25.3	$X^2=10.26$
	BA/BSc	11.4	25.0	21.6	$p < .17$
3)	Dip	45.6	22.2	16.9	$X^2=6.40$
	BA/BSc	33.3	26.7	24.4	$p < .37$

Table 3 (Continued)

Question No.	Variable Qualification	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
15 4)	Dip BA/BSc	16.0 14.9	17.6 9.0	18.4 23.9	$X^2=7.29$ $p < .39$
5)	Dip BA/BSc	35.0 28.2	32.5 34.1	15.8 21.2	$X^2=3.57$ $p < .83$
6)	Dip BA/BSc	9.4 8.2	10.4 4.9	13.2 9.8	$X^2=7.69$ $p < .46$
7)	Dip BA/BSc	9.1 11.7	14.6 5.2	18.9 10.4	$X^2=9.49$ $p < .22$
8)	Dip BA/BSc	27.8 44.7	11.2 12.9	20.9 4.7	$X^2=21.44$ $p < .01$
16 1)	Dip BA/Bsc	57.3 52.6	26.8 32.0	14.1 11.0	$X^2= 6.14$ $p < .29$
2)	Dip BA/BSc	25.5 16.5	47.3 36.7	26.7 44.3	$X^2=10.78$ $p < .03$
3)	Dip BA/BSc	33.3 42.7	31.0 27.0	34.5 29.2	$X^2=2.24$ $p < .52$

APPENDIX 8

TABLE 4

Cross-Tabulation of Preference Questions by Teaching Experience of Teachers

Question No.	Variable Teaching Experience	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
13 1)	1-5 years	42.9	16.3	18.4	$X^2 = 15.32$ $p < .22$
	6-10	61.8	18.6	6.9	
	11-15	56.9	20.0	9.2	
	16- Over	60.5	18.6	16.3	
2)	1-5 years	10.3	15.4	33.3	$X^2 = 29.65$ $p < .01$
	6-10	30.0	20.0	28.6	
	11-15	20.5	29.5	29.5	
	16- Over	11.5	50.0	11.5	
3)	1-5 years	8.1	29.7	32.4	$X^2 = 13.40$ $p < .34$
	6-10	6.0	31.3	35.8	
	11-15	20.5	30.8	25.6	
	16- Over	26.3	15.8	42.1	
4)	1-5 years	23.3	32.6	27.9	$X^2 = 10.88$ $p < .53$
	6-10	17.4	30.4	31.9	
	11-15	19.0	33.3	28.6	
	16- Over	30.4	34.8	8.7	
5)	1-5 years	54.3	17.4	13.0	$X^2 = 13.66$ $p < .32$
	6-10	37.5	34.1	12.5	
	11-15	48.4	25.8	16.1	
	16- Over	55.6	22.2	8.3	
14 1)	1-5 years	51.9	9.6	7.7	$X^2 = 10.18$ $p < .60$
	6-10	46.8	16.5	11.0	
	11-15	46.5	12.7	7.0	
	16- Over	47.6	26.2	4.8	
2)	1-5 years	21.3	38.3	25.5	$X^2 = 11.35$ $p < .25$
	6-10	20.4	29.6	36.7	
	11-15	14.9	41.8	34.3	
	16- Over	38.2	26.5	26.5	
3)	1-5 years	2.6	31.6	52.6	$X^2 = 9.43$ $p < .67$
	6-10	3.5	48.2	32.9	
	11-15	1.8	42.9	42.9	
	16- Over	7.1	42.9	35.7	
4)	1-5 years	50.0	25.0	6.8	$X^2 = 16.61$ $p < .16$
	6-10	59.0	18.0	8.0	
	11-15	65.0	9.0	7.5	
	16- Over	47.6	9.5	11.9	

Table 4 (Continued)

Question No.	Variables Teaching Experience	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
15 1)	1-5 years	19.6	11.8	17.6	$X^2 = 22.94$ $p < .38$
	6-10	11,3	13.4	13.4	
	11-15	12.3	10.8	20.0	
	16- Over	7.7	5.1	20.5	
2)	1-5 years	6.3	27.1	14.6	$X^2 = 25.23$ $p < .24$
	6-10	10.9	22.8	28.7	
	11-15	12.1	24.2	24.2	
	16- Over	12.8	23.1	23.1	
3)	1-5 years	38.0	20.0	18.0	$X^2 = 23.40$ $p < .18$
	6-10	34.2	27.0	21.6	
	11-15	44.9	26.1	17.4	
	16- Over	55.1	16.3	18.4	
4)	1-5 years	18.2	15.9	29.5	$X^2 = 21.89$ $p < .41$
	6-10	19.2	12.3	15.1	
	11-15	8.0	14.0	22.0	
	16- Over	16.0	20.0	16.0	
5)	1-5 years	26.9	34.6	23.1	$X^2 = 28.92$ $p < .12$
	6-10 years	40.7	25.7	17.7	
	11-15	37.7	29.9	13.0	
	16- Over	13.0	54.3	17.4	
6)	1-5 years	4.9	9.8	19.5	$X^2 = 24.98$ $p < .41$
	6-10	17.2	4.7	9.4	
	11-15	2.4	9.8	7.3	
	16- Over	4.8	14.3	14.3	
7)	1-5 years	11.8	15.7	13.7	$X^2 = 19.99$ $p < .52$
	6-10	9.6	12.8	18.1	
	11-15	6.7	8.3	16.7	
	16- Over	13.9	8.3	13.9	
8)	1-5 years	39.2	7.8	5.9	$X^2 = 38.55$ $p < .03$
	6-10	31.8	12.1	14.0	
	11-15	25.8	19.7	19.7	
	16- Over	39.6	4.2	25.0	
16 1)	1-5 years	47.1	31.4	15.7	$X^2 = 13.71$ $p < .55$
	6-10	58.4	28.0	12.0	
	11-I5	56.5	29.4	12.9	
	16- Over	55.8	25.0	13.5	

Table 4 (Continued)

Question No.	Variables Teaching Experience	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
16 2)	1-5 years	33.3	37.8	28.9	$X^2 = 10.77$ $p < .55$
	6-10	24.2	40.4	32.3	
	11-15	14.5	50.0	35.5	
	16- Over	18.4	50.0	31.6	
3)	1-5 years	34.7	32.7	30.6	$X^2 = 15.99$ $p < .067$
	6-10	30.6	37.3	32.7	
	11-15	44.4	20.6	34.9	
	16- Over	43.9	19.5	31.7	

APPENDIX 8

TABLE 5

Timing and Location Preferences: Chi-Square Results of the Responses of Teachers and Trainers

Question No.		t/T	First Choice %	Second Choice %	Third Choice %	Chi-Square Results
13	Timing of INSET					
	School-Time	t	56.8	18.5	11.2	$X^2 = 35.61$
		T	20.6	5.9	32.4	$p < .001$
	Evenings	t	20.7	25.7	27.4	$X^2 = 22.89$
		T	17.2	6.9	24.1	$p < .001$
	Weekends	t	12.3	29.0	33.3	$X^2 = 23.53$
		T	3.8	11.5	30.8	$p < .001$
	School vacation	t	20.9	32.2	27.1	$X^2 = 20.39$
		T	16.7	69.4	5.6	$p < .001$
	Summer holiday	t	46.6	26.7	12.9	$X^2 = 8.92$
		T	70.0	20.0	7.5	$p < .06$
14	Location of INSET					
	Local school	t	47.8	15.7	8.4	$X^2 = 13.67$
		T	27.8	16.7	16.7	$p < .01$
	Teachers' centre	t	21.5	34.1	32.5	$X^2 = 3.47$
		T	29.7	35.1	32.4	$p < .32$
	Community college	t	3.4	43.0	39.6	$X^2 = 2.09$
		T	-	51.5	33.3	$p < .72$
	University	t	57.3	15.4	8.3	$X^2 = 1.92$
		T	58.1	11.6	14.0	$p < .75$

(t: teachers, T: teachers' trainers)

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