SOME PROBLEMS IN THE

E'DUCATIONAL SYSTEM OF JORDAN

by

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ABSTRACT

Problems arise from asynchronous changes in society. Therefore, changes in the socio-economic system have created problems due to inadequate responses in the educational system. While new aims in education have been discussed, and even were incorporated in the 1964 Jordanian Education Law, they have not been fully achieved in practice. While many of these aims were appropriate to the new circumstances in Jordan, there were serious faults in the Law, which prevented the successful pursuit of the aims.

This study an attempt to reveal why the aims of education in Jordan, as set out in the 1964 Law, have not been achieved adequately in practice, by examining some issues of policy in the educational system. The central issues are: school buildings, literacy, adult education and private education. In addition there are constraints which hinder the realisation of the aims of education and solutions to these issues. The constraints that are considered in this study are finance and the mental states of participants in the educational process. To tackle this situation it is necessary to design new policies for educational administration and finance, the structure and organisation of the system, curricula in the schools of Jordan and teacher training.

Therefore, the thesis is organised as follows. Chapter One deals with a discussion of the aims of education in general and in Jordan specifically, in terms of whether they should be knowledge, child or society centred. The second chapter deals with issues in the educational system and constraints preventing change and suggests how the Minitry of Education could deal with the problem of achiving the stated aims of education.

The third chapter discusses educational administration, and the relationships between the various parts of the educational administration system. Special attention is paid the the different roles of administrators at the national, local and school level, to explore the extent to which these roles are complementary or in conflict. Chapter Four deals with the structure and organisation of the school system, and whether the pressent 6-3-3 is the most appropriate organisation for the achievment of the educational aims.

The fifth chapter tackles the curriculum, which is perhaps the most important issue of all. All the elements of curriculum development, namely theory, objectives and content are discussed and related to the aims of education and whether they are knowledge, child, or society centred. The sixth chapter deals with the related issues of teaching methods and evaluation in similar terms.

Chapter six deals with the preparation of teachers, and how teachers can best be trained so as to improve the opportunities for achieving the stated aims. Particuar attention is paid to the institutions in which the training of teachers takes place, and the part played by the universities and the Ministry of Education.

In the eighth and final chapter the findings oare summarised, and a range of policies are put forward which are deigned to solve the identified problems.

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<div style="text-align: right;">Amin Salman</div>

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CHAPTER ONE

The Aims of the Education System in Jordan

The aims of the educational system of Jordan were formally set out in the 1964 Education Act. The aims which are presented in that act are derived from a variety of sources, reflecting diverse strands in Jordan's historical development. These include not only the Islamic heritage of the country and French and British influences, but also aspirations towards international standards of education and modernisation. The latter are linked with Jordan's participation in the international community as a member of the United Nations and as a trading nation.

This chapter analyses the aims of education primarily to illustrate the difficulty of producing aims from such diverse sources, but also to identify the position which these aims occupy in the educational system.

The value of an aim emerges when it gives meaning to action, determines its direction and defines the means and the modes of its achievement.[1] Not having an aim means not knowing how to act, and not tasting the enthusiasm to achieve it. Not to have an aim is to lose the dimension of knowing ends and knowing how to determine the means of achieving them.[2]

To have an educational aim makes it possible to anticipate the outcome of present and projected educational activity. It is important to emphasize some aims for learning and teaching. J.Brubacher points out:

"Having an aim is to act purposefully, to consider future
events in the light of the past and to act intelligently.
That is to say having an aim helps in organizing action in
line with anticipated outcomes and educational aims. Since
educational aims are values, they should also form the drive
or motivation to accomplish the task in hand, and provide
the basis for evaluating the task when done".[3]

So, an aim is an attempt to foresee what the end or termination
of present educative activity will be and what effort will be
necessary to guide both pupil and teacher.[4] Therefore, an aim
helps firstly to assess the means which are available for
reaching an end, and secondly it suggests the order in which
steps should be taken.

H.Broudy also advocates the setting up of educational aims. His
point of view is that the aim of education must be to promote the
good life through self-determination, self-realisation and self-
integration. This can be achieved by the deliberate formation of
intellectual habits.[5]

Therefore, both Brubacher and Broudy assert that education must
have aims, and that setting them before action is necessary for
the learning/teaching process. This static view of aims, as
something decided upon before action, is in contrast with
J.Dewey's view that aims are dynamic and need to be related to
the changing circumstances in which the actor contemplates
action. In Dewey's opinion, aims are not to be thought of as
being set up beforehand, but are merely the result of problem
solving situations which arise during the activities of life
(i.e., aims arise out of concrete situations in which people are

involved).[6] Aims therefore, must be tailor made for the occasion; we cannot publish a list of them in advance. We do not know our aims until a situation arises and we project aims as a means of guiding our observation and for finally selecting of a plan for handling the specific situation. Thus for Dewey the aims of education have an instrumental quality, because the educational process has no end beyond itself. It is its own end.[7]

Consequently, Dewey offers "neither aims nor criteria whereby the aims may be ranked in hierarchy. People have aims or ends or purposes arising out of their present circumstances which motivate and direct them towards action".[8]

In general, lists of aims, however they are gathered, are only devices which can be used empirically to achieve some sort of balance between various educative activities. Moreover, a list of educational aims is useful in suggesting to educators what is to be looked for and how to keep an overall balance between all the values which may be involved.[9]

A further point should be mentioned. Since education is life and consequently growth, according to Dewey, each individual must be given the opportunity to explore his own potentialities and his environment and consequently actually to grow. Wheeler points out:

"All people are educable, but the kind of education they need depends on what is lacking in their all round growth. It follows from this that educational aims must be continually re-examined and re-fashioned for any particular society at a given time".[10]

In this sense, as aims of education can only be related to the past experience of the individual or the society, aims must be continuously reformed to take account of the new experiences which have been accumulated. In discussing the educational aims of Jordan, it is necessary to develop the connections between those aims and Jordanian society. A list of aims can be drawn up from the 1964 Education Act. But in evaluating the current aims of education in Jordan, it may also be necessary to propose new aims for education so that the Ministry can take them into account in the reconstruction of education.

Before discussing the aims of education which were set out in the 1964 Education Act, it is necessary to examine the aims of education in Jordan before that year.

The aims of education should be derived from a clear, well-defined philosophy. The principles of the old philosophy of education in Jordan prior to the 1964 Education Act, were based on the Islamic Arab Heritage and the British view of knowledge. This traditional philosophy of education emphasised cognitive development, i.e., its purpose was to develop the mental ability of children, but it did not take into account the development of the whole personality or the needs of Jordanian society. Consequently, the old aims of education concentrated on inculcating knowledge, facts and information. This meant that the traditional aims of education encouraged students to learn by heart the subject matter which he could link with his daily life. Thus these aims of education, which did not take into account the

student's needs, were knowledge centred and not individual or society centred.

It is worth noting that educated persons internalised these aims adequately, because they were derived, on the whole, from the Islamic Arab heritage. By the same token, Jordanian society responded adequately to them. Most people acquired mental states which implied that the aims of education should be knowledge centred.

The old philosophy and these aims prevailed unitl the 1964 Education Act which outlined a new philosophy and new aims for education. They differed greatly from the old ones, because they were derived from foreign sources. So the problem is whether the new philosophy and its associated aims of education can be realised in practice through people in society who possess traditional attitudes towards education, and what conditions would promote the implementation of the new philosophy.

The 1964 Education Act defined an educational philosophy ana its aims for Jordan, which emerged from the Jordanian Constitution and its interpretations from Jordanian experiments, from local and Arab reality, from a desire to conserve ideals and values (i.e. an ideology) derived from the Islamic and Arab heritages, and from a wish to achieve present and future needs in terms of the aims and aspirations of Jordan in cultural, social ana political fields.[11] The most important principles of this eclectic educational philosophy as defined in Article 3 of tne 1964 Education Act are the following:

1) Believing in God and the ideals of the Arab Nation,

2) Believing in Arab Unity, its freedom and its personality, in the integrated United Arab Home,

3) To promote an understanding of the Hashemite Kingdom of Jordan as an Arab State, which is a monarchy with a parliamentary system of government,

4) Believing in international understanding on the basis of freedom, equality and Justice,

5) Respect for individual dignity and freedom, and respect for the public interest of society, to an extent that one should not dominate the other,

6) Social justice and providing equality of educational opportunities for all Jordanians according to individual potentialities,

7) To assist every student to grow physically, mentally, socially and emotionally, to be a responsible citizen for himself and his society,

8) Education is significant for the development of the Jordanian community in all its varied aspects and in an integrated framework of the Arab Home. This can be achieved by the following: a) Improvement of the natural enviromment by industrialisation and controlling of natural resources, b) benefiting from modern technological developments, and paying attention at the same time to its repercussions and problems, to take advance procedures to avoid them and to find solutions for them, c) Promoting Arab values and spiritual ideals (Arab ideology) and to develop the social and sound traditions and habits to suit the continuing

changes of human civilisation,

9) Respect freedom and the democratic system which enables the citizens to participate in controlling themselves and administering their affairs in various fields on the basis of knowledge and common interest,

10) Positive participation towards the development of international civilisation, in Sciences, Arts and Literature.[12] [Translation from Arabic]

Consideration of these principles of educational philosophy in Jordan reveals that while they draw very clearly on the basic ingredients of the Islamic Arab heritage a certain amount of emphasis is placed upon the possibility of modernisation.[13] In this connection it is possible to classify the various aims set out above in three ways; according to their origins, according to whether the values they present are modern or traditional, and according to whether they stress individual or social development.

For example, aims 1 and 8c above are based in the traditional values of Islam. Aims 2 and 3 draw upon a more modern view of nationalism and national government borrowed from Western Europe. The remaining aims are all modern, in the sense that they are in accordance with the United Nations Declaration of Human Rights, and with aspirations for the development of a modern technological economy. There are differences between them, however, with aims 4, 5 and 7 emphasising individual development, and aims 6 and 8, especialy 8b and 8c stressing social and economic modernisation.

On the assumption that the majority of people in Jordan have mental states which reflect traditional Islamic values, one could suppose that those aims which are derived from those values will be easiest to implement in practice. But at this level of generality there is considerable scope for interpretation, and it would be unwise to suppose that adherence to Islamic values necessarily precluded the promotion of individual development or economic modernisation. To form a clearer view of where the different aims of education might come into conflict it will be necessary to consider more concrete expressions of the educational aims.

Article 4 of the 1964 Education Act sets out such a detailed set of curriculum aims, analysis of which will facilitate an understanding of where difficulties of implementation are likely to arise.

Article 4 reads as follows:

1) To prepare the righteous citizen who believes in the following:

   a)   the principles of the educational philosophy in Jordan.

   b)   the rights of citizenship and responsibility emerging from them.

   c)   the realisation, practically, of ethical ideals whether in collective or individual fields of behaviour.

   d)   initiative in work and its consequence, positively, in behaviour, fruitful co-operation with others and the democratic way in human relations.

2) Understanding the environment including its natural, social and cultural forms, beginning from home to school, village, city, district or governorate, Jordan Arab Home and human society, provided that it is accompanied by the following:

   a) an analytical understanding of all the features, varied problems, and current and future needs of the environment,

   b) it should be achieved in such a way that it develops positive feelings in the individual concerning his duties for participation in the developent of the environment in accordance with his aptitude and his ability.

3) To develop basic skills such as:

   a) calculation and communication such as speaking, hearing, writing, reading standard Arabic, and developing reading habits continually, to enjoy reading and to increase krowledge,

   b) to follow up scientific method in research, thinking, inference and to make distinctions between right and wrong,

   c) to follow up objectively criticism of construction, reform and continued advancement,

4) To assist the normal growth of the individual: physically, mentally, socially, emotionally, taking into account the individual differences, and the development of talent, and providing opportunities for the different types of handicapped to develop according to their potentialities towards meeting and gratifying the individual needs on the one hand, and the development of society with its variea

features on the other hand,

5) To promote the collective and individual health level by disseminating health information and the development of healthy habits in a behavioural and practical way,

6) To promote the collective and individual recreation level by developing normal habits of innocent recreation and varied features of the Arab and Jordanian Folk Art,

7) To promote the collective, individual and economical level, and to incresse the National Income, by providing educational opportunities for all, by the diversification of educational programmes which meet the interests and desires of individuals on the one hand, and satisfy the future and present needs of Jordan in all fields within a comprehensive economical blueprint of the State on the other hand.[14]

[Translation from Arabic text]

These new aims of education represent a major change from the old ones based firmly upon the Islamic traditions of Jordan. In contrast with the old aims, these are not entirely consistent with the stated philosophy. They are in part inspired by aims borrowed from abroad. For example, they include consideration of the development of the whole potentiality of the child (i.e.child centred) and the needs and demands of the Jordanian society (i.e.society centred). This means that there has been a shift from knowledge centred aims to child and society centred aims. In addition they are sufficiently novel, when compared with the traditional aims, to increase the difficulty of achieving them, particularly since most of them are derived from the pragmatic

educational philosophy of the USA.

This means that when we take Articles 3 and 4 of the 1964 Act together, there is a lack of connection between the broad philosophy set out in Article 3 and the aims set out in Article 4, which are supposed to be derived from it. In fact, some aims have no logical connection with any of the principles of the stated philosophy. For example, the emphasis placed on individual and collective development, cooperation and understanding of the environment in paragraphs 1 and 2 of Article 4, appear to have no basis in the general philosophy of Article 3.

This lack of coherence may be attributed to the fact that the principles of educational philosophy are vague, and do not provide a clear, broad and certain basis for the elaboration of aims. While the general philosophy shows some influence of pragmatic philosophy, this shift from traditional Islamic views to pragmatism is much more fully reflected in the aims of education.

Moreover, the aims themselves are too general and vague, and not sufficiently defined to permit their easy translation into curriculum objectives, so that it is difficult to institutionalise them and consequently to realise them adequately in practice. In brief, then, the 1964 Education Act sets out new aims of education, but does not show where and how they could fit into the general philosophy of education for Jordan. Neither does it show how they can be used do develop specific curriculum measures.

Since the majority of teachers and administrators adhere to the traditional Islamic values and traditional "mental states", the practical outcome of this situation is that the new aims of education are ignored. This lack of attention to aims is reinforced by other aspects of the 1964 Act, which provides for a rigid administrative system on traditional lines, but is not addressed to the difficulties of introducing new aims, nor to the retraining of practising teachers and administrative personnel.

The 1964 Education Act, therefore, provides an inadequate basis for the reform of education in Jordan. Because the Ministry of Education discharges its responsibilities in accordance with the 1964 Act, that Act should be repealed and replaced by a new one which takes into consideration all the stated aims of education which are expected to be achieved in practice.

The general problem stated here, the difficulty of introducing new aims while the majority of teachers and administrators hold traditional "mental states" is not unique to Jordan. Nor should criticism of the 1964 Education Act be taken to mean that innovation is in principle impossible in Jordan. On the contrary, had the difficulties of introducing new aims been recognised, and the necessity of providing a coherent philosophy and set of aims which were not in complete conflict with the traditional Islamic philosophy been addressed, much of what was intended in the 1964 Act could be achieved in Jordan. An important starting point for this is the recognition that many of the detailed prescriptions

of pragmatism have much in common with some important branches of Islamic philosophy. Rather than borrow the aims of pragmatic education and attempt to graft them onto traditional beliefs, it would be better to develop a philosophy of education, and aims for the educational system, which were specific to Jordan and draw upon the Islamic heritage instead of conflicting with it.

For example, the philospher Abu Nasr al-Farabi (870-950) put forward some views which show strong parallels with the philosophy of Dewey. Man is described as having a series of potentialities which may or may not become actual. These include reason and imagination.[15] The extent to which these potentialities are actualised is a measure of the movement of a man towards becoming an ideal man.[16] While Dewey would not use some of these terms, the primary position given to growth and development by both philosophers is striking. Moreover, while for Dewey the most important human activity is critical thinking, for al-Farabi the development of the rational potentialities is that which separates man from all other forms of life.[17]

Al-Farabi develops these basic ideas in describing a desirable educational system, and points out that the education of men must take into account two principal categories of knowledge; those which all men must have because together they belong to a single society, and those which are specific to the individual, and the specific position he occupies in society.[18] Again, one might see a parallel with Dewey, and the knowledge all people should have of the principles of a democratic society, and the specific knowledge which they require related to their own interest.[19] In

both philosophers one can see the basis of a rationale for child centred and society centred aims in education.

The philosophy of al-Farabi finds echoes in that of Avicenna (980-1036), Averroes (1126-1198) and al-Ghazali (1059-1111).[20] To import pragmatism was therefore not only fruitless, but to a very great extent pointless. Similar aims could have been rooted in traditional Islamic philosophy, and had an effort been made to show how the reforms represented a better way of achieving certain Islamic goals the reforms would have been much more likely to be successful.

This examination of the 1964 aims of education in Jordan implies that the aims should be re-shaped. Some general considerations facing Jordanian educationists in regard to aims should first be mentioned. Educational aims are the basic assumptions which underlie the theory and practice of education. Educational aims are numerous and include political, social, economic and culural aims. In addition they differ from country to country according to the special initial conditions of that country. But despite the multiplicity of educational aims and their manifold types, all nations share most of these aims. But the varied needs, different conditions, and the differences in the degree of civilisation suggest that nations should have different aims. Some countries are more concerned with some types of aims rather than others. As V.Mallinson points out that while educational aims;

> "differ from one country to another... [in Western Europe
> and the USA] there is a certain common core factor of

educational aims typified by what we might describe as
Conservatism, Education for Citizenship and Education for
Christian Salvation".[21]

But as mentioned before these aims should be derived from a well
defined philosophy appropriate to a given country - in the case
of Jordan, an Islamic way of life. Therefore, the State of Jordan
should introduce a philosophy of education which confidently
affirms something definite about the origin, the destiny and the
nature of man and provides a broad and sure basis for the
elaboration of an educational system, that will meet to the
fullest all the demands made by the State.[22]

However, the requirements of our age demand that our educational
philosophy and its educational aims continually be re-examined
and re-shaped. Perhaps for this reason, His Majesty King Hussein
in his address to "The Educational Process Conference" (May 1980)
pointed out that:

> "The gains and the achievements which the educational system
> in Jordan has realized are a sound base and strong support
> for its development. The explosion of knowledge and the
> effect of modern technology on modern life impose on this
> system and on any other educational system a re-fashioning
> and reconsideration of its aims and modes, in order to adapt
> itself to the requirements of this modern age, to maintain
> its identity of Islamic Arab civilization and to reconcile
> between its originality and its modernity".[23] [Translation
> from Arabic]

While it is clearly the responsibility of the Jordanian people to
re-shape their educational aims and to draw up the means and
modes of achieving them, it is useful to list some educational
aims which Jordan may take into consideration. Therefore, the
following are suggested as new educational aims for Jordan.

1 The Conservatism and Modernisation Aim

This means that education should aim at the preservation of the existing cultural pattern. So emphasis should be built upon handing on the Islamic Arab cultural heritage, i.e. teaching Islamic Religious education to Moslem students, and transmitting the Islamic Arab cultural heritage to the Jordanian Community. In addition to that, to assure cultural continuity, the growth and development of national characteristics should be fostered to "act as a stabilising force".[24] The implications of the above comments, however, are that out-moded ideas should only gradually be discarded and replaced by newer ones in strict accordance with the inevitability of personal growth and progress.

2 International Understanding and Homeland Affection

Education should aim at fostering in the student a sense of belonging to his homeland, who must work continuously to develop his home through his profession and the co-operation with his fellow citizens. Therefore, education should instill in the young, love for and loyalty to Jordan, (which is part of the Arab Home) the Arab Nation and Nationalism, without developing racialism or a hatred of strangers or of other nations. Education should emphasise the unity of the Arab World, the co-operation of its countries in a changing world, and political modernisation as an efficient way of creating Arab Solidarity.

Since Arab nationalism should not conflict with international co-

operation it should be dynamic, hence education in Jordan should promote the importance of international, regional, national and local co-operation to avoid the domination of the strong over the weak and the rich over the poor. Education also should emphasise and explain the significance of relationships between people of the different countries of the world and their economic integration; and that international understanding should be based on freedom, justice and equality, and international problems should be solved on the basis of negotiation and not on the basis of violence and war.

In conclusion, education should promote tolerance, understanding and friendship among all nations, racial and religious groups, and should further the activities of the United Nations for the maintenance of peace.

3 Education should aim at the realisation of Human Rights

A general understanding of what is involved in the observation of Human Rights is derived from the Universal Declaration of Human Rights of the United Nations. According to Article 20 of the Declaration, education should be directed to the "full development of human personality and to the strengthening of respect of human rights and fundamental freedom".[25]

Primacy must be given to the human rights of the individual regardless of race, sex, religion or any other categorisation. But Jordanian educators should take into account the fact that

knowledge about human rights and their realisation is not sufficient. It is also necessary that there should be an interpretation of this knowledge in terms of experience and action in the field of human relationships, in school and family, in community and nation, and in the world at large, so that attitudes may be built up which will endure long after the information itself has been forgotten.[26]

4   The Individual's and his Development

Educational aims in Jordan regarding the needs of the individual and his development should be:

1) To help the individual to achieve a rounded personality through exploring and realising all his potentialities, by encouraging their development, to enable his talents to emerge and to grow and to mature whether he is handicapped or talented; and also by providing him with educational experiences which develop his personality and help him to adapt himself to the social world of reality. So, each individual must be given full opportunity to explore the possibilities of both himself and his environment so that he does actually grow. Also, the school should realise its creative function which, simplified, is that of producing "critical and creative individuals capable and willing to initiate social change".[27]. Therefore school should provide the student with an education for readiness and for cultural change, to help him to cope with change, to think about change and to think for himself. The school should train the individual to recognise new situations when they arise and to meet them intelligently.[28]

2) To gratify all the individual's needs, and to develop all the aspects of the personality of the child in a balanced way, is to help him to grow physically, mentally, socially and emotionally in a normal and integrated way. A basic requirement is the acceptance of the child as an individual. This implies the recognition of individual differences in temperament and personality as well as in physique and intelligence, and it means that the child must be free to grow and to develop at his own rate.[29] The child also needs to master complex concepts. The child also needs to feel secure (security need) in the affection of his parents and others, and this need is one of the most powerful forces in the socialisation of the child.[30]

Despite the fact that security needs are most easily and naturally gratified in the family, the school should make some provision to meet them rather than to deny them. Also, from the point of view of derived needs, such as economic security, the best approach would seem to be for the school to provide the general knowledge and skills that are required to live and earn a living and the specialised knowledge and skills that are fundamental to different vocations.[31] In addition, the individual must feel that there is some area of his life in which he is successful (adequacy needs). To meet this need, school aims must be such that it is possible for the children to succeed for a large part of the time, because success serves as a motivating factor towards further development.

The child also, needs approval of his acts and demands recognition as a successfully functioning individual. While the successful completion of any action engenders a feeling of satisfaction, which is intensified when others give their approval and recognition, failure to complete an act may leave the child with a sense of inadequacy. But the child needs something more than recognition and approval. He must work and play as a member of a group. Therefore, the aims of school must be such that, at least, some of them can be achieved by groups of children working together.

3) To develop the basic skills of the child involves such skills as communication, speech, writing, the ability to read with understanding and knowledge of calculation involving numbers and measurement.

4) To provide the individual with knowledge by acquainting him with other nations' civilisations, and at least with a foreign language to provide him with a minimum knowledge of the Human and Natural Sciences and Mathematics, is in order to enable him to live in the age of technology and to meet the explosion of knowledge successfully. Knowledge increases rapidly, and it should be presented to him at an adequate level. This would enable him to understand, comprehend, digest and apply it. This presented knowledge should be eclectic and include the fundamental concepts of learning. Also, boys and girls should develop capacities for thought, judgement, (i.e. they should develop autonomy of thought and action), enjoyment and curiosity, a sense of responsibility towards their work and towards other

people, some understanding of the physical world and the human society in which they grow up.[32]

5) To train the individual to obtain knowledge by himself from its varied and numerous sources, is in order to develop auto-education (self teaching) for the realisation of continuing education.

6) To permit him to continue his education, especially if he has the desire, is in order to prepare him for living in the society of the twenty first century.

7) To develop fundamental work skills should be based on positive work attitudes emerging from an appreciation of the values and respect for work. Therefore, vocational education in Jordan should form a significant and fundamental part of the compulsory and secondary education cycles in accordance with student interests and the varied needs of the surrounding environment.

8) Students should be provided with a functional education to enable them to secure a suitable level of living and to develop their environment in order to raise the collective and individual economic level of living and consequently, to increase the Gross National Product of Jordan.

9) Educational aims should be directed towards instilling cooperation in the individual. So, the school must train the students to work together in groups.

10) The collective and individual levels of health should be raised by disseminating health information and developing healthy habits whether in action or behaviour.

11) The worthwhile use of leisure and the development of varied aspects of Arab and Jordanian Folklore Art should be attempted.

12) To develop the aesthetic appreciation of the individual should be an objective.

5 Social Relevance and National Development

Educational aims should be relevant to the environment and to the various institutions and corporations of the Jordanian community. They should not only take into consideration the present requirements and needs of Jordanian society, but also they should foresee the likely and future needs of society. Education should aim at the economic growth and development of Jordan by taking account of the explosion of knowledge, and particularly, the scientific technologicel revolution and its application to development. So, education should be linked with social and economic development to provide the trained manpower for economic development at various levels. Education should aim at ensuring the continuous, positive participation of Jordanian citizens in developing their community and meet its fundamental and changing needs, by making it possible to absorb the new developments which may occur as a result of scientific and technological progress.

Education should aim at conserving, transmitting and modernising culture (i.e.social function). That is to say, it should hand on the cultural heritage, and develop modes of thought which can be used to solve problems involving people rather than things, and to deal with the problems presented by continuous change to help the public to understand and to cope with complexities of technological change.

6 Democratic Orientation

Education should aim at the realisation of democracy in the Jordanian Community, because, it is only in a democratic system that all basic human needs can be adequately achieved. Democracy can be developed through the democratic commitment of the educational system in its method and administration and in all its institutions and its cycles. This can be achieved by granting students equality of educational opportunities and opportunities such as freedom of discussion, by promoting respect for the viewpoints of others, by accepting collective decisions voluntarily and by training students to make decisions for themselves and by developing in them the necessary courage and power to solve the contradictions of this age.

Democracy might be encouraged by the use of the scientific method in resesrch, in thinking, in inference and in making distinctions between what is right and what is wrong. Also, it is necessary to develop objectivity in criticism, to train and to develop the individual's desire and ability in research and to think

scientifically in order to participate in the progress of science and art. The school should habituate students to perform their duty well and to shoulder their responsibilities. The school should train them as responsible citizens' in a democratic society to work for and build up a democratic community on the basis of knowledge, experience, cooperation and positive work. The freedom of the individual and a democratic system which permits citizens to participate in the control and administation of their affairs on the basis of common interest should be respected. Students should also be encouraged to develop democratic methods in human relations.

All the above mentioned aspects of democracy can be achieved by practising democracy in all institutions of the Jordanian community. Educational democracy should recognise the principle of individual differences, and should provide special educational conditions for every individual to enable him to actualise and to develop his potentialities.

7 Ethical Character

Education should aim at implementing and developing the ethical character of students. So, the school is considered as a custodian of moral values, and has always been responsible for implanting moral standards and values, such as responsibility and respect for individuals.[33] The school should help the student to arrive at a self-imposed code of moral social behaviowr. The formation of moral and ethical personality is an important part of the business of any school. A good deal of care should be

taken to ensure good and righteous conduct, in both personal and social relationships, and to encourage honesty, truth-telling, courage and austerity.[34] Moral education should "create and maintain in the pupils a system of moral attitudes which will prepare them for social life".[35] The character of a people is very important, because it determines the people's freedom and from it stems its political constitution, its ideals and aspirations, its social and cultural outlook.

Mallinson states:

> "Thus, it is the character of people and not its intelligence that determine its future. And it is from people's character and not from its intelligence, that stem its political constitution, its needs and aspirations, its social and cultural outlook".[36]

It is worth noting that Wheeler states:

> "While it is true that notable statements of educational aims have been made by individuals it seems likely that the working out of general aims and ways of implementing them are in our society, no longer a task for an individual. Society is so complex and the contribution of the behavioural sciences so extensive that the derivation of aims should be an interdisciplinary group concern".[37]

In other words, in setting up educational aims it should be remembered that if they are to work they should arise out of the hopes and aspirations of people. On the other hand, it is important to remember that in complex modern societies it is inevitable that aims should be derived from interdisciplinary group concerns. These two conditions have been satisfied in Jordan which is a society in transition.

Educational aims should be flexible and capable of meeting changing circumstances. Ends established externally are

frequently too rigid and do not promote action.[38] So a good aim
is based on the present experience of pupils and would be the
outcome of existing conditions. Yet aims should also provide a
framework for future planning and since in the process of
implementing plans conditions themselves will change, aims should
themselves be open to re-examination and change.

The views of Brubacher and Broudy, that aims must be set out in
advance to direct action, and of Dewey, that a rigid prescription
of unchanging aims cannot be set down, can therefore be
reconciled. There is no harm in listing aims beforehand,
providing that as a succession of problems is faced there is a
willingness to modify aims to give direction to problem solving
activities.

In setting out proposed aims for the Jordanian educational system
these two principles have been born in mind. The proposed aims,
in common with the aims set out in the 1964 Education Act, have
much in common with the aims derived from pragmatic philosophy.
They incorporate many of the aspirations towards modernisation,
democracy and human rights of the Jordanian people. At the same
time, properly interpretted, they are sufficiently comprehensive
and flexible to allow modification to be made to them in the
light of experience. In setting out proposed aims, the author of
this thesis has no intention of presenting aims as though they
were immutable.

On the other hand, the proposed aims set out here, pay more
attention than the aims of the 1964 Education Act to the second

requirement, that unless they can be reconciled with the persisting 'mental states' of Jordanian teachers and administrators they are unlikely to succeed in practice. It has been shown that the aims proposed here can be reconciled with a major strand of Islamic thought. There would be much more chance of achieving some of the goals, if the link between the new aims and the traditional attitudes of teachers and administrators was made explicit.

In this thesis, each aspect of educational policy in Jordan will be considered to show that, since 1964, the new aims have failed to be implemented in practice. It will further be argued that because the new aims have been seen as foreign and antithetical to Islamic values, they have at best been ignored, and at worst opposed. Specific proposals will be made as to how the aims could be presented in such a way as to be compatible with existing 'mental states', and therefore be more likely to succeed. In a situation where change is desired, it is impossible for the proposed aims to be entirely compatible with either current practice or current 'mental states'. The present thesis is only concerned to show how failure to accomodate aims to the present conditions in Jordan has produced considerable and unnecessary opposition to innovations.

Recognition of these difficulties should not be used to deny the value of spelling out in detail desirable aims. This has been done in this chapter. In the next chapter proposals to re-organise the administration of education will be considered and

an assessment made of the possibilities of implementing them.

REFERENCES

1   Akil, F., An article written about aims of education, written in Risalat al-Mwallim (The Message as the Teacher) in Arabic, Vol.7, No.6, 1964, p.10.

2   Ibid.

3   Brubacher, J.S., Modern Philosophies of Education, New York: McGraw-Hill, 1962, p.223.

4   Ibid.

5   Broudy, H.S., Building a Philosophy of Education, Englewood Cliffs, New Jersey: Prentice Hall, 1969, pp.25-37.

6   Dewey, J., Democracy and Education, New York: Macmillan, (First published 1916), 28th Edition, 1955, p.50.

7   Ibid.

8   Wheeler, D.K., Curriculum Process, London: Hodder and Stoughton, 10th Edition, 1979, pp.77-78.

9   Ibid.

10   Ibid.

11   Ministry of Education, Jordan, Education Development in Jordan, Arabic text, Amman: 1977, p.21.

12   Ministry of Education, Jordan, Collected Laws and Bye-Laws of the Ministry of Education, Part 1, Arabic text, Amman: 1966, p.45.

13   Shami, M.A., and Foudah, H.M., Educational Innovations in Jordan: 1976-1979, Arabic text, Amman: 1979, p.22.

14   Ministry of education (1966), op.cit., pp.46-47.

15   Nadir, A.N., (Ed.) Ara'ahl al-Madinat al-fadileh (The ideas of the Inhabitants of the Ideal City), by Muhammed abu Nasr al-Farabi, Arabic text, 4th Edition, Beirut: Dar al-Mashriq, pp.87-88.

16   Ibid.

17   Fakhuri, H., and Jur, Kh., Al-Falsafah al Arabiyah fi al-Maslina Wa al-Garb (Arab philosophy in East and West), Arabic text, Beirut, Dar al-Jil, 1982, p.334.

18   Nadir, A.N., op.cit., p.134.
      See also, Musa, M.Y., Bain al-adin wasl-falsafah fi ra'y Ibn
      Rushd wa falasifat al-as'r al-wasit, (Religion and
      philosophy in the opinions of Ibn Rushd and the philosophers
      of the Middle Ages), Cairo: Dar al-Masarif, 1959, p.94.

19   Tanner, D., and Tanner, L.N., Curriculum Development, New
      York: Macmillan, 2nd Ed., 1980, p.155.

20   Fakhuri, H., and Jur, Kh., op.cit., p.333.
      See also, Galib, M., Fi Sabil Mawsu'at Falsafiyah al-Farabi
      (For a philosophical encyclopaedia al-Farabi, Beirut: Dar wa
      Maktaliit, 1979, p.115.

21   Mallinson, V., An Introduction to the Study of Comparative
      Education, 4th Edition, London: Heinemann, 1977, p.79.

22   Ibid.

23   Ministry of Education, Jordan, Educational Process
      Conference in a Developing Jordanian Society, Arabic text,
      May 1980, Amman: Middle East Press, 1980, p.16.

24   Mallinson, V., op.cit., p.7.

25   Wheeler,D.K., op.cit., p.85.

26   Ibid.

27   Mallinson, V., op.cit., p.3.

28   Taba, H., Curriculum Development, Theory and Practice, New
      York: Harcourt, Brace and World Inc., 1962, p.65.

29   Wheeler,D.K., op.cit., p.92.

30   Ibid.

31   Ibid.

32   Ibid, pp.80-84.

33   Taba, H., op.cit., p.65.

34   Lauwerys, J.A., (Ed) Ideals and Ideology, London: Evans
      Bros., 1969, p.29.

35   Ibid, p.35.

36   Mallinson, V., op.cit., pp.4-5.

37   Wheeler,D.K., op.cit., p.83.

38   Dewey, J., op.cit., p.122.

CHAPTER TWO

Conditions Influencing the Realisation of Aims

Among the conditions in Jordan which have made it difficult to realise in practice the new aims proposed in the 1964 law, several are particulary important. There is a shortage, for example, of school buildings, and many of those available make it difficult for teachers to do more than pass on knowledge using traditional methods of rote learning. Secondly, there is a high level of adult illiteracy and a shortage of adult educational facilities, which make it difficult for parents to help their children. Thirdly, the private educational system drains off many good teachers, thus impoverishing the publicly maintained schools. Probably the most important feature of the Jordanian system which makes it difficult to change the emphasis from traditional knowledge centred aims to child and society centred aims are the deeply held beliefs (or 'mental states') of teachers and others engaged in the educational process. Frequently, though they may overtly accept new and foreign aims, their behaviour is motivated by values and beliefs appropriate to the old system of education.

In this chapter, each of these adverse conditions affecting the successful implementation of the new aims in practice will be examined more closely.

1 <u>School Buildings</u>

Many schools are run in former dwelling houses. These lack the facilities which are necessary for the all round education of pupils, e.g. the space and equipment for adequate physical education. Moreover they lack specialist rooms for manual training, home economics and science laboratories. Audio-visual teaching aids are lacking and libraries are a rarity. In the absence of these resources it is difficult to employ teaching methods which are appropriate to the realisation of either child or society centred aims.

The inadequacy of school buildings in Jordan is chronic. It existed during the Turkish reign of Trans-Jordan and continued during the Trans-Jordan Emirate. According to R.D.Mathews and M.Akrawi the Ministry and local authorities were responsible for buildings and equipment.

> "According to the old Turkish law, the school building in the rural districts must be provided by the village authorities. The Ministry of Education must provide the rest - school furniture, equipment, cost of upkeep end teachers' salaries. In the cities the cost of rental is borne by the Ministry of Education. All of the school buildings in Trans-Jordan, except five, are rented".[1]

In practice, these authors state,

> "Elementary schools are housed in rented buildings, usually former dwellings... Secondary schools are in rented or government buildings".[2]

It is clear that most of the school buildings in Trans-Jordan were rented school buildings and originally former dwellings which were not equipped, as stated, with the facilities

for sound teaching.

Today the shortage of school buildings results in a double shift school system in which some periods of the weekly timetable are omitted. Physical education and extra curricular activities, which are usually performed out of school hours, have to be cancelled. Even so, about 45 percent (12) of the school buildings were still rented property in the school year 1979/80, and very few of them were satisfactory as far as lighting, playgrounds, and equipment were concerned.[3] There was insufficient finance for their upkeep.

In the case of new school buildings, most of them which were constructed in villages, are small and lack playing yards, libraries and laboratories. The number having appropriate facilities is small. Moreover, new school buildings were badly designed. They were, and in fact still are, designed by general architects, who at most consult only with school administrators. School buildings should be designed by educational architects in collaboration with educators who are knowledgeable about curriculum and instruction needs.[4]

The designers of school buildings should have a clear understanding of the activities and curricula for which the school building will provide a setting. The environment can either promote or inhibit desirable attitudes and behaviour. Moreover, the schools built by the Ministry of Education are not sufficiently adaptable to allow the interior spaces provided by

the building to be altered without major rebuilding.

D.Pratt points out that:

> "The initial design of a structure places severe constraints
> on the kinds of environment, and hence on the programmes
> that can be developed in the building. For this reason,
> flexibility is an important criterion in modern school
> design. Ideally, schools need to be designed, so that they
> can be subsequently be extended upwards or outwards, and so
> that the interior spaces can be altered without major
> rebuilding".5

The situation regarding school buildings continues to exist. Its continuation means that the Ministry has failed to solve a major problem for more than a third of a century. A number of reasons can be found to explain this continuing failure.

In the first place, the raising of the period of compulsory education for all children, from six years to nine years, and adding on additional years to the period of secondary education, placed enormous demands on school building accommodation. In addition the increased social demand for education from members of the public has led to measures which make all types of secondary education, whether academic or vocational education, virtually open to all students. A heavy load has been placed on the shoulders of the Ministry, which has further aggravated the shortage of school buildings. This crisis became worse after the unification of the two Banks in 1950, which brought about an even greater increase in the demand for school places.

Besides the general increase in demand for education, there was also a general population increase which considerably raised the

numbers of students in the various cycles of education. The natural growth in population was made still worse by the war of June 1967, when the displaced population of the West Bank came with their children to the East Bank of the Jordan.

It should be mentioned in this connection that, despite a scarcity of resources, the Ministry has tried its best to construct school buildings, especially in the first and second Five Year Plans (i.e. 1976-1980, and 1981-1985). But the provision of suitable school buildings has not kept pace with the growth in student numbers over the last years. The extent of the increase in student numbers over the last ten years can be judged from Table 1, which also shows the absolute increasse in student numbers in the private sector, which is an indirect indication of the shortfall in places in Ministry schools. The total school population in Jordan in 1982/83 was 842,415, or about 35 percent of the total population of 2.4 millions.[6]

Besides the demographic changes which contributed to the shortage of school buildings, there were also political obstacles to increasing the number of school places. These centred on the division of responsibility for school buildings between the central Ministry and a number of Local Education Committees.

Table 1 Comparative statistics of Students for the Years 1973 to 1983

Scholastic Year	Sex	Ministry of Education	Grand Total
1973/1974	Total	337,889	497,125
	Male	191,233	280,022
	Female	146,656	217,103
1974/1975	Total	367,183	534,985
	Male	205,466	298,470
	Female	161,717	236,515
1975/1976	Total	394,613	572,162
	Male	218,313	317,105
	Female	176,230	255,057
1976/1977	Total	425,227	611,834
	Male	233,606	337,229
	Female	191,621	274,605
1977/1978	Total	454,438	647,590
	Male	233,606	337,229
	Female	206,393	291,899
1978/1979	Total	490,569	687,951
	Male	264,494	373,542
	Female	226,075	314,409
1979/1980	Total	525,651	730,508
	Male	280,268	392,440
	Female	245,383	338,068
1980/1981	Total	550,412	762,425
	Male	291,163	408,321
	Female	259,249	354,104
1981/1982	Total	574,921	795,922
	Male	301,930	424,807
	Female	272,991	371,115
1982/1983	Total	594,961	842,415
	Male	310,273	448,765
	Female	284,688	393,650

1. Source: Ministry of Education, The Statistical Educational
   Year Book of 1981/1982, p.52.

2. The tenth year figures are taken from Education in Jordan in
   Figures 1982/1983.

In the 1964 Education Act responsibility for school building construction was left to local committees which were not able to solve the problem. The local committees are provided with only a small percentage (i.e. 3 percent) of the estimated annual rent paid to the owners of the buildings to finance school buildings. The income is insufficient for the purposes, due to the low estimated rentals and the low levels of school tax. For example, the total contribution of the Local Education Committees to the Education Budget was 989,385 J.D.(Jordanian Dinar) in 1978/79 and 1,204,130 J.D.[7] The bulk of the funds raised were paid in rentals for school buildings, especially in small towns and villages. This meant that very little money was left to construct school buildings in rural areas. Some school buildings were, however, constructed in the cities.

Although the 1964 Education Act permitted taxation by the Local Education Committees, in fact they did not raise taxes.[8] Moreover, members of the committees were not elected on the basis of their interest in educational process and they were expected to perform varied tasks such as running the affairs of municipal councils in cities, or village councils. It would be preferable to elect commitee members from persons who are interested in, and knowledgeable about, and competent in school building matters. No doubt, the fact that responsibility for school buildings was delegated to overloaded committees is an important reason for their failure to solve the problem.

This failure to devolve education matters to local committees which specialised in education, but instead placing the

responsibility for some aspects of education on committes which had diverse concerns, results from a desire on the part of those in the Ministry to retain their power. Specialised education committees would have taken more responsibility from the Ministry than would have been acceptable. The 1964 Education Act was built upon concepts of centralised educational administration, and therefore strictly limited the amount of responsibility which was devolved. In this the 1964 education Act repeated the same failed policy which had been tried by the Turkish authorities, who similarly gave responsibility for school buildings in villages to such committees. Thus the situation under the Turks was very similar to the present arrangements.

In terms of school buildings, the Ministry did not respond adequately to the 1964 Education Act. Although the immediate responsibility for school buildings was placed on local committees, the Ministry was supposed to draw up a long term plan. Article 93 of the act stated that:

> "The Ministry should set down a long term plan to provide suitable buildings for the teaching process according to the needs and potentialities of the country. It should distribute buildings in cities, streets and villages in accordance with a well considered policy of education and it should supervise continuously the Private and Public institutions' buildings that they should have the required conditions".9

The failure of the Ministry to draw up such a plan may be attributed to the fact that the Ministry has two directorates, one for planning and one for school buildings, neither of which have clear responsibility for the plan, and neither of which has the specialised and qualified personnel to draw up the plans, to

supervise and report on difficult aspects of school buildings.

Given the failure of the Ministry policy to solve the school building problem during the last three decades, it is necessary to reconsider that policy, and to initiate a new one for constructing school buildings as soon as possible. From what has been said, it can be seen that the problem of school buildings is a considerable one, and should be solved as quickly as possible. Joint efforts should be made on two levels, national and local, to secure the necessary finance.

Therefore, it is recommended that a school buildings committee should be established to work with the Minister of Education, and have wide powers. This committee should involve both high level educational architects and educators knowledgeable in the theory and practice of curriculum and teaching methods. There should be a specialised sub-committee on financial affairs to organise the raising and use of funds in the educational buildings section. This committee should be given sufficient power to enable it to perform its tasks quickly and adequately. The funds of this committee should be secured from the national and local authorities.

The local authorities should not only be given the power to raise taxes, but should also be given responsibility for other aspects of education (by decentralising the administration of education). The local authorities would thus be given the motivation to act in educational matters, as well as the power to raise money. The

educational administration in Jordan should be developed in the direction of participatory management and in a manner as to enable all concerned to participate in the decision making process in accordance with the participants' levels of competence in terms of the type of decisions needed.

Delegating responsibility for running school affairs to local authorities, by decentralising educational administration would ensure local participation and arouse more interest in local schools. This would assist the levying of local taxes and provide local funds for the construction of school buildings. Such a policy might well work because:

a) it is part of the Islamic Heritage (i.e. part of the mental states of Jordanian people) that parents should support the Kuttah school by providing it with a building and providing the teacher of the Kuttah with housing and food, if not money, and

b) in addition the small amount of school tax raised currently is paid as rentals for the school buildings. These are evidence that the resources are available locally to provide school buildings. However, if the money were spent directly on the construction of buildings, better quality accommodation could be provided at very similar cost. It is the responsibility of local authorities to provide school buildings, but one could expect them to make greater efforts if they had more responsibility, and were not constrained to contribute to the construction of school buildings in cooperation with the central authority, the Ministry of Education.

The delegation of full responsibility to local authorities (i.e.

decentralisation of educational administration) would require a change in the 1964 Education Act, which was based upon the concept of a centralised administration of education. The Ministry of Education would appear not to be totally opposed to such moves, as it is already undertaking some preliminary steps towards decentralisation, and might well look favourably on this proposal. This issue will be discussed more fully in Chapter 3.

2 Adult Education and Literacy

Adult illiteracy has hindered the realisation of the new aims of education. The Ministry has not established centres for adult education and literacy throughout Jordan, even though this was required by the 1964 Education Act, Article 110. This states that the Ministry of Education should be concerned with the dissemination of culture among individuals of the Jordanian community by establishing centres for adult education on the basis of their personal interest and by organising technical, practical, scientific and cultural courses to enable them to increase their standards of living.[10] The instruction of adults may take place in school buildings out of school hours, and in the adults' leisure time.

The 1964 Education Act does not explicitly mention illiteracy, because illiteracy was originally the responsibility of the Ministry of Labour and Social Affairs. The Ministry of Education became responsible for illiteracy in 1968, whereupon it opened illiteracy centres. Even so, in 1976, illiteracy among adults

amounted to 32.4 percent.[11] This can be partly attributed to the fact that the illiteracy centres were not evenly distributed throughout the country, and there were some areas without centres at all. Moreover, there is still illiteracy among children. even as late as 1982/83, only 91 percent of children were attending the primary cycle of education, which means that the rate of illiteracy among children can be roughly estimated as 9 percent. The poor attendance rates among children of school age is partly produced by the high rate of drop outs, who leave the primary cycle before becoming literate in Arabic. In addition there are a number of nomadic Bedhouins, who live in some remote areas of the Jordanian desert, and it is very difficult to establish schools to teach their children.

Illiteracy could, however, be overcome by setting up centres to reduce adult illiteracy over the entire area of Jordan. Given the resources, there is adequate motivation to remove illiteracy. A belief in the importance of reading and self education is deeply rooted in the Islamic Arab cultural heritage. These values are part of the mental states of Jordanian people. The evidence for this is to be found in the Koran, and Hadeth, which encourage Moslems to learn. For instance, the first word in the first verse of the Koran, which Mohammed the Messenger received from God is "read": "read by the Name of God who created, created man from clots of blood".[12] Also, Mohammed the Prophet, in Hadeth, implores Moslems to learn in such words as, "learning is the responsibility of every Moslem whether male or female".[13] Also, he freed every captive at the Battle of Badir who taught ten illiterate Moslems to read and write Arabic.[14] There are many

other instances in the Islamic Moslem cultural heritage where

Moslems are encouraged to learn, especially to read.

In conclusion, if adult illiteracy centres were opened, the

mental states of the people would ensure that they were fully

used. Evidently, there is a lack of buildings for centres for

educating illiterate adults, but they could use present school

buildings where possible. New buildings are, however, also

necessary. These centres should, like the schools, be constructed

with the cooperation of the local authorities and the Ministry of

Education. As with the case of schools, this could be achieved by

drawing upon the mental states of people and involving local

people in the educational projects. There is evidence that some

parents should also be involved in adult illiteracy programmes.

A.Y.Tell comments that:

> The centres of adult illiteracy will succeed only if there
> are suitable teachers. At the moment, teachers of adult
> illiteracy are, in the main, drawn from teachers in
> compulsory cycle schools of the Ministry. That is to say,
> because they are not trained to teach adult illiterates,
> they cannot perform their work in adult literacy centres
> satisfactorily. Therefore, suitable teachers are needed, who
> would have to be trained now to teach adults so as to take
> into consideration the needs, interests, abilities of adult
> illiterates in their methods of teaching. This would also
> encourage adults to join the centres.[15]

3 Private Education

Before 1947, the provision of private education in Jordan exceded

public education. R.D.Mathews and M.Akrawi stated that:

> In 1945-1946, there were 73 public schools of all types,
> with 199 teachers (including 38 women) and 9,874 pupils of
> whom 1,956 were girls. In the same year, there were 100 non-
> government schools of which 64 were for boys, 21 for girls

and 15 coeducational. These were manned by 251 teachers of whom 95 were women, and attended by 6,472 pupils of whom 2,640 were girls. Thus the total number of pupils in both public and private schools was 16,346 of whom 4,596 were girls".[16]

These private educational institutions included national educational institutions and foreign educational institutions. Both kinds of private school still exist in Jordan. The Ministry of Education has the right to supervise all the private schools and it is not permitted to establish a private institution without a licence issued by the Ministry, on the basis of a Cabinet decision.[17] Private schools must accept general educational policies and the Jordanian curriculum. They should teach, as a minimum, Islamic religion for Moslems and for non-Moslems their own religion, Arabic language, history and geography of the Arab countries, and an understanding of civics and regard for the Arab Homeland (Arab society) in all educational cycles. They must follow the text books issued by the Ministry of Education, and Arabic is the language of instruction in all private schools. If private schools wish to teach other subjects, or to use other text books, it is necessary for them to seek the approval of the Ministry. Private schools are permitted to teach one or more foreign languages in any educational cycle.[18]

In addition to the private academic secondary and compulsory schools in which Jordanian programmes are taught, there are some foreign secondary private schools which teach foreign programmes such as British and French progammes in foreign languages.[19] They are licenced by the Ministry. The achievement of the general

educational aims in these schools is hindered by the bureacratic arrangements which make it necessary for them to teach Jordanian programmes in Arabic.

The Ministry has in the past paid too little attention, and is still paying too little attention, to private education, especially at the level of kindergartens and pre-school education. The 1964 Education Act permitted the establishment of kindergartens without setting any specific educational aims for this cycle. In this way, the Act did not legislate adequately for this cycle. As a consequence, the Ministry has not set a curriculum for the pre-school cycle. It has not set up an educational programme to qualify professional teachers for this cycle, and has not held educational courses to improve the professional level of teachers working in kindergartens. Non-professional teachers in this cycle cannot establish curricula to achieve in practice the development of the whole personality of children in this cycle.

Because the Ministry has not opened schools for this cycle, only a very small minority of children enjoy pre-school provision. That is to say about 16 percent of the relevant age group attended this cycle in in the school year 1982/83, compared with the 91 percent in primary schools. Besides this, of the small number of children attending kindergartens, three quarters are in the Amman governorate, which means that there are areas in the country where the provision of kindergartens is completely inadequate. It can be said that it is the private institutions of

education in Jordan which specialise, to a great extent, in teaching and bringing up children in the pre-school cycle. They work under the supervision of the Ministry of Education, which has opened no schools and pays little attention to kindergartens which admit children from the ages of 3 years to 5 years. Most of the private schools are housed in former dwellings, or in parts of church buildings or adjacent quarters.[20]

Failure to promote pre-school education is an obstacle to the realisation of child centred aims. This is a most important stage for the intellectual development of the child (i.e. the early years of life). Pre-school education in Jordan is therefore neither as well provided for, nor is as much importance attached to it, as one would expect from study of other countries in the Western World. V.Mallinson points out that:

> Everywhere in the Western World much more attention is being given to nursery education. Everywhere the nursery school is called upon to play a more important and decisive role.[21]

He adds:

> Everywhere it is recognised that urbanisation and the tempo of modern life disrupt family life and reveal inadequacies in most families which were not hitherto suspected. Even more important, parents themselves are coming to realise that modern conditions of home life are not always the best for a child beyond a certain age; that all children can benefit from an experience which guides natural play and interests towards the development of skills which are going to be of real importance later;[22]

Mallinson goes on to state that:

> The findings of child psychologists have had their part to play both in pin-pointing these inadequacies and securing more thorough and professional training for nursery school teachers.[23]

These views are reinforced by B.Bloom of the University of Chicago, for example, who has shown "that the most important

years for a child's intellectual development lies between the ages of 0 and 8, and that all which comes after is dependent to a large degree on the foundations then laid".[24]

It is therefore recommended that the Ministry should pay more attention to the private schools in general and to pre-school education in particular, because it is an important stage in the intellectual development of children.[25] The Ministry should train kindergarten teachers in summer or evening courses, to enable them to perform their duties adequately in order to realise the child centred aims of education in Jordan. Because the present kindergarten education is not satisfactory, the Ministry should prevent the appointment of teachers in this cycle who are not professionally qualified to teach there. The Ministry should encourage the association of Private Schools, which was founded in 1977 in Amman, and should encourage the foundation of other associations of private schools all over the country, and should cooperete with them in raising the educational level of private schools (particularly kindergartens) and in defending their interests. The Ministry should encourage the establishment of kindergartens and private schools in the small and remote governorates and districts by providing them with aid. It has been noted that kindergartens are concentrated in Amman governorate. The Ministry of Education should pay more attention to the drawing up of specifications for kindergarten buildings. Finally, because of the importance of pre-school education, the Ministry should draw up plans to integrate it into the present system of education.

4 U.N.R.W.A. Educational System in the East Bank of Jordan

U.N.R.W.A. is the United Nations Relief and Work Agency for Palestine Refugees in the Near East. It is an organisation of the United Nations General Assembly. It was established in 1950 to assist Palestine Refugees, "victims of the Arab Israeli war in 1948", and the need for its services has continued.[26]

An independent administrative structure for the U.N.R.W.A. schools was established. The Headquarters for this administrative structure is in Amman and is headed by the chief administrative officer. It has its own officials, supervisors and compulsory cycle school, and has established centres for vocational training and others for the training of staff in its schools.

The administrative structure of the Agency and its schools are under the supervision of the Ministry, and they adhere to the philosophy and aims of education in Jordan, but they are independent. The agency implements the educational policy of Jordan, its curricula, text books and all regulations issued by the Ministry. The Ministry does not cooperate a great deal with the agency concerning its educational problems. A particular problem facing the Agency is the shortage of classrooms, but the Ministry is not able to cooperate with the Agency in solving it. Moreover, the Ministry does not supervise Agency schools either professionally or technically, since they are in practice under the supervision of Unesco. This makes it difficult to ensure that

Jordanian aims of education are achieved.

5 Educational Finance

Education in Jordan is financed by government grants, funds from non-governmental organisations, contributions from private citizens, and loans and aid from international organisations. Of these the largest portion comes from government sources.

The Ministry of Education obtains its finance from the general state budget. The general state budget sets aside fixed appropriations of money for the expenditure of the Ministry of Education. But these appropriations to the Ministry of Education are not sufficient to meet the financial needs of the Ministry, because the percentage of the Ministry of Education has never exceeded 8.3 percent of the state budget in any fiscal year. For instance, the percentage of the state budget dovoted to the Ministry of Education was about 3.9 percent in fiscal year 1950/51 and about 8 percent in 1961/62. Table 2 shows the total budget and the Ministry of Education budget as a percentage of that for the last eleven years.

It is evident from the figures in this table that while there has been an increase in the Ministry of Education budget, there has been little increase in it percentage of the state budget devoted to education. Those increases which have taken place have been associated with the First and Second Five Year Plans (1976-1980, and 1981-1985) which were designed to implement the aims of education laid down in 1964. To achieve these aims, the Ministry

of Education budget should not be less than 15 percent of the state budget. This means that the Ministry of Education should be at least doubled in terms of its position in the overall budget.

Table 2: Comparative Statistics of the Ministry of Education Budget and its Percentage to State Budget for the Last Eleven Years

Fiscal Year	State Budget	Ministry of Education Budget	Percent of State Budget
1973	159,193,000	7,490,650	4.7
1974	165,667,000	11,942,000	7.2
1975	218,250,000	14,873,800	6.8
1976	263,000,000	18,610,500	7.1
1977	332,600,000	22,315,000	6.7
1978	317,813,000	26,357,000	7.1
1979	513,683,000	35,766,000	7.0
1980	529,233,000	39,668,000	7.5
1981	638,250,000	50,781,000	8.0
1982	765,600,000	61,563,000	8.0
1983	775,370,000	63,950,000	8.2

Source: Ministry of Education, The Statistical Educational Yearbook 1981/1982, p.14.
For 1983, Education in Jordan in Figures 1982/1983.

Non-governmental institutions put their resources into the private schools. These resources come from fees paid by students themselves, and from local and foreign contributions and endowments.

The contribution of individual citizens is made through the resources raised by local authorities. These include a school contribution fund, local donations, a village fund, municipality funds, village council funds, a local school tax and other personal contributions. These various sources of revenue, and the purposes for which they are spent are set out in Table 3.

International resources includes loans and aid of various types, including the aid of U.N.R.W.A.

If we take into account the economic situation of Jordan, and the efforts to develop education, and compare them with other developing countries, we find that the financial appropriations for education are relatively high. Nevertheless, the poverty of Jordan's Treasury, the financial dependence of the state on foreign aid (which is unreliable in terms of amount and time paid), the increase in military spending and the scarcity of natural resources, the total picture developed is one of poor allocation of the internal resources of the country and failure to provide adequate funding from the state budget. There have been improvements over the period from 1950 to 1983, with the Ministry of Education Budget increasing ten-fold over the last twelve years.[27] This, at least, indicates appropriate concern on the part of the State in providing support for educational development.

Table 3: Local contribution to the Expenditure of Schools of the Ministry of Education 1980/81

Type of Expenditure	School Contribution Fund	Local Fund	Village Fund	Municipality Funds	Village Council Funds	School Tax	Other Contributions	Grand Total
Total	197,259	123,328	88,932	692,902	488,348	117,139	84,788	1,792,696
A: Recurring	115,709	56,913	8,505	19,742	33,938	103,139	4,800	342,746
Salaries	-	-	-	1,200	-	83,429	2,400	87,029
Rentals	-	20,850	8,305	18,442	33,538	19,560	-	100,695
Others	115,709	36,063	200	100	400	150	2,400	155,022
B:Capital	81,450	66,425	80,427	673,250	454,410	140,000	79,988	1,377,565
Land Purchase	-	1,900	9,500	76,000	19,500	70,000	6,338	183,238
Construction	-	20,500	70,827	595,950	348,910	70,000	51,700	1,157,887
Equipment and Furniture	81,450	44,025	100	1,300	86,000	-	21,450	234,325

Source: Ministry of Education, The Statistical Educational Yearbook 1980/1981, p.16.

It can be concluded that education in Jordan is financed almost entirely from the central state budget of the government of Jordan, through an annual allocation of a small percentage of the available resources to education. In practice, substantially less than five percent of the money for education is raised from local sources. There is little local taxation, which may be why local authorities do not participate much in the running of schools. In addition, the centralised educational administration does not encourage such participation. The participation of local communities in school affairs is badly needed in Jordan, both to counter the inflexibility of the centralised administration, and to produce the interest which would make the levying of higher local taxes acceptable. In the next chapter a more detailed analysis will be offered of how decentralisation would help in make more funds available from local sources.

6   The Mental States of Educational Personnel

Participants in the educational process may have acquired 'mental states' which prevent them from realising the aims of the education in Jordan. Over many years, as a result of a centralised system of educational administration, practically everyone now possesses similar (or the same) mental states. These are:

1)   fear of consequences: all participants implement the regulations which are received from senior officials without question or debate,

2)   non-critical thinking and no wish to challenge the

regulations,

3) no desire to use their initiative or to encourage their subordinates to use it,

4) no liking for experimentation and a determination to prevent their subordinates from experimenting, and

5) a belief that all regulations should be treated in a similar way to regulations that come from God, and consequently that regulations from the Ministry of Education are bound to be good and should not be changed or challenged.

Among the most important participants in the educational process who have acquired mental states which prevent the achievement of the stated and new aims of education are teachers, headmasters, educational supervisors, administrators and curriculum makers.

Teachers fear the consequences of criticising or discussing the educational system, the aims of education or regulations and decisions they receive from headmasters, supervisors and administrators. They implement them even if they do not wish to, and despite their criticisms, because they fear the consequences. Teachers have no wish to challenge regulations or to change them. In the application of these regulations, they pay more attention to implementation than to using their initiative and intelligence. They have no wish to experiment or to allow students to experiment. Students, for their part, do not attempt to develop initiative or critical thinking, because they believe that their teachers wish to prevent them from doing so. Therefore new ideas, or modern trends, and consequently new aims of education, are not easily accepted.

To maintain discipline in the classroom, the teacher believes that he must force students to sit silently at their desks during the whole period and should not allow them to discuss even matters which are relevant to the subject matter in hand. He also believes that discipline can be maintained in the classroom by punishment and not by guiding and cooperating with the students to help them improve their conduct.

The teacher believes that his method of teaching should be based on lectures; students should sit silently and passively in the classroom to take notes. Moreover, students should learn by heart the prescribed matter in the text books, the only source of student's knowledge. The teacher feels he must make sure that students have memorised all the pages of the text book within an allotted time. He believes that his efforts should be concentrated on the indoctrination of students in subject matter rather than in the achievement of child or society centred aims. This may be attributed firstly to his belief that the supervisor always examines students in the subject matter they are supposed to have learned, and secondly to his belief that emphasis should be on the memorisation of the subject matter in order to pass school and general examinations.

He also believes in restricting his methods of teaching and has no wish to change them, especially if they are recommended by an old fashioned supervisor. The teacher has no wish to use modern educational aids in teaching, the most important of which can be

described collectively as educational technology. Therefore, the mental states of the teacher prevent him from attempting to stimulate the imagination or curiosity of students or to develop creative ability, critical thinking, problem solving and independence. These mental states are antithetical to the achievement of the new and stated aims of educstion.

Similarly, the headmaster implements the laws and regulations which he receives from the Ministry or from the Director of Education in the governorate or district without question. He has no wish to challenge or change them because he fears the consequences. So he accepts them, and also he is not willing to allow teachers to use their initiative or intelligence or to give them a chance to experiment.

The headmaster supervises the work of teachers and gives them orders. He expects all teachers in his school to accept his authority and obey his instructions and orders without question, and he believes that he can report immediately the disobedience of any teacher to the Director of Education in order to punish him. Also, he believes that in his evaluation of a teacher's work through an annual secret report, he can recommend to the director of Education that a teacher be punished by transferring him to a remote area or to an undesirable school. These mental states oblige the teachers to accept his orders without discussion. He believes that discipline in the school can be maintained by punishing students physically or by transferring or dismissing them from the school, rather than by guiding, counselling, and cooperating with them in a democratic way.

When he interviews students' parents he believes that he should warn them what punishment their children will receive if they do not behave well, rather than win their cooperation by trying understand the causes of their children's misconduct or weakness. These mental states of the headmaster have made it difficult to encourage teachers and parents to change their attitude to knowledge centred aims.

Like teachers and headmasters, supervisors are unwilling to challenge or change the regulations which are issued by the Ministry, because they fear the consequences of any attempt to do so. Instead, the supervisor believes that he should supervise the way they are implemented in schools by teachers and headmasters during his visits to schools. In these visits he expects to be able to enter schools and classrooms without invitation. Moreover, he believes that his visits to schools and classrooms should be secret, and so he accepts that his programme of visits should not be known. This means that there is no, or little trust between teachers and supervisors. He expects, on his visits to classrooms, to criticise teachers and report to the Director of Education because he believes that his duty is to find fault, and to report on the weaknesses and deficiencies of teachers to the Director. This mental state of supervisors has forced teachers to concentrete on the indoctrination of students in subject matter. The supervisor is reluctant to introduce alternative methods of teaching or to encourage teachers to introduce them.

The most important administrators in the Directorate of Education in a governorate or district are the Director of Education and two senior officials who assist him, the Director Administrative Assistant and the Director Technical Assistant.

The Director of Education receives decisions, regulations and laws from the Ministry of Education and implements them without question. Tke Director of Education (and his two assistants) are responsible for passing on all the regulations and orders of the Ministry to schools: to headmasters, teachers and students.

The Director of Education implements the regulations of the Ministry without guestioning them or challenging them, because he fears the consequences. The Director Administrative Assistant accepts traditional regulations from the Ministry and passes them without discussion to schools, i.e. to headmasters and teachers. He has no wish to change or challenge them because he fears he may be punished or lose his position.

The Director Technical Assistant in a Directorate, supervises the work of supervisors. He accepts traditional concepts of supervision which come from the Ministry and implements them without opposition or question. He believes that the visits of supervisors to schools and teachers in classrooms should be a secret matter and that it should be performed without invitation. He beleives also that the supervisor should report on the faults and weaknesses of teachers and recommend suitable punishments to the Director of Education. The Director Techsical Assistant has

no wish to change or challenge such traditional concepts of supervision, but on the contrary he tries to see that they are implemented by supervisors during their visits to schools.

It could be concluded that non-critical mental states persist in all aspects of the work of administrators. There is no evidence of critical thinking even at the Ministry of Education level. There is no evidence that anyone wishes to challenge the system of education, and question whether the aims of education are being achieved in the educational system of Jordan.

Also, the regulations issued by the Ministry may be attributed to a lack of trust between those concerned with the work of schools and the Ministry representatives, particularly its administrators and supervisors.

The mental states of the curriculum makers are linked with an old fashioned theory of knowledge based on the Islamic-Arab tradition and the British view of knowledge which implies that the curriculum depends on books and rote learning. Curriculum makers accept a subject centred curriculum based on an encyclopaedic theory. So the content of the curriculum provides facts and information rather than promotes creative thinking and problem solving. It does not take into account individual differences. It does not develop the whole child, or respond to the needs of society. Consequently, the authors of textbooks fill them with facts and information which oblige teachers to encourage their students to learn by rote.

In short, the curriculum is subject centred rather than child or society centred. There has been no wish on the part of the curriculum makers to change it, and also there has been no questioning of what knowledge is of most worth and what should be included in the curriculum.

Under these conditions it is necessary to consider carefully what new policies may help educators in Jordan to achieve the aims of education laid down in the 1964 Education Act. As stated, these aims were foreign in origin and they are unlikely to be achieved unless the financial situation is improved and the deeply held beliefs of educators can be changed. In subsequent chapters consideration will be given to policies associated with the administration of education, the organisation of the school system, the content of education and teacher education. An atempt will be made to show how changes may be brought about provided these do not do violence to the mental states (and therefore traditional forms of behavious) of participants in the enterprise of education.

References

1   Mathews, R.D., and Akrawi, M., Education in Arab Countries of the Near East, Washington, D.C.: American Council of Education, 1949, p.307.

2   Ibid, p.310.

3   Ministry of Education, Auba al-Tarbiyah (Bulletin), "The Conference on the Educational Process in Developing Jordanian Society (13-15 May, 1980), Arabic Text, Amman, 1980, p.125.

4   Pratt, D., Curriculum Design and Development, New York:

Harcourt, Brace and Janowich, 1981, p.379.

5   Ibid, p.319.

6   Ministry of Education, Jordan's Education in Figures, Amman: 1983.

7   Ministry of Education, The Statistical Yearbook of Education, Amman: 1979, p.16, and 1980, p.16.

8   Tell, A.Y., Education in Jordan, Amman: Ministry of Culture and Youth, Arabic Text, 1978, p.314.

9   Ministry of Education, Risalat al-Mu'allim (The Message of the Teacher), Collection of Laws and Bye-Laws, Amman: 1966, p.69.

10 Ministry of Education, Collection of Laws and Bye-laws, Amman: Arabic Text, 1970, Part 1, p.22.

11 Ministry of Education, Educational Development in Jordan, op.cit., p.200.

12 The Koran, Al-Qura'n Al-Karim wa ma'ahu Safwit al-bayan Li-ma'ni al-Qura'n (The Qura'n with a commentary by Haserein Muhammad Makhluf, Cairo: Dar al Kitah al-Arabi Press, 1957, Vol.1-2, Sura 96, Verse 1, p.554.

13 Zarnuji, B.I., Ta'lim al-Muta'alim Tariq al-Ta'allum (Teaching the Learned the Method of Teaching), Cairo: Dar al-Kitah al-Arabi Press, 1948, p.4.

14 Nasdwi, A.H.A.H., Al-Sirat al-Nahawiyah (The Prophet Mohammad's Biography), Jeddah: Dar al-Shorouk, 2nd Edition, 1979, p.188.

15 Tell, A.Y., Education in Jordan, op.cit., p.312.

16 Mathews, R.D., and Akrawi, M., op.cit., p.307.

17 Ministry of Education, Risalat al-Mu'allim (The Message of the Teacher), op.cit., p.48.

18 Ibid, pp.63-64.

19 Ministry of Education, Catalogue of Educational Programmes in Private Schools, Arabic Text, Amman: 1980, p.15.

20 Ministry of Ministry, Educational Development in Jordan, op.cit., p.105.

21 Mallinson, V., op.cit., p.157.

22 Ibid, p.157.

23 Ibid, p.166.

24   Ibid.

25   Ibid, p.167.

26   U.N.R.W.A., **Fact Sheet 10**, Amman: 1979.

27   Tell, A.Y., **op.cit.**, p.233.

CHAPTER THREE

The Educational Administration of Jordan

The Education Act of 1964 (Article 5) vested responsibility for
the administration of education in a highly centralised Ministry
of Education. Through its various bodies, the Ministry oversees
all the educational activities which take place in the country.
The intention of this is to establish institutions which have
adequate power to facilitate the realisation of the aims
previously described. But in fact, this centralised system of
education is an obstacle to the achievement of the stated aims in
education, and the power which it has is frequently used in an
adverse way.

The system of administration is one of the most important means
by which educational aims can be achieved. In Chapter 1 it was
pointed out that many of the aims of education in Jordan stem
logically from a pragmatic philosophy. Other aims were derived
from the traditional Islamic heritage. While some aspects of the
Islamic heritage were quite compatible with a pragmatic view of
educational administration, others, particularly respect for
individuals in authority and reliance upon written instructions
as incontrovertible, are not. Whether a pragmatic philosophy and
its related aims of education are realised in practice in the USA
because the system of administration in that country is
decentralised is a question of some importance to this thesis. It
is also important to examine precisely which procedures drawn
from the Islamic heritage inform the day to day operation of the

centralised educational administration in Jordan. This careful analysis of the administrative system will form the content of this chapter.

The present situation is mainly the result of historical circumstances and local practices. While the Islamic system of education was based upon respect for the authority of Moslem theologians at the local level, Napoleon's expedition to Egypt in 1789 substituted other forms of authority and strengthened centralisation. The third influence, "that of the British, paradoxically failed to modify the sterile rigidity of the Islamic-French systems. In fact, the British perpetuated rather than broke the inflexible centralised system which prevailed".[1]

Therefore the Education Act of 1964 reinforced the system introduced by Napoleon and the British. There remains, however, a tendency in Jordan towards decentralisation. B.Holmes, in his major work, **Problems in Education** states the following about centralisation and decentralisation of educational administration:

> "The danger for comparative educationists is that in classifying national systems of education as either centralized or decentralized simple conclusions are drawn: for example, that the former are necessarily totalitarian and the latter democratic. Certainly one aspect of the liberal faith has been, and is, that there is a direct relationship between democracy and the decentralized control of education... Certainly it is possible to hold as a fundamental principle that democratic systems ought to be decentralized, but in practice, successful operation of any system of administration depends on a complex of relationships between it and the societal configurations".[2]

In any analysis of administrative systems some kind of formal

organisation concerned with the control of education will be found. These formal organisations can be found at the national, regional and local levels.[3] Talcott Parsons points out that three major levels can be distinguished in the hierarchical structure of these formal organisations.[4] These are the technical, managerial and public interest levels.

Holmes suggests that Parsons analysis of formal organisations can be applied to educational systems, and identifies the technical, managerial and public interest groups in the educational context:

> "Parsons maintains that in any formal organization three levels should be distinguished, the technical, the managerial and the public interest. Each level is identified by the function its members perform. Thus in education the technical functions are performed by the teachers, the managerial by administrators or executive officers, and the public interest by a variety of elected or appointed persons serving on committees, boards, or in institutions".[5]

Holmes, in expressing his awareness of the need for a conceptual framework for rigorous comparative studies of administrative systems, maintains that the analysis provided by Talcott Parsons provides an excellent starting point. He further claims that;

> "A further assumption made here is that examples of Parsons' formal organisation are found at every level - central, regional, local and within an institution - of the educational system. Only a careful analysis of the basis of function, level and aspect of policy and the interactions between a complex of institutions will enable a rigorous comparative study to be made".[6]

By adapting Parsons' model to an administrative system which has a formal organisation at several levels, the writer will carry out an analysis of the Administration of Education in Jordan. Mention should first, however, be made of the main assumptions of

the analysis:

1) The process of decision-making is the core of any administrational system,

2) Organisation is a function of administration,

3) The distinction between the public interest, managerial and professional (technical) levels of control is not clear-cut, since a single person may have duties, responsibilities and power at more than one level.[7]

Levels of Administration in Jordan

It is possible to identify, in broad outline, the various administrative levels in education in Jordan (three levels of control).

I) The National level is the Ministry of Education (the centre) in Amman.

II) The Regional level administration is in the governorates and districts in the East Bank of Jordan only.

III) The Institutional level is found in schools. It must be noted that there are two sectors in which schools can be placed: the Public Sector of Ministry of Education schools on which emphasis will be placed in this study, and the Private Sector consisting of schools operated by national, foreign and international educational organisations.

I) The National Level of Educational Administration

The Ministry of Education was founded in 1948, and in 1964 an

Education Act, No.16, issued by the Ministry replaced all previous education acts. The 1964 Education Act defines the responsibilities and functions of the Ministry of Education, of which the following are the most important.

"1) To issue the important and major decisions for the implementation of educational policy in Jordan.

2) The Ministry is responsible for the establishment and control of the various types and levels of Public (State) Educational Institutions, the process of curricula design, development and revision, producing text books, holding general examinations, appointing teachers, administrators, supervisors, snd personnel as civil servants.

3) Supervision of all the Private Educational Institutions whether they are national, foreign or UNRWA educational institutions.

4) To supervise the financing of educational processes and the expenditure which comes from the State Budget.

5) To encourage educational research and the drawing up of educational plans.

6) To establish and regulate cultural relationships with Arab and foreign countries, and to coordinate educational affairs witk other ministries in Jordan".8

[Translated from Arabic]

Some of these statements are vague, but confer considerable power for decision making on the Ministry. Others are much more explicit, of which control over the organisation of the school system, curricula and examinations are very important.

The Levels of Control within the Ministry of Education

a) The Managerial Group

The key person in the managerial group within the Ministry is the undersecretary of the Minister of Education. The centralised

system of educational administration in Jordan concentrates vast authority in the hands of the undersecretary, in addition to the authority which is delegated to him by the Minister. To ensure the adequate exercise of these powers, the Minister of Education appoints three consultants who are responsible to the undersecretary.

The Consultant to the Undersecretary for Planning is responsible for two directorates within the Ministry; The Directorate of Planning and Research and the Directorate of Curricula and Educational Aids. The Directorate for Planning and Research has seven sections. Its main task is to draw up educational plans to further educational policy, in cooperation with the Higher Board of Education and the Higher Committee of Education. The Directorate of Curricula and Educational Aids has six sections for setting up, developing and planning curricula, producing text books, supervising and maintaining educational aids, developing teaching methods using modern educational technology such as television, radio, and video, and evaluating the results of general examinations.[9]

The Consultant to the Undersecretary for Teaching is responsible for five directorates, which are responsible for various aspects of supervision of schools, and for ensuring that Ministry programmes anr implemented.[10] The directorates, each of which comprises a number of sections, are; the Directorate of General Education, The Directorate of Vocational Education, The Directorate of Certification and Educational Supervision, the

Directorate of Physical Education, and the Directorate of Private Education.

The Consultant to the Undersecretary for General Services is responsible for six directorates, each of which is further subdivided into sections.[11] These are the Directorate of Examinations, the Directorate of Project Implementation, the Directorate of Personnel Affairs, the Directorate of Finance Services, the Directorate of School Buildings, and the Directorate of Cultural Relationships.

The formal structure of the managerial group of the Ministry is completed by four other sections, the Legal Adviser, the Chief Clerk, the Ministry Consultant for Technical Affairs, and the Ministry Consultant for West Bank Educational Affairs, each of whom, with their respective staffs, is directly responsible to the Undersecretary. The whole managerial organisation is set out in Figure 1.

DIAGRAM REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES
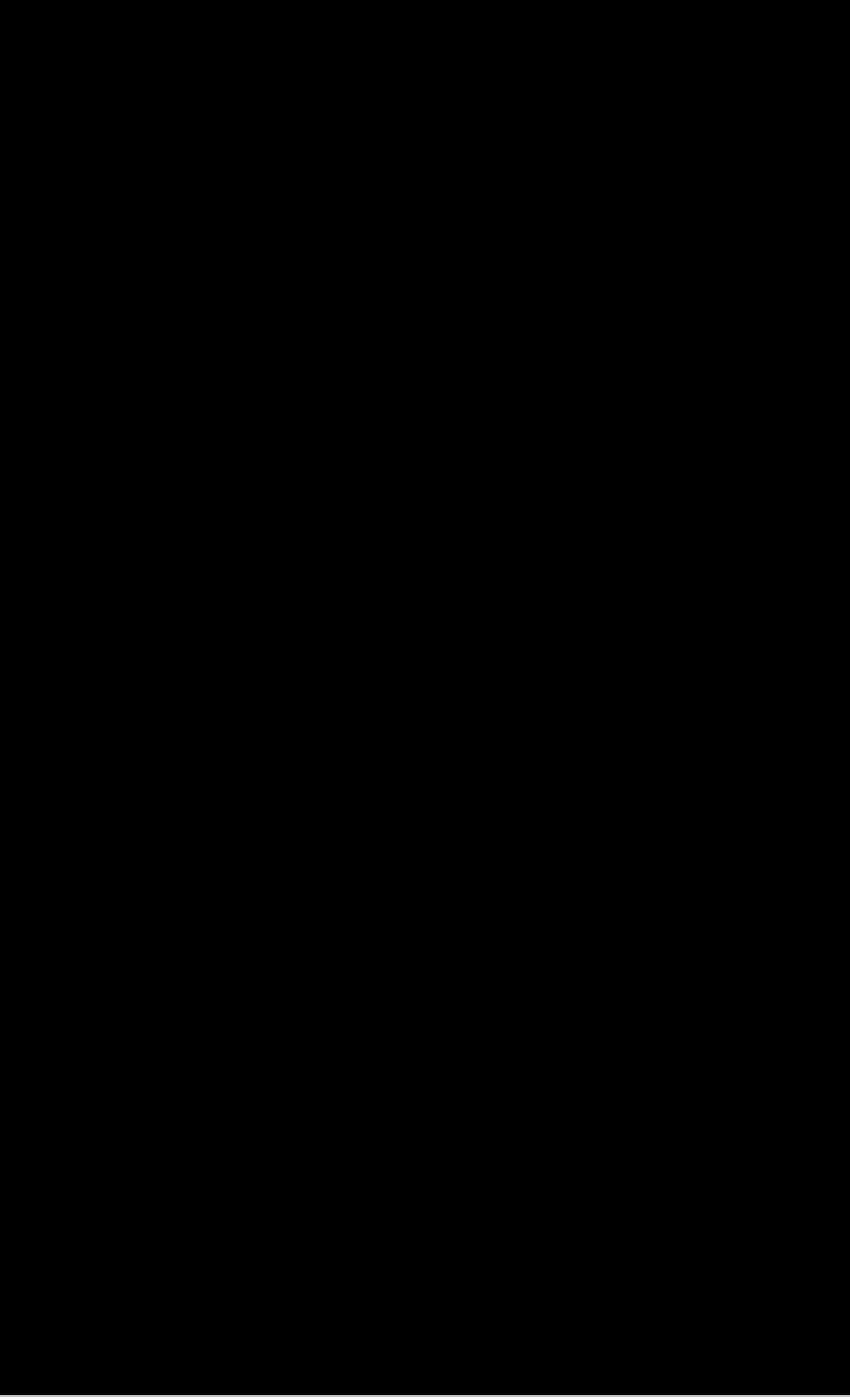
Source: Ministry of Education (Jordan) The Statistical Educational Year Book 1979/1980 p 7

Administrative Structure

Each of these directorates is headed by a director, who is responsible to the appointed consultant to the Undersecretary. Each section has a section head who is responsible to the director concerned. The Undersecretary and his consultants, the directors and the heads of sections should be university graduates (Article 84 of the 1964 Education Act) and all of them should have long experience of the work to be performed. They are all appointed by the Minister of Education, except the Undersecretary who is appointed by the cabinet.

As mentioned, the Undersecretary has great responsibility and power. He is responsible for the actions of the consultants and directors. He is an ex-officio member of many committees; the Jordan University Council, the State Budget Committee, the Higher Education Board, the Committee of General Examinations and the Committee of Scholarships. In addition he has working relationships with his peers in other countries. thirteen directors of education in the governorates and districts are directly responsible to him.

Given this centralisation of power, it is unlikely that sufficient consideration will be given to the local conditions, habits and traditions of local citizens in the formulation of regulations and orders from the Undersecretary to the governorates and districts of education. Since such matters ought to be taken into consideration in the formulation of orders and regulations to raise the efficiency of local authorities, the power of the Undersecretary should be reduced, to permit local

conditions, of which the Undersecretary is ignorant, to be taken into account.

The director of each directorate, or the head of a section is selected on the basis of seniority. He is the supreme authority within his directorate or section and is usually authoritarian. He expects everyone under him to do what he says with no discussion or debate. The opportunity for subordinate officials to participate actively and positively in helping to formulate policy on work problems is usually limited. The characteristics of a successful bureaucrat in the Ministry can be summarised as follows; obedient and loyal to his superiors, strictly adherent to laws, regulations and routine work, and able to train those under him to acquire implicit faith in statements of superiors without questioning them or even using their intelligence.[12]

A feature of bureaucracy in Jordan is, therefore, that individuals in the bureaucracy hesitate to take decisions, even on agreed principles, since decisions may lead to mistakes for which blame may be apportioned later. The safest way to avoid mistakes is not to act. This does not help in the achievement of aims, because, as set out in Chapter 1, aims should be applied flexibly and constantly revised.

So, a new type of personality is required to provide educational leadership in Jordan. This personality should include, besides professional competency, a sense of moral obligation towards the aims of education, a readiness for change, creativity and intelligence applied in the realisation of aims, a positive

scientific attitude towards experimentation and problem solving to resolve and reconcile contradictions, and initiative and confidence. The key problm, then, is how to change for the better the fundamental attitudes and performance of the civil servants.

It is suggested that many of these desirable characteristics could be based upon values which are highly regarded in the Islamic heritage, and that the gap between the existing type of personality and that which is desired should be bridged by systematically applying a scientific approach to administration. This could be achieved by simultaneously providing scientific training inside and outside work, and changing the environment of leadership to encourage community control, active criticism and the devolution of power in the process of decision making.[13]

In order to overcome some of the defects of a centralised administration, the Ministry of Education has reorganised its administrative structure several times in the last ten years. Typically this has involved the reorganisation of the central Ministry, which then reorganises the governorates and districts along similar lines. Since such reorganisation does not affect the balance of power between the national and regional levels, it always leaves too much power in the hands of the Ministry, and results in inadequate coordination and lack of clarity over the limits of responsibility of the central Ministry.

Always, when reorganising its administrative structure, the Ministry has placed emphasis on changing the names of its

directorates and sections, without actually improving the efficiency of the administration or increasing decentralisation. Another criticism of the general organisation of the Ministry is that the whole structure of each of the directorates is based on two distinct lines of authority. The principle line of authority derives from the Undersecretary and appropriate consultant, and is designed to make the directorate or section function as part of a larger administrative structure. The second line of authority derives from the director or section head, and is designed to make the directorate or section responsive to his personal authority. This is primarily an internal matter for the directorate or section, but these internal conditions may conflict with the broader purposes of the Undersecretary or consultant. This hinders change, because the Undesecretary and consultants may not have adequate communication channels open to them within directorates or sections and may therefore be unable to control or coordinate efficiently a number of directorates and sections, even though they usually work on the assumption that they can.

b) The Public Interest Group

The Minister of Education, as an appointed minister of the government, is the principal member of the public interest group within the Ministry. There is a system of advisory panels and committees which are designed to ensure that education serves the public interest. The Minister is chairman of all the central advisory councils of education in the Ministry. He is also chairman of the Higher Board of Education, the Higher Committee of Education, the Higher Committee of Literacy and Adult

education, and the Committee of General Examinations.

Under the centralised system of administration, the Minister has very wide powers of control over most of the affairs of the Ministry. He has final authority over the working of the Ministry and its staff. He issues all decisions and regulations to the officials in the Ministry and in the governorates and districts, and they have to implement them without discussion. He appoints, or recommends the appointment of, the Ministry's high officials, and promotes them. He can, if necessary, draft education laws and issue regulations concerning the internal organisation of the Ministry. Any alterations in syllabuses, the right to purchase text books, the organisation of general examinations, and the appointment of teachers, administrators, directors and the transfer and promotion of all these officials are under his absolute authority.

As with the Undersecretary, the Minister has far more duties than he can perform efficiently. Also, in the past, constant changes in the Ministers of Education have been antithetical to the achievement of aims. Such changes contribute to lack of continuity in educational policy. As a consequence, it has been impossible to formulate an integrated and workable educational policy. In addition, until recently, Ministers of Education have not been specialists in education, and could not discharge their duties professionally and efficiently.[14]

To correct these shortcomings, His Majesty, King Hussein, issued

directives to improve the situation. As a result, the Ministry of Education has some continuity in educational policy and administration. Moreover, a specialist Minister of Education has been appointed on ten out of sixteen occasions during the period 1966 to 1977.[15] Since then, most ministers have been specialists; Dr.M.N.Shafiq (Ph.D. in Education) a well known and outstanding educationist and Dr.S.Tell (Ph.D. Comparative Education 1963) a former Dean of the Faculty of Education in Jordan University are among them. The then Minister of Education, Hikmat Al Sakit, was an educator for a long time in the Ministry of Education.

In addition to the Minister of Education, the Ministry of Education has a number of committees which assist in performing the public interest functions of the Ministry. The most important of these are the Higher Board of Education, the Higher Committee of Education, and the Higher Committee of Literacy and Adult Education.

The Higher Board of Education is linked directly with the Ministry of Education (see Figure 1) and is composed of 15 members who represent both the public and private sectors of society. The State members of the Board are appointed by the Cabinet but the members of the private sector are appointed by the associations which they represent. The Minister of Education is the chairman of the Board. The Board has full authority to make decisions about curriculum development and revision and about text book production. However, it has only an advisory capacity in all other educational matters such as the implementation of educational policy, and the establishment of

compulsory institutes or cultural centres, whether they are public or private.[16]

The Higher Committee of Education is also linked directly with the Ministry of Education. Its chairman is the Minister of Education and the Undersecretary is vice-chairman. Members are the consultants of the Undersecretary and the directors of the directorates in the Ministry and the consultants of the Minister of Education and the Legal Advisor. Its important tasks are the following;

1) to draw up long term and short term plans for the development and diversification of education and to state how these plans can be financed and implemented,

2) to supervise the evaluation of the Ministry's educational projects, and the control of general examinations, and

3) to adopt the Ministry's general plan for the certification and training programmes for teachers and the general plan of each of the directorates and sections in the Ministry, and to make sure that they are implemented.[17]

The Higher Committee of Literacy and Adult Education is headed by the Minister of Education, and has 18 members who represent both the public and private sectors. The Committee draws up plans for literacy and adult education. It links literacy and adult education projects with growth projects and coordinates literacy and adult education efforts in the public and private sectors. It also cooperates with other similar bodies in Arab and foreign states and with the International organisations of the United

Nations.[18]

There are other committees in the public interest level which have responsibility for such areas as educational certification and training, and general examinations. There is also a national team developing curricula for the teaching of mathematics.[19] But most of these committees and boards have only an advisory role in educational matters, and thus they are not encouraged to participate effectively in making recommendations and seeing that they are implemented.

c) The Technical (Professional) Group

This level is made up of university and school teachers' syndicates at the national level. In the case of Jordan, there has been no school teachers' syndicate since 1956 when the government abolished it as a result of a strike. An explanaition was provided by Dr.Shafiq (a former Minister of Education).

> "Although education is highly valued in Jordanian society, the teaching profession is not high on the ladder of professions. Salaries are not high and the government is reluctant to allow teachers to organise a professional association".[20]

In the absence of a teachers' syndicate there is no professional association of teachers which can work to raise the professional efficiency of teachers, raise their salaries or defend their interests and rights. Thus the teachers are not encouraged to think of educational policy formulation as something which they can influence at the national level.

II) The Regional Level of Administration

Education at the regional level is administered by the governorates and districts. The Education Act of 1964, Article 80, stated that directorates of education should be established in the governorates and districts which were to be subordinated to the Ministry of Education in performance of their duties. Therefore the East Bank was to have 10 regional directorates, each one to be the local instrument of the central Ministry organisation.

a) The Managerial Group

Each governorate or district has a directorate, headed by a director, who is to some extent independent of the administration. He is appointed by the Minister of Education and he must hold a university degree (Article 84 of the 1964 Education Act). He is responsible to the Undersecretary for the educational affairs in his directorate or district. He receives decisions, regulations and instructions from the Minister of Education which he must implement without discussion. This does not assist in realising aims, because he cannot tackle educational affairs in his governorate or district according to local conditions.

He cannot appoint teachers or supervisors, or transfer any one of them without reference to the Ministry of Education.[21] No use is therefore made of his knowledge of the needs of schools and the specialisations of teachers and educational supervisors which are needed in his diretorate. The director is, thus, responsible for the smooth operation of education in his directorate, while being

severly restricted as to the extent to which he can use his own initiative.

To assist the director in performing his duties, each director has two assistants, the Director Administrative Assistant and the Director Technical Assistant, and a staff of supervisors and other personnel. In addition he is responsible for the headmasters, teachers and students in the schools of the directorate. So it is clear that the director's authority does not match his responsibilities.

The Director Administrative Assistant is appointed by the Minister, and must hold a university degree. He supervises and organises the planning and statistical section, the school buildings section, the accounts section, the supplies section, the general examinations section, and the section of the chief clerks office. He is responsible to the Director of Education.[22]

Similarly, the Director Technical Assistant is appointed by the Minister amd must hold a university degree. His important tasks are supervision, organisation and training, general education, educational aids, private education, literacy and adult education, psychology and counselling, and school activities. He is responsible to the Director of Education.[23]

The Director and his two assistants are responsible for passing on all the regulations, orders, bye-laws and laws of the Ministry of Education to the schools, headmasters, teachers and students

for implementation. This means they are not given any opportunity to assess directives from the Ministry and decide which are appropriate for their locality.

b) The Public Interest Group

The Committee of Education of the Directorate is composed of the Director of Education, as chairman, his two assistants, and two supervisors elected by their colleagues in the Directorate. The Committee has the authority to prepare annual reports on the schools and to recommend the reports to the Ministry of Education for approval.[24] The Committee sets up a basis for the transfer of headmasters, teachers and other personnel from one place to another inside the governorate or district. Transfers are authorised by the Minister of Education or by the Undersecretary in accordance with Civil Service Bye-law No.23 of 1966. The Minister and the Undersecretary have the authority to reject any transfer recommendation made by this Committee.[25] The members of this Committee are well equipped to administer the educational affairs in their governorate or district in the light of their personal knowledge of the local conditions, but have very little power.

The Committee also tackles all the general issues concerning education in the governorate or district. It considers the decisions made by teachers' councils about the annual results of students in schools. Therefore the Committee of Education assists the Director in monitoring educational matters in the directorate.

The Local Committee of Education is composed of representatives of the municipal council of the city or towm, or village local council, and the Director of Education in the governorate or district. The chairman is the administrative governor of the governorate or district.[26] The local committee of education should consult the Director of Education on educational matters, and help him to implement policy in the governorate or district. The local committee is responsible for constructing school buildings which may be financed from the school tax which is imposed on the basis of the annual rentals of buildings in cities, towns and villages. The school tax amounts to 3 percent of these annual rentals.

The local committee has the authority to impose an extra tax to finance the construction of school buildings and to purchase plots of land for school buildings. But there is no evidence that local committees of education do raise extra tax to finance the construction of school buildings. This is serious because inadequate school buildings are still a major problem.

c) Technical Group: Educational Supervision in the Directorate

The educational supervision and training of teachers are organised by the technical assistant, who is responsible to the Director of Education in accordance with Bye-law No.19 of 1972. Educational supervision in the Directorate of Education is undertaken by a number of specialist supervisors. Each of them is a specialist in a particular subject, should hold a university degree, have at least four years experience in teaching and also

have experience of school administration and be trained in special courses.[27] There is, however, no in-service or pre-service training for supervisors.

In addition, the Ministry of Education, in selecting supervisors, takes into account his academic and professional qualifications and his length of service in the teaching profession, but does not interview him to assess his personality or his interest in supervision. Indeed, the Ministry selects the supervisor without the participation of the Director of Education in the governorate or district for which the supervisor will be selected, and whose participation could ensure the selection of the most competent candidate, because of the Director's knowledge of the candidates' personal qualities and suitability to supervise.

The number of supervisors is not in proportion to the number of teachers as stated in the 1964 Education Act (Article 78). For instance, the average number of teachers to each supervisor in Amman Governorate is 216, while in Irbid Governorate it is 186. The average over the whole country is between seventy and one hundred.[28] In addition to that, some supervisors undertake supervision in more than one directorate of education. This does not assist in achieving aims, because the supervisor is frequently unable to perform his tasks adequately due to the great number of teachers who are under one supervisor.

In former days, educational supervision was inspection in theory and practice. It was founded to ensure that the teachers in schools were performing their duties well according to the aims

and plans which were drawn up in the Ministry of Education.[29]
Formerly, the inspector was an administrative official who was
also responsible for the inspection of the teachers' work in the
classroom in order to discover their faults and report to the
Director of Education to punish them. The basis of teachers'
evaluation was personal. Therefore, it was impossible to develop
the abilities of teachers to the fullest or for the educational
process itself to realise its aims.

But the expansion of educational services, the increasing number
of students and hence the number of teachers and schools
necessitated specialist inspectors in various subjects of
education to inspect teachers in the classrooms. The nature of
their tasks differed very much from that of the administrative
inspectors. One difference is that specialist inspectors have
more ability to tackle educational problems than the previous
administrative inspectors, whose duties were not to reform
deficiencies, weaknesses or faults, or to help the teacher use
the best methods of teaching, or direct him to the best
educational aids and to use them in the most suitable way. On the
contrary, the intent of inspection was to report these
deficiencies, weaknesses and faults of the teacher in order to
punish him.

This type of inspection is based on a lack of confidence between
the teacher and the inspector. In addition, the teacher has no
role in the inspection process, and the emphasis was on the
performance of the teacher in the classroom and on his methods of

teaching subject matter to students. If aims are to be achieved the supervisor should encourage teachers to experiment with methods of teaching, to develop their critical thinking and problem solving, and to encourage independence of thought on the part of students.

The traditional concept of inspection differs very much from the modern concept of supervision which is a cooperative democratic process between two persons; the supervisor of the subject matter aiming to assist the teacher (the second person) in discovering and understanding the aims of education, and also in assisting him to accept these aims and to exert his best efforts for their achievement.[30]

So, in order to achieve the stated aims of education, it is recommended that educational supervision in Jordan should liberate itself from this out-moded concept and practice of inspection. Therefore, great responsibility rests on the shoulders of the educational leadership in Jordan to improve educational supervision. It is necessary to liberate supervision from an out-moded concept and practice of inspection. The development of improved educational supervision can be realised by drawing up a comprehensive plan, which should include the preparation and training of the personnel to be leaders of educational supervision. These people should be trained abroad so that they could gain a good understanding of educational supervision, its methods, its practices, and its objectives. Such a plan is basic to the development of educational supervision.[31]

III The Institutional Level of Administration

a) The Managerial Group

Control of the school is vested in the headmaster. The headmaster
of a secondary school should be a university graduate and have at
least three years of experience in teaching. He is selected from
successful teachers with a strong personality and must attend an
administration course.[32] But most headmasters of secondary
schools have not been trained in school administration.
Consequently, the headmaster does not tackle educational problems
in his school according to educational and school administration
principles, but according to his own experience.

The headmaster of a compulsory school (i.e. primary and
preparatory schools) should be a graduate of a teachers' training
college with teaching experience of not less than three years, or
hold the General Secondary Education Certificate (GSEC) and have
at least five years teaching experience. This means that the
headmaster of a compulsory school need not be trained in school
administration, and this does not help him to tackle his
responsibilities efficiently. Concerning these, he is responsible
to the Director of Education in the governorate or district for
the running of his school, its organisation and for the
development of a spirit of cooperation among its teachers. Also,
he has to contact the Director of education about all important
matters, and cooperate with him.

But many problems arise in schools which headmasters cannot deal

with. They do not seek the cooperation of the Director of Education, because they fear the charge that they cannot manage their school. Problems are thus aggravated, so that they cannot be tackled by the Director of Education when they eventually come to his attention. Examples of such problems are disputes between some teachers and their headmaster, or between teachers themselves.

The headmaster receives regulations from the Director of Education, or from the Ministry, and is required to implement them without question. He is also required to accept curricula and text books which are prescribed by the Ministry. He has to accept the appointment of teachers to his school whether or not the teachers are competent. The headmaster has no opportunity to initiate changes in the light of his own critical thinking, or to propose what is appropriate to the local environment.

The head teacher is also responsible for the following:[33]

1) Cooperating with the administrative authority and the local committee of education and the municipal or village council in the interests and development of his school.

2) Establishing satisfactory links with students' parents, and cooperating with them to ensure the good conduct of their children.

3) Establishing friendly relations with persons living in the school area who may assist the school by offering their services to it.

But most headmasters do not untertake such matters, because they

believe that their responsibility is restricted to the internal running of their school. Therefore, they establish few or no links with local bodies, parents or local inhabitants of the school area, who could help to realise the aims of the school.

The headmaster also has duties which relate to the teachers in his school. He is the first supervisor of all teachers in his school. Sometimes he does not have the ability to supervise them effectively, because, as with other appointments, headmasters are selected on the basis of formal qualifications and length of experience rather than on the basis of competence. As a result, it can happen, and frequently does, that many teachers in a school are more competent than the headmaster.

All employees of the school should cooperate with the head to ensure that the aims of education are realised. But in many cases disputes between the headmaster and some teachers, or between the teachers themselves, have had an adverse effect on the working of the school. There is no easy way to resolve such disputes within the school, as, in theory, all teachers in the school are expected to accept the headmasters authority without discussion. Disputes could more easily be resolved if there was a tradition of more democratic and cooperative school governance.

Finally, relations between a headmaster and his staff are poor because at the end of each school year the head must file an annual "secret" report on every teacher in the school and send it to the Director of Education. The most astonishing fact about

these reports is probably that their effect in practice tends to be negative rather than positive, which means that they lead to punishment but rarely to reward. An unusual aspect of the report procedure is that the same formal report which is used to assess the performance of a teacher is used to assess the work of the headmaster. No special report forms are provided by the Director of Education in the governorate or district to assess the performance of headmasters. Thus the success or failure of a head cannot be publicly evaluated.

b) The Public Interest Group

There are a few bodies which cooperate with the headmaster in running a school. The most important of these are the teachers' council and the teachers-parents associations.

The teachers' council is composed of all the teachers of the achool and is chaired by the headmaster of the school, and its duties are to control all instructional and educational matters in accordance with the laws, bye-laws and regulations of the Ministry of Education. This leaves no freedom to tackle educational matters in accordance with the special conditions of the school and the local environment.

Teachers-parents associations are composed of parents and teachers of the school. Since September 1971 the Ministry of Education has encouraged the establishment of these associations in every school in all cycles of Education.[34] The aims of these associations are:[35]

1) to develop the social relations of school teachers to enable

them to understand the social factors which positively or negatively affect the attitudes of students and their parents towards school, and

2) to establish new attitudes in parents and to develop their views about the school as a body which has a social role.

These aims have not been achieved, because these associations, hitherto, have failed to build bridges of confidence between the school and home and community. Teaching staff are not trained to develop activities which might attract the parents to visit the schools and join these associations, and in many cases the buildings are not welcoming either. In order better to achieve the aims of these associations, the school should open its doors to parents, so that they can benefit from its services, equipment, tools, instruments, library and public utilities. Few schools have introduced such steps, thus making schools very unresponsive to local opinion.

These associations do, however, discuss many problems, dealing with school affairs, general cultural subjects, and the problem of rented school buildings. They also establish centres for literacy and adult education.[36] But they cannot solve the problems of school buildings by themselves, and the need for centres for adult literacy training has not been satisfied. Even with the best will in the world, these associations cannot tackle these educational problems in all parts of the country, and they have tried they have not succeeded adequately.

In short, while parents in cities responded to these associations satisfactorily, villagers do not pay much attention to them because of their traditional feelings that education is the responsibility of the state.

c) The Technical Group: Teachers

1) Selection and Appointment of Teachers

Candidates for teaching posts apply to the Civil Service Commission at the start of the school year. The committee of employees of the Civil Service Commission selects candidates for appointment, taking into account their academic qualifications, certificates and degrees, and educational experiences, but without interviewing candidates before their selection.[37] These procedures are inadequate because, in selecting teachers, account should be taken of the candidates personality, interest in teaching and enthusiasm for it.

The selection committee selects two or three times as many candidates as there are vacant posts in the Ministry of Education. Then the Civil Service Commission sends the names of the selected candidates to the Ministry, which in turn sends them to the Director of Education in governorates and districts, without taking into account the exact number of teachers required or their major areas of experience.

The Director of Education selects more teachers than there are vacancies in his Directorate, but cannot pay much attention to the qualities of the teachers or their specialities, because the original list of candidates supplied by the Ministry has taken no

account of these whatsoever.[38] The newly appointed teacher undergoes a probationary period which lasts for two years at least, after which he acquires tenure as a civil servant.[39]

In the case of selection for teachers for secondary schools, consideration is given to previous experience in preparatory schools. In some cases, especially where the candidate teaches a shortage subject such as science, mathematics or English as a foreign language, candidates who have taught in preparatory schools may be selected even though they do not have a degree, which is a formal requirement for selection for secondary schools. Such teachers are frequently below the adequate professional standard, and need in-service training.

All selected teachers have to be appointed by the Ministry of Education, since teachers in State schools are government employees, and their employment is governed by general regulations for the appointment of civil servants. It is clear that the Ministry of Education has no clearcut and definite policy of selection and appointment of teachers. In practice, responsibility for selection lies with the governorate and district Directors of Education. These Directors do not have authority commensurate with their responsibilties.

2) Salaries of Teachers

Teachers salaries are paid according to a ten scale salary structure which applies for all civil servants. Grade 1 is the highest and grade 10 the lowest. The grades are grouped into two:

first class includes grades 1 to 6 and second class grades 7 to 10. These grades were established in a bye-law of 1966.[40] The salary scale, and the way they have increased by the government, are shown in Table 4.

The civil service salary structure takes in all employees of the Ministry of Education from the Undersecretary at the centre to the teachers in the governorates and districts. For example civil servants on the fifth grade may be in the central ministry, others are cultural attaches abroad, some are supervisors in the Directorates of Education, heads of schools or teachers.

The most important criteria for determining the grade and point of the salary structure for an individual teacher are the initial starting point and length of service. A newly appointed teacher is appointed to grade 9 if he holds a teachers' institute certificate, to grade 7 if he holds an M.A., and to grade 5 if he holds a Ph.D. The civil service bye-law of 1966 does not recognise any principle which links salary with the type of work undertaken, or position and responsibility. Nor does it take into account qualifications gained after joining the civil service.

Table 4: Civil Servants' Salary Scales for Different Years

Class	Grade	1970					1977					1980					1981				
	Year	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	1A	92	95	98	101	104	102	105	108	111	114	127	130	133	136	139-145	150	153	156	159	162-180
1	1B	83	85	87	89	91	92	94	96	98	100	112	114	116	118	120	132	135	138	141	144
1	2	72	74	76	78	80	82	84	86	88	90	100	102	104	106	108	114	117	120	123	126
1	3	62	64	66	68	70	72	74	76	78	80	87	89	91	93	95	102	104	106	108	110
1	4	52	54	56	58	60	62	64	66	68	70	75	77	79	81	83	90	92	94	96	98
1	5	46	47	48	49	50	52	54	56	58	60	63	65	67	69	71	78	80	82	84	86
1	6	41	42	43	44	45	46	47	48	49	50	55	56	57	58	59	68	70	72	74	76
2	7	36	37	38	39	40	41	42	43	44	45	48	49	50	51	52	60	61.5	63	64.5	66
2	8	31	32	33	34	35	36	37	38	39	40	42	43	44	45	46	52	53.5	55	56.5	58
2	9	26	27	28	29	30	31	32	33	34	35	37	38	39	40	41	44	45.5	47	48.5	50
2	10	21	22	23	24	25	26	27	28	29	30	32	33	34	35	36	36	37.5	39	40.5	42

TEACHERS' ALLOWANCES

3 JD for 1st class from 1/4/1970
4 JD for 2nd class from 1/2/1972

11 JD for both classes from 1/1/1977

7 JD for 1st class
9 JD for 2nd class from 1/5/1980

Family allowance
15 JD from 1/2/1981
(Previously 9 JD)

Note: JD Jordanian Dinar

Source: Ministry of Education, Personnel Affairs Directorate, 3rd January 1982

The consequence of these policies is that teachers are not encouraged to take in-service training courses or improve their level of competence. Nor are they encouraged to seek positions which give more responsibility, since more responsibility is not necessarily linked with more pay. Teachers are more likely to seek to be moved to a higher grade while remaining in a job which carries only the same responsibility as their present one. This does not encourage competent teachers to seek positions with more responsibility, and too many are prepared to stay in the position they occupy.

In theory, according to the civil service bye-law of 1966 the initial salaries and annual increments of teachers are equal to those of any other professional group possessing the same qualifications. In fact, promotion (which is dealt with in detail in the next section) is slower for teachers, and teachers do not enjoy the extra allowances paid to doctors, pharmacists and engineers, even though they have undergone equal or longer periods of training. (The period of education of a graduate teacher is equal to that of an engineer and longer than that of a pharmacist or dentist.) This means that, in practice, teachers are paid less than other professionals, and the low salary and low status make teaching an unattractive career for many capable young people. As M.M.Morsi has pointed out:

> "In fact, the gravity of the problem has been recognised by all Arab countries. In answer to a questionnaire, all the Arab States admitted that teachers enjoy parity with members of the other professions only in the initial stages of their careers, then through the course of time, their salaries and chances of promotion deteriorate continuously. The result is that many leave; while those who do not, harbour a feeling of injustice which is damaging to their productivity".[41]

Many teachers seek to supplement their income by giving private tutorials to their students, or offer remedial courses out of school to prepare students for general and school examinations. This is exhausting work which makes the teachers less efficient in school.

Other teachers have sought to improve their financial position by leaving Jordan and going to teach in neighbouring rich Arab States, which pay relatively high salaries to teachers. So, in 1967, there were between five and ten thousand teachers abroad. These figures have at least trebled by 1985. The result is that the Ministry loses great numbers of competent professional teachers annually, who could help to raise the standard of education and achieve the educational aims.

It is appreciated that the financial conditions in Jordan are bad, and do not permit the Ministry to raise teachers salaries so as to be in line with the level of salaries in oil producing Arab States. Nevertheless, the Jordanian Government has made efforts to improve the salaries of teachers in a piecemeal fashion. Some of these special allowances are shown in the notes to Table 2. Other allowances were introduce by a bye-law of 1975, which gave Ph.D. holders an allowance of 70 percent of their basic salary, M.A. holders 30 percent, and diploma and first degree holders 20 percent. All teachers with fifteen or more years of service in the teaching profession were given an allowance of 20 percent of their basic salary.

Thus the government has, on several occasions, made some attempt to raise teachers salaries to parity with other professions. These efforts have failed, at least partly because increases in the cost of living have removed the benefit which the additional allowances brought. But more importantly, these attempts to reform the salary have failed because they failed to address the major difficulty, that a civil service salary structure which is based on formal qualifications and length of service is not suited to the teaching profession. The new allowances followed a similar pattern in rewarding qualifications and long service for all teachers.

The teaching profession needs a salary structure which rewards skilled teachers, and pays adequately those who are prepared to take on additional responsibility. Even if the general level of teachers salaries was higher, teachers will not be relieved of their underlying feeling of injustice until they are paid according to a salary structure which is responsive to the needs of the profession. Moreover, such a new salary structure could be designed to encourage teachers to take in-service training, and to develop new teaching skills which are more appropriate to the achievement of the present aims of education.

3) Promotion of Teachers

A teacher may be promoted to a higher grade if he has proved himself to have distinct abilities in teaching, to have performed his work and duty well, and have at least two years service in his current grade with very good assessments.[42] The time factor

therefore plays a decisive part in promotion from one grade of the profession to another. But in practice very few teachers are promoted after two years of service and most of them are promoted only after five years or more because there are no vacancies in the higher grades.

This situation is exacerbated by the general policy of taking on more teachers than are required, and of overstaffing in the educational system generally. Promotion from one scale to another is slow. This situation, however, has long faced the Ministry. It became acute when, in recent years, many teachers spent up to ten years serving the Ministry without promotion. Failure to be promoted has an adverse effect on their enthusiasm for teaching and consequently their productivity.

There is little opportunity for good performance as a teacher to speed up promotion. There is, however, scope for poor performance to slow down promotion even further. The teacher will not be promoted or given an annual increment if his assessment is "weak" for one year or "fair" for two years.[43]

In addition, a teacher without a university degree may not be promoted to the first grade, and only holders of the General Secondary Education Certificate (GSEC) may be promoted to the third grade.

The promotion of teachers is based on the assessment of annual reports, qualifications, length of experience, grade and seniority.[44] All the procedures for teacher promotion are in the

hands of senior officials of the Ministry of Education, and the Directors of Education in the governorates and districts are only involved in supplying the documents on the basis of which the judgement should be made. These judgements, which are based on written documents rather than on the personal qualities of the teacher, are also biased so that service in secondary schools is more highly regarded than service in preparatory schools, and the latter more highly than service in primary schools. And since the only document which reflects the teacher's ability, the annual report, is not designed to have the trust of the teacher, there is widespread feeling among teachers that the promotion procedures are unfair. There are also cases which are more clearly unfair, in that none of the criteria set out above is used, and promotion is based on personal recommendation and nepotism.[45]

Generally the system of promotion favours graduate teachers, who have a relatively greater chance to climb up the scale, and can reach the highest grades. They can also be promoted to the highest and key positions in the Ministry, such as head supervisors, Directors in the Ministry of Education or Undersecretaries of State. Non-graduate teachers cannot be promoted above principals of a primary or preparatory school, a division inspector or division head. It is noteworthy that salary does not increase with promotion from one position to a higher one. This does not encourage competent teachers to seek promotion to positions of higher rank.

4) Transfer of Teachers

The Minister of Education has the power to transfer teachers of the first class (grades 1 to 6), while his undersecretary also has the power to transfer teachers of the second class (grades 7 to 10), but both of them delegate this power to the Director of Education in governorates and districts. Directors recommend the transfer of teachers to the Minister and Undersecretary for approval.[46] Since the Directors have the information about teachers to make good use of transfers, there is not reason why they should not have full authority over the process.

The transfer policies in the Directorates of Education take into account the length of teaching experience, ability, age, grade, social status and health. The Education Committee of the Directorate participates and assists the Director in transfers by formulating the grounds for transfer. But the Director and the Committee do not adhere to these grounds for many reasons, one being official and popular pressure. Some of the Committee members respond in terms of their personsl relationships and some of them always agree with what the Director decides in order to gain his favour.

Transfer practices may lead to a situation where in one primary or preparatory school there might be five or more teachers of science and mathematics while in another school there are only one or two. This poor allocation of teachers is the result of the policy which is not based on the needs of schools, on teachers' specialisations or their wishes, and which is applied arbitrarily.[47]

In fact, teachers are frequently transfered without their consent. The Director and Committee justify such transfer on the grounds that they can fill vacant posts with competent teachers, transfer teachers from remote areas to urban areas where conditions of life are better, transfer a teacher from a school where he is dissatisfied, or punish teachers for misconduct by transferring them to remote areas.

This policy of treating transfer to some areas as punishment leads to unequal educational opportunities for students in remote areas, because inexperienced and inefficient teachers with a record of misconduct are usually transferred to remote areas, while efficient, highly qualified teachers of excellent character are transfered to the cities. There is need for a Ministry of Education policy designed to ensure equality of educational opportunities for all Jordanian students.

The excessive movement of teachers in the course of their careers has an unsettling influence, which affects their efficiency. These moves are mostly prompted by teachers wishing to move to areas which are more desirable. To overcome this difficulty, it is suggested that priority in teacher recruitment should be given to candidates who live in the area where there is a vacancy, and that a teacher's wishes should be the first consideration in dealing with transfers.

Transfer within a governorate or district is relatively

straightforward, and arranged by the local authorities. Transfer between governorates and districts is more complex and is handled by the central bureaucracy in Amman. Period of service, merit and family circumstances are taken into acount. The complexity of the process produces anxiety for some teachers, especially for married couples working in different governorates or districts. Although the Ministry policy of considering family circumstances helps, and couples who are both teachers are normally transfered to the same city or village, the problems are much more severe when one of the couple is engaged in an occupation other than teaching.

5) Teachers' Retirement and their Pensions

A teacher may retire upon request after thirty years of service, or when he becomes sixty years old. In the case of handicap or chronic disease the Minister of Education may permit him to retire on full pension if he has twenty years of service. If he has less than twenty years service he receives compensation of one month's salary per annum of service. On retirement a teacher receives a sum of money from the Social Insurance Fund, to which he has contributed during his period of service.[48]

Teachers' pensions used to be relatively low, but in 1981 a new pension scale was introduced which gave civil servants similar pensions to those of the Jordanian Armed Forces. This improved teachers' pensions considerably. However, the thirty years of service which teachers have to achieve before they receive a full pension is longer than that required of members of the Armed Forces. It would be better for the health and happiness of

teachers, and better for the whole education service, if teachers who have occupied a senior post for a number of years could be encouraged to step aside and give an opportunity to younger teachers.[49] This might be achieved either by requiring a shorter period of service for a full pension, or devising ways for senior staff to be relieved of some of their responsibilities without loss of status or salary.

6) Conditions of Work

The conditions under which teachers work vary according to the area in which the school is located, the type of school in which they teach and the individual attitudes of administrators, headmasters and supervisors. However, these conditions are, on the whole, governed by regulations issued by the central Ministry.

During the school day, all teachers are supposed to be on duty, and are not expected to leave the shcool premises even when they are not teaching, except with the permission of the headmaster. This rule is normally only strictly enforced by authoritarian headmasters. However, the teaching load is heavy, and most of the working day is taken up by lessons. Teachers are expected to conduct between 22 and 26 lessons per week, depending on the cycle of education in which they teach. In primary schools the teaching load is 26 lessons, in preparatory schools 24 and in secondary schools 22. Each lesson is 45 minutes long. In addition teachers are expected to supervise extra-curricular activities, fill in pupil records, take part in promotion exercises, and mark

examination papers.

With the approval of the Minister, teachers may be granted study
leave to improve their academic, cultural, professional,
vocational and technical qualifications relevant to their jobs.[50]
Such leave may be granted with or without salary, and is usually
for one year 'in the first instance, and further extension is
subject to renewal. However, the number of teachers who benefit
from study leave is limited.

In all other respects the conduct of the teacher is strictly
circumscribed by the system of supervision, and the regulations
and orders of the Ministry concerning text books, teaching
methods and curricula, which have already been discussed in
detail.

7) Dismissal of Teachers

Teachers may be dismissed, in general, because of serious
misconduct or failure to perform their duty; but in particular,
teachers are dismissed for one of the following reasons: absence
for more than seven days without an acceptable excuse, ill-
health, loss of nationality, and imprisonment for one month or
more. A teacher has the right to be heard and defend himself
before the legal bodies of the Ministry.[51] But many cases of
dismissal occur for reasons other than those set out above: for
political, personal, ethical and other reasons, without the
teacher being given the chance to defend himself.[52]

A decision to dismiss a teacher must be taken by the Minister of

Education. The Director of Education of a governorate or district has no power to dismiss teachers, or to participate in the dismissal procedure. The participation of the Director of Education would help to make the procedures more fair and reasonable. The arbitrary and remote nature of dismissal proceedings has led to considerable insecurity on the part of teachers, whose efficiency suffers as a result.

8) Teacher Drop-out

Because of the poor working conditions, the heavy responsibilites and the low level of authority which teachers have, coupled with poor salaries, lead to very high drop-out rates among teachers. The Ministry of Education loses an estimated 5 percent of teachers annually. For example, during the five years from 1964 to 1968, the Ministry lost about 2,300 employees, 5 with Ph.D. degrees, 30 with M.A. degrees, 266 with B.A. degrees, and 554 holding diplomas from teacher training institutes. The loss of personnel with higher degrees and university degrees is one of the problems which faces the system of education in Jordan. The Ministry loses the most highly qualified and professional teachers.

The problem has become worse in more recent years. Research carried out about the drop-out of the technical and managerial personnel from the Ministry showed that the number of drop-outs from the Ministry amounted to 5,672 during the three years from 1976 to 1978. Annual figures were as follows:[53]

Year	Number of Drop-Outs
1976	1,377
1977	1,583
1978	2,712
Total	5,672

The research showed that the numbers involved increased each year. It also showed the main reasons given by drop-outs for wishing to leave the teaching profession.[54]

Reason	Percentage
Place of Work	54.5
Economic Reasons	30.3
Social Reasons	15.2
Total	100.0

The basis for this dissatisfaction on the part of teachers has been fully discussed in this chapter. This discussion leads to a number of recommendations which could reduce the drop-out rate:

i) the allocation of a sufficient number of scholarships for every governorate and district in the country in various subject specialisations, and the appointment of scholars in their own governorate on graduation would prevent them from being transfered to other governorates or leaving for abroad,

ii) teachers in remote areas should be given privileges to encourage them to perform efficiently by providing free housing, or by having to pay a token housing rent, and by providing them with the basic services of living,

iii) the reorganisation of secondment procedures to neighbouring

oil producing Arab States is necessary so that teachers can enter into temporary contracts which will improve their financial position and broaden their experience, while making sure that they are not permanently lost from the Jordanian education service,

iv) individuals should be encouraged to develop collective business projects by granting them loan facilities,

v) the professionalisation of teachers implies that teachers should have a special cadre, as do the other professions in Jordan,

vi) the creation of a climate that provides teachers with personal, material and non-material encouragement to remain teachers would have, in the long run, an important effect on Jordanian life, and

vii) retirement and pension rights should be the same as for the Armed Forces in terms of payments and length of service.[55]

IV Conclusion

This brief review of the administration of education in Jordan shows a system which is unnecessarily rigid, on occasions arbitrary, and does not encourage teachers to apply a critical attitude in their own work. Above all, it encourages teachers to adopt a view of the organisation of education which is directly opposed to some of the new aims of education in Jordan.

Teachers cannot reasonably be expected to listen to the suggestions which pupils make, to treat the students' suggestions

with care and consideration, and generally encourage the participation of the young people before them in a democratic way, if they themselves are subject to the arbitrary imposition of decisions over which they have no control. In this respect, there are many features of the administration which are obstacles to the achievement of the aims set out in the Education act of 1964.

Any further reform of education which was intended to achieve the new aims of education would need to take such issues of administration into account.

References

1   Samaan, W., "Cultural Diversity and Educational Unity in the Arab World", in Holmes, B., (Ed.), **Diversity and Unity in Education**, London: George Allen and Unwin, 1980, p.109.

2   Holmes, B., **Problems in Education: A comparative approach**, London: Routledge and Kegan Paul, 1965, p.158.

3   Ibid, p.158.

4   Blau, P.M., and Scott, W.R., **Formal Organization: A comparative approach**, Routledge and Kegan Paul, London: 1963, p.39, and Parsons T., "Some Ingredients of a General Theory of Formal Organizations", in Halpin, A.W., **Administrative Theory in Education**, Chicago: Chicago University Mid-West Administration Center, 1958, pp.40-72.

5   Holmes, B., **Problems in Education**, op.cit., p.159.

6   Ibid, p.159.

7   Morsi, M.M., "The control of general education in state schools in Egypt with special reference to the role of the Ministry of Education", Unpublished thesis, London: 1969, p.10.

8   Ministry of Education (Jordan), **Risalat Al-Mu'allim** (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, (Arabic Text), Amman: 1966, p.10.

9   Ministry of Education, **Education Development in Jordan**, (Arabic Text), Amman: 1977, pp.45-47.

10   Ibid, pp.48-50.

11   Ibid, pp.52-54.

12   Morsi, M.M., op.cit., p.42.

13   Ibid, p.44.

14   Tell, A.Y., Education in Jordan, Amman: Ministry of Culture
     and Youth, (Arabic Text), 1978, p.185.

15   Ibid, p.185.

16   Ministry of Education, Education Development in Jordan,
     op.cit., p.59.

17   Ibid, p.60.

18   Ibid, p.61.   .

19   Ibid, pp.62-64.

20   Shafiq, M.N., Encyclopaedia of Education, Vol.5, New York:
     Macmillan, 1971, pp.264-266.

21   Ministry of Education, Education Development in Jordan,
     op.cit., p.67.

22   Ibid.

23   Ibid.

24   Ibid, p.68.

25   Ibid.

26   Ministry of Education (Jordan), Risalat Al-Mu'allim (Message
     of the Teacher", Collection of laws and bye-laws, Vol.10,
     No.1, op.cit., p.68.

27   Ibid, p.67.

28   Ministry of Education (Jordan), Risalat Al-Mu'allim (Message
     of the Teacher", A special issue on the conference of
     educational supervision in Aqaba City from 4-7 February,
     1975, Vol.18, Nos.3 & 4, July-December, (Arabic Text),
     p.165.

29   Tell, A.Y., "Education supervision in Jordan", in Risalat
     Al-Mu'allim, Conference on educational supervision, op.cit.,
     p.26.

30   Ibid, p.38.

31   Ibid, p.38.

32 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., p.67.

33 Ministry of Education (Jordan), Collection of laws and bye-laws, regulations No.5, 1968, part I, Amman: 1970, pp.85-86.

34 Ministry of Education, History of Education in Jordan 1921-1970, Amman: 1980, p.69.

35 Ibid, p.71.

36 Tell, A.Y., op.cit., p.312.

37 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., Civil Service bye-law, p.107.

38 Tell, A.Y., op.cit., p.277.

39 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., Civil Service bye-law, p.114.

40 Ibid, p.104.

41 Morsi, M.M., op.cit., p.224.

42 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., Civil Service bye-law, p.115.

43 Ibid, p.115.

44 Ibid, p.116.

45 Tell, A.Y., op.cit., p.279.

46 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., Civil Service bye-law, p.120.

47 Tell, A.Y., op.cit., p.290.

48 Ministry of Education, Collection of Laws and Bye-Laws, Pensions, (Arabic Text), Amman: 1975, p.61.

49 Taylor, W., "Problems and Solutions in Relation to Education in Comparative Perspective: The Case of Teacher Education", in Holmes, B., (Ed.), Diversity and Unity in Education, op.cit., p.168.

50 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., Civil Service bye-law, p.127.

51 Ministry of Education (Jordan), Risalat Al-Mu'allim (Message

of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, op.cit., Civil Service bye-law, p.138.

52   Tell, A.Y., op.cit., p.281.

53   Ministry of Education, Drop-out of Administrative and Technical Competents, (Arab Text), Amman: 1979, p.27.

54   Ibid, pp.48-49.

55   Ibid, pp.54-56.

CHAPTER FOUR

The Organisation and Structure of Schools in Jordan

The educational administration in Jordan (that is the Ministry of Education) groups students for instruction to realise the aims which were specified in the 1964 Education Act. However, in practice, the way in which the structure of schools is organised in an obstacle to the achievement of those aims.

This chapter deals with issues of structure and organisation in general, and in Jordan in particular, to show how these issues can have an effect on the achievement of aims, and to outline procedures which should be introduced in Jordan to respond to the new aims more adequately.

The organisation and structure of schools in Jordan is still as it was before 1964, following its reorganisation in the school year 1960/1961. Pupils are divided according to age grading (chronological age) and sex, and streaming is used in the secondary cycle in the 11th and 12th grades. This type of school organisation does not take into account individual differences among learners. But the 1964 Education Act specifically mentions in its statement of aims that education in Jordan should meet the individual differences of children.

Article 4 of the Act states:

> "To assist the normal growth of the individual; physically, mentally, socially, emotionally and taking into account the individual differences, the development of creativity, and providing opportunities for the different types of the handicapped to develop according to their potentialities

towards meeting and gratifyigg the individual needs on the one hand, and the development of the society with its varied features on the other hand".₁

[Translated from Arabic]

It is clear from this Article that education in Jordan should gratify the needs and develop the abilities of the individual and meet individual differences among students. That is to say, it should develop the whole personality of the student in its various aspects. This aim of education is to a great extent child centred, and should be accompanied by changes in structure and organisation which permit child centred practices.

Despite this Article of the 1964 Education Act, no serious attempt has been made by Jordanian educators to realise this aim and to meet the individual differences among pupils by reorganising the structure of schools. It seems that educators have paid little attention to accomodating individual differences.

Given the present structure of schools in Jordan, it will be impossible for them to achieve this aim without radical reorganisation. But the attitude of Jordanian educators towards the present structure of schools differs very markedly from that of educators in other advanced countries in the West, where school men have devoted a great deal of attention to the organisation of school systems. Their first purpose of reorganising the structure of schools has been to provide conditions under which groups of students can learn effectively. Other considerations have also played a dominant role, including

ease of administration, economical use of teachers and teachers'
satisfaction.[2] In addition, school organisation has been seen as
an instrument in providing adequate socialisation for children,
dealing with individual differences, and directing teacher
attention toward the need to provide differential instruction to
meet individual needs.

Any meaningful description of a school's overall organisational
pattern should include both vertical and horizontal aspects of
grouping children for instruction. J.Goodlad points out that,

> "Schools are organised to serve specific functions. They
> must classify students and move them upward from a point of
> admission to a point of departure from school. Vertical
> organization serves this function. Schools also must divide
> the student body among available teachers. Horizontal
> organisation serves this second function".[3]

Accordingly, a total educational system is divided into
organisational units. Vertically, stages or levels provide for
the upward progress of students through time. Horizontally, parts
of each vertical stage are arranged side by side, providing pupil
teacher ratios and a basis for assigning students and teachers to
available places.[4] Choices of vertical organisation are a graded
structure, or a non-graded structure, or some hybrid modification
of the two, such as multi-grading.[5] The pattern of horizontal
school organisation results from dividing the school population
into groups and assigning the students to classes. The horizontal
pattern may be influenced by considerations of the children, of
the curriculum and of the teachers' qualifications.

Differentiation between the vertical and horizontal aspects of a

school organisation is helpful in separating out the various issues involved. The attempt to provide schools with an effective horizontal structure produces problems of grouping and devices such as team teaching. Attempts to provide them with an effective vertical structure raise issues of how and when children should be promoted from on grade to another.[6]

1) Vertical School Organisation

Schools in Jordan still use the monolithic school grading structure of the past. This is the traditional way of organising the vertical progression of students from grade to grade. At the end of each grade, the student is moved, or not moved, to the following grade depending on whether he passes or fails certain assessments. Although the majority of children in a particular grade may be of the same chronological age, only in the first grade is the chronological age of over-riding importance in determining the grade of the child. (In this thesis, the term "grading" will be used to describe this system of transfer from one grade to another. "Non-grading" implies that chronological age is the over-riding consideration in all grades, with automatic transfer to the next grade at the end of each academic year.)

It is important to recognise that all teachers in Jordan today work according to a system of grade classification requiring that children move step by step through the school system. It must further be recognised that courses of study, textbooks and even

teachers, are organised around the grade concept. So in a pure grading system (as in Jordan), the sequential content of instructional programmes is determined by assigning subject matter to various grade levels, by the designation of instructional material as suitable for a particular grade level, and by the promotion of pupils upon satisfactory completion of the work specified for each grade level. In pure non-grading, however, the sequence of content is determined by the inherent difficulty of the subject matter and the children's demonstrated ability to cope with it. Materials are selected to match the spread of individual differences existing within the instructional group, and the children move through the work according to their readiness to proceed, rather than moving through the grades. Promotion and non-promotion does not exist as such, and an important goal is to provide for the continuous progress of each child.

In multi-grading each class contains two or more grades simultaneously. Although grade labels are retained, children are permitted to work in several grades at once, depending on their progress in each subject. In a multi-graded class containing, for example, grades three, four and five, a child could be studying work for grade three for arithmetic, grade four for social studies, and grade five for reading. Non-grading and virtually all modifications of grading are intended to facilitate the provision of curricular and instructional material in accordance with individual differences, and hence to provide an improvement over a pure grading system. However, no scheme of vertical school organisation automatically ensures success.

The graded system of vertical school organisation is often criticised for ignoring individual differences among learners by demanding that all children should cover the same material at approximately the same rate. Exponents of non-graded schools claim benefits with respect to pupil well-being and achievement, which have not been proved conclusively. Critics of the non-graded plan claim that what non-grading purports to do can be accomplished as readily in graded schools.

Neither the proponents of grading, nor its critics, deny that it is important to provide suitable instruction and material according to the pupil's ability. It is, therefore, widely recognised that school organisations should be flexible. As Goodlad points out,

> "Vertical school structure should provide for the continuous upward progression of all learners, with due recognition of the wide variations among learners in every aspect of development. School organisation, then, should be flexible enough to permit differentiated rates of pupil progress".[7]

Further, the pattern of vertical school organisation should provide several alternative classroom placements for a given learner, the final choice of placement being dependent upon careful teacher diagnosis of the individual.

The graded plan as found in schools in Jordan does not appear to be readily adaptable to the demands of flexibility. Non-grading and multi-grading are promising alternatives and should be given careful consideration as providing for progress according to

human variability. Therefore, they are recommended for the schools of Jordan.

However, in considering non-grading, or automatic promotion, some caution must be exercised. Blanket promotion policies for all children are not justified. Promotion on the basis of a minimum standards is not adequate. But studies indicate that the ultimate achievement of repeaters is not better than the performance children of similar ability who are promoted. However, elimination of the causes of retention, rather than the repeating experience itself, would be more satisfactory in improving the subsequent achievement of pupils. Pupil failure often means that interest in school work is replaced by feelings of resentment which may be expressed in aggression.[8] The frustration produced by an inability to perform satisfactorily the work expected in a higher grade contributes to slow learning pupils becoming disciplinary problems.

Therefore, a greater incidence of troublesome behaviour is found among children who have not been promoted than among pupils who have progressed in the normal way. Goodlad notes that,

"Throughout the body of evidence runs a consistent pattern: undesirable growth characteristics and unsatisfactory school progress are more closely associated with non-promoted children than with promoted slow learning children".[9]

But the promoted slow learner unable to do the work of the next grade, frustrated and discouraged, develops feelings of inferiority which adversely affect his social relationships and personality development.[10]

Therefore, the problems of a graded system cannot easily be alleviated by adjusting standards of assessment: making the assessment easier will result in more children passing into the next grade and finding difficulty with the work; making the assessment harder will create more resentment as more and abler pupils are frustrated in their progress through the system. Central to this issue is the inflexibility of a system which labels children as passing or failing at the end of each year, and is incapable of handling special talents in particular subjects.

2) Horizontal School Organisation

A pattern of horizontal school organisation involves dividing an identifiable cluster of students at any stage or level in a school into class groups, and assigning them to available teachers. This process aims at utilising effectively both teachers and classroom space. Horizontally, schools may be organised according to a number of criteria. Generally, a well articulated system will need to take into account the children, the curriculum and the teachers.

In considering the children, a choice must be made between homogeneity (likeness) and heterogeneity (difference) in pupils comprising each class group. If the choice is for homogeneity the criteria of likenesss may be age, size, sex, interest, ability, achievement or a combination of these.

Curriculum considerations involve a choice between separate subjects and various combinations of subjects as the basis for setting up class groups.

The consideration of teachers centres on the suitability of teachers to take a given class. This will include assessment of teacher qualifications. A choice is made between the self-contained classroom (with one teacher for all subjects) and departmentalisation (a different teacher for each subject).

Team teaching is a valuable feature of horizontal school organisation, as it allows for flexibility based on considerations about school children, curriculum and teacher qualifications in establishing class gronps. But it is necessary to take into account educational values when deciding the basis on which learners should be allocated to groups. Educators and lay citizens tend to hold rather strong views about whether or not to separate the sexes, whether or not to group by ability, whether or not classes should be small, and so on.

Homogeneous and Heterogeneous Grouping

Homogeneous grouping is when the total student population under consideration is divided into instructional groups according to some criterion of likeness, such as age, ability, readiness, interests, sex, achievement or IQ. Heterogeneous grouping brings students together according to dissimilarity rather than similarity, or ignores a particular aspect of dissimilarity.

Except in very large school systems, and possibly not even then, it is impossible for teaching groups to be homogeneous in all respects, and homogeneity is only guaranteed on the criteria used for selection. All the classes in the schools of Jordan are homogeneous with regard to grade and sex.

In the first grade, all learners in the schools in Jordan are the same age. This is a normal arrangement for an organised school system, for political and administrative reasons.[11] Even in a rigidly graded system such as that found in Jordan, there is a notional link between chronological age and grade. But after admission, there is no real reason why this should be the case.

The argument for age grading is that it has been the norm in schools for so long that it is generally considered to be natural. All pupils are supposed to develop in accordence with their chronological age, and hence age grouping should produce homogeneous learning groups. This contention is clearly fallacious. Age does not consistently predict the level of cognitive development. Girls at the age of thirteen have, on average, the intellectual maturity of boys at fifteen. Hence, if the goal is uniformity of intellectual maturation, it will require differential, not uniform, age grouping.[12]

Multi-grading goes some way to dealing with this criticism of age grouping, although it should be noted that teachers would not find it acceptable that all girls, on average, are two grades ahead of boys of the same chronological age. In a graded system, age demarcations rather than pupil ability create psychological

difficulties associated with what some students can cope with and what they cannot. Normally, children in the fourth grade cover material set down for that grade, and do not explore new topics with a view to deepening concepts or insights opened up in the second and third grades, and to be developed in the fifth. As Goodlad points out,

> "Grades are barriers to continuous pupil progress. These grade-level barriers are likely to prove increasingly irksome in intensified efforts to translate structural sequences in subject matter into longitudinal curricula for elementary and secondary education".[13]

This artificial division between curriculum material suitable for a particular age or grade is a feature of most systems. Homogeneous ability grouping is an attempt to overcome this difficulty.

Ability grouping may be defined as the organisation of learners into groups for instruction on the basis of an assumed or demonstrated intelligence, or general or specific aptitude.[14] Ability grouping in its most rigid form (known as streaming or tracking) implies that students are segregated for extended periods into parallel but separate tracks, or streams, leading to different academic and career outcomes and life chances. The streams have a clear hierarchy of status, and movement between streams is inhibited. It is assumed that ability is a better predictor of the educational potential of students than an indicator of actual achievement and consequently provides an adequate basis for grouping. But in grouping students for instruction, it is necessary to take into consideration the

following statement of Goodlad:

"No single measure provides an adequate basis for grouping. Some school systems use elaborate bases combining achievement test scores, intelligence, test results, teacher judgement and observations of children in a variety of educational settings".[15]

Ability grouping is based on the assumption that a group of students of approximately equal ability will have roughly similar learning speeds. This will prevent the faster learners from being slowed down by the slower ones, will allow greater attention to be paid to the needs of all learners and will increase the efficiency of instruction. However, the empirical evidence indicates that this is not a necessary outcome of ability grouping.[16] The only generalisation based on research about ability grouping that can safely be made is that the results are, so far, inconsistent.

In weighing the advantages of any system of grouping, it is important to bear in mind the effects of the system on the children who are thus grouped. Some sort of grouping is normally dictated by practical considerations of class size, and the most important effects to be considered relate to the child's academic and intellectual development. Hilda Taba notes that,

"Although there may be a variety of reasons for grouping, the essential one is to facilitate learning, and learning of the widest possible scope. Grouping could be considered an important part of strategy to create conditions for aiding not only academic learning, but also the type of learning for which direct teaching is ineffective".[17]

Most advocates of streaming stress academic development, and identify two major results of such a method of grouping; an

increase in achievement, and a reduction in the range of abilities of pupils within a classroom. The latter is, in itself, not obviously desirable, unless it is also linked to assumptions about the teaching process which indicate that teachers are more effective when dealing with narrower ranges of ability.

A considerable number of teachers believe that streaming is a legitimate and worthwhile method. They believe that it is less difficult for the teacher to work with a homogeneous group. Since grouping tends to reduce the range of abilities and interests, many teachers feel that this reduction makes it easier to produce a teaching plan and to implement it.

But streaming has been criticised. It probably benefits some bright children and the very weak, but there is little to commend it for the great majority of children. M.M.Metwally refers to D.Warwick, who claims,

> "Streaming, or grouping by ability, so often achieves only two things for the majority. It destroys much of the innate potential of the individuals, and it places emphasis upon competition rather than a cooperative pooling of experiences and skills".[18]

Careful research findings show that achievement is not increased, and there is no difference in the average achievement of students in ability grouped classes compared with classes not grouped in this way. The few studies where average and above average students benefited from ability grouping are balanced by an equal number of cases where they achieved better in ungrouped classes.[19] But the evidence shows consistently that ability grouping does not benefit slower learners academically, and often

reduces their achievement. So, ability grouping does not have a positive effect on academic achievement. D.Pratt concludes that,

> "As the main purpose of ability grouping is to provide academic benefits, it is a significant conclusion that it tends to produce no such benefit consistently but does tend to be detrimental to slower learners."[20]

In the case of non-streaming, research findings indicate that there is a convergence of both the brighter and slower learner towards the mean.

But there are other effects of grouping on children, besides the impact on learning, and, in considering the education of the whole person, it is important that these should be taken into account. Grouping may have an important effect on the pupil's self image. This may indeed have an effect on academic achievement, because self image is integral to the development of the personality and the happiness of the individual. The results of ability grouping on self-image are largely negative. While the practice sometimes inflates the self-esteem of superior pupils, it tends to reduce that of slower pupils, especially when they are taught by an academically oriented teacher. It has been found that the self-image of slow, average and fast learners is almost universally superior in an ungrouped system.

The emotional and social development of average and below average ability children is strongly influenced by the use of streaming or non-streaming methods. There is evidence that streaming produces undesirable social attitudes towards school. Many studies have high-lighted its inhibiting effects on those aspects

of children's development other than academic. Children's comments reveal the negative consequences of streaming. They acquire undesirable labels. Pupils tend to look at their teachers in terms of the group within which they are placed.

Teachers themselves are not immune, and are likely to feel that they have been streamed along with their pupils. Those who are assigned to low ability classes miss more chances of promotion than do teachers assigned to high and average ability classes. On the whole, streaming practices often strain staff relationships within a school.

Streaming by ability frequently reinforces social differences between children: children who come from well- kept homes and who are themselves clean, well clothed and shod, stand a greater chance of being put in the upper streams than their measured ability would seem to justify. Streaming has been condemned on the grounds that it tends to lead to inequality of opportunity, undemocratic provision, unfair competition and undue pressures.[21]

The majority of social and emotional effects of streaming by ability would therefore seem to be undesirable. These effects are accepted because of the supposed benefits which ability grouping produces. However, the research available suggests that even these benefits are not guaranteed. To overcome this, Pratt argues that learning readiness, rather than ability, should be used for grouping students:

"The management of differences among learners will be the most efficient, effective, and humane, if the composition of

instructional groups is generally determined according to the criterion of readiness for the learning".[22]

Three elements of readiness for learning need to be considered: maturation, motivation and prerequisites.[23] The student's level of cognitive development must be sufficiently advanced so that he can cope with the objectives and handle the subject matter and teaching methods used in the programme. For example, to study history successfully, the child must have acquired the concept of historical time. Motivation is necessary if learning is to take place. And, learning prerequisites are often critical to learning readiness. Students are not ready for calculus until they have acquired some basic concepts and skills in algebra and trigonometry. It should be noted that cognitive prerequisites stated in terms of knowledge and skills are generally preferable to academic prerequisites stated in terms of courses, programmes or grades. Prerequisites imply maximium as well as minimum prior learning.

If these aspects of readiness are controlled, it should be unnecessary to base selection on age, intelligence, verbal ability, teacher recommendations, academic grades or any of the other criteria so frequently employed. Clearly the visitor to a school, using readiness as the criterion for grouping learners, would not expect to see the familiar classroom of pupils who are similar in age and size. Probably, a typical classroom would contain pupils of a wide age range, conceivably six to sixty, all sharing an interest in the subject and having a minimum basis of prior learning. In such a group, both the accelerated and the

slower learner cease to be visibly distinct by reason of their age, thus removing a major difficulty that inhibits students from progressing at their own pace.

The evidence already available suggests that grouping by learning readiness reduces variation in learning speed. Consequently, it is less essential to make special provision for faster learners because those who have already met specified objectives are placed in different groups.

In general, it can be concluded that horizontal school organisation is intended to facilitate the provision of instructional material in accordance with the individual differences always present in a class group. The grading system is supposed to permit the passage of a student through the system at his own pace, but social considerations mean that there is pressure to complete one grade per year. The non-grading and multi-grading systems offer some advantages which might facilitate dealing with individual differences. However, it should be noted that, as Goodlad argues,

> "No scheme of school organization, however elaborately worked out, provides for the types and ranges of learner variability encompassed by the school. In the matter of dealing educationally with individual differences, there are no organizational panaceas".[24]

Nevertheless, the organisation and structure of the schools in Jordan must facilitate the realisation of the child centred aims of education, which includes meeting the individual needs of pupils. The present grade structure of the schools of Jordan prevents the achievement of this and other aims of education.

Structure and Organisation of Schools in Jordan

The major vertical levels of the educational ladder in Jordanian educational institutions consist of the following cycles (see Figure 2):

FIGURE NO 2: Educational Ladder in Jordan 1981/1982 p8

DIAGRAM REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES
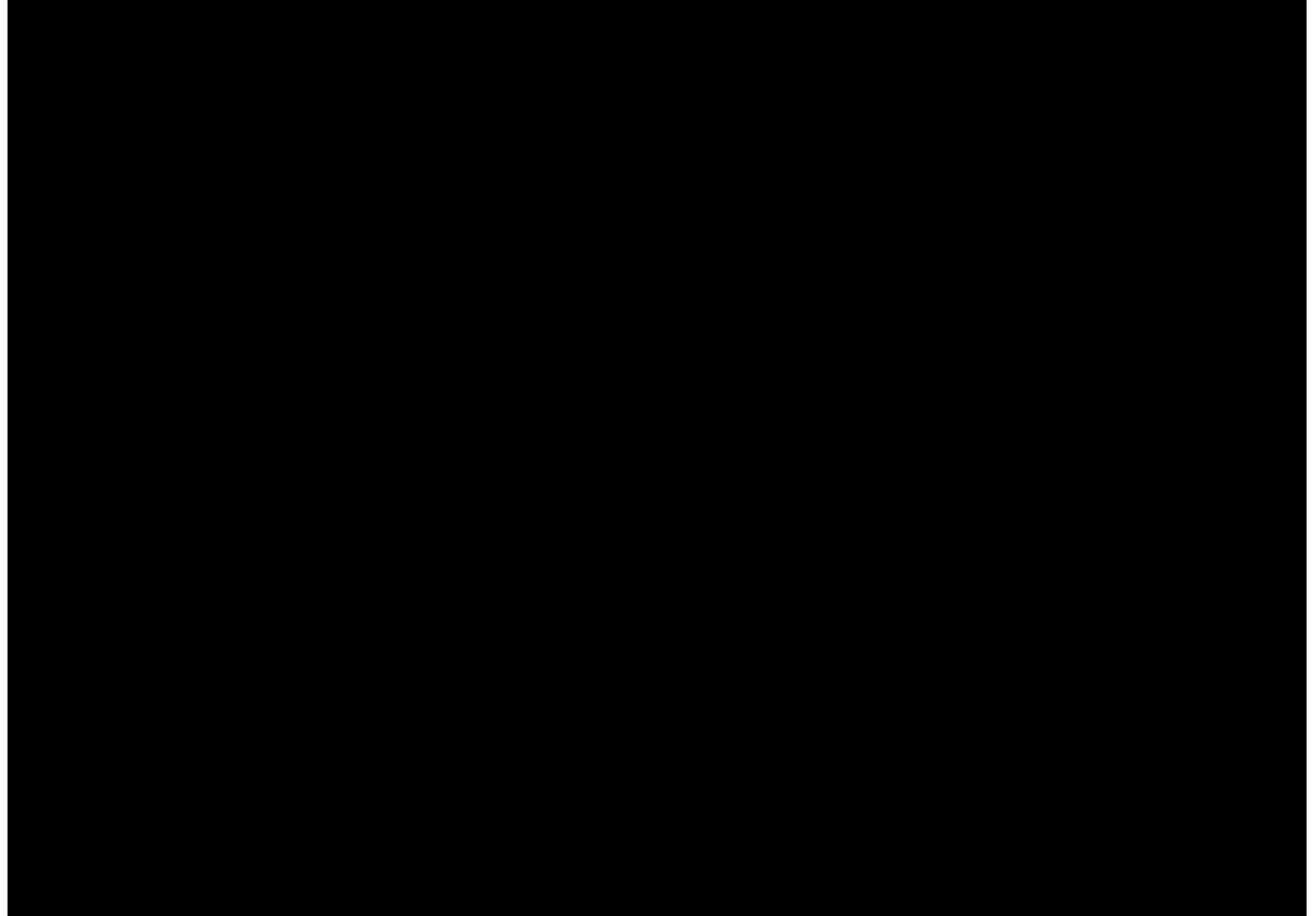
1) The pre-school cycle (kindergarten cycle from 3 to 5 years of age); children are admitted to this cycle at the age of 3 years and 8 months, according to the regulations of the Ministry of Education issued in 1973. It is a co-educational cycle.

2) The compulsory cycle: for 9 years from 6 to 14 years of age, is composed of two cycles: all schools are single sex.

    a) The primary cycle for from 6 to 11 years of age: children are admitted between the ages of five years and eight months and six.

    b) Preparatory cycle for 12 to 14 years of age.

3) Secondary cycle for 3 years from the ages of 15 to 17. Schools are single sex, and the schools are diversified into two types.

    a) Academic education (general education): at the beginning of this type there is a common core curriculum, i.e. in the first secondary form (10th form). From the start of the school year 1960/1961 the 11th and 12th forms have been divided into two areas of subject specialisation, literary and scientific.

    b) Vocational education: begins from the first vocationsl secondary form, and has various types: industrial, commercial, agricultural, postal, women's education ana vocational education for girls.

4) The post secondary and university cycle is from age 18 to 23. This is a co-educational cycle. It differs in its

duration from 2 to 6 years. In community colleges, the duration is two years and in some subjects 3 years. But university education which leads to a B.A. or B.Sc. degree is four years after the G.S.E.C. Post graduate studies, which lead to an M.A. degree take 6 years after G.S.E.C. University cycle B.A. degree courses and community colleges generally admit students who have passed the G.S.E.C. with an average of not less than 60 percent, but there are more opportunities for graduates of academic schools than for graduates of the vocational school who have taken the vocational G.S.E.C.

The horizontal organisation of the schools varies for the different stages or cycles. Private schools may have different arrangements, so details should be taken to refer specifically to Ministry of Education schools.

In the primary school, children aged six are admitted to the first primary class, without taking any kind of examination. All that is required is a birth certificate. The child in this school is promoted automatically to the second, third and fourth primary classes. Repetition of one of the three first primary classes must be based on the decision of the teaching staff of the school, with the agreement of the student's parent. In the fourth, fifth and sixth classes, the student is promoted to a higher class if he does not fail in four subjects. Otherwise he is required to repeat the entire grade. All students in the primary schools are grouped according to their sex.

In the preparatory school, all students promoted from the sixth primary class are admitted to the first class. A student is promoted to higher classes in this school if he does not fail in four subjects. Retention is based on the failure of students in four or more subjects. Students are grouped according to sex.

In the general secondary schools, students promoted from the third preparatory class are admitted to the first secondary class. Students who fail in four subjects are not promoted to a higher class. Repetition of the third secondary class is not permitted. Students in the second and third secondary classes (i.e the 11th and 12th forms) are divided into two streams; the literary and scientific stream. This streaming is based on the interests of students and the grand total of their marks in mathematics and natural sciences. The average of these two subjects must not be less than 60 percent if the student is to proceed to the scientific stream. That is to say that this streaming is based on a specific ability of students.

In vocational secondary schools, students who are promoted from the third preparatory class are admitted to the first secondary class. Students are grouped according to their interests and the grand total of their marks in the third preparatory class and the educational opportunities which are available in this type of education.

It is clear from the aforementioned that students in all cycles of education are grouped for instruction on the bases of sex and

ability. But this organisational structure of the schools in Jordan prevents the realisation of the development of individual differences among students, their learning and consequently the achievement of the stated aims of education.

The vertical organisation of schools in Jordan is an unhappy combination of non-grading (automatic promotion) in the first three years and grading thereafter. The horizontal organisation incorporates major elements of ability testing. Neither are flexible enough in their application to permit individuals to develop at their own pace, or to develop their individual talents. Moreover, many of those negative social and self-image effects which have been described in general terms in this chapter are evident in students in Jordanian schools. It is therefore desirable that a number of changes should be made to the organisation of schools to facilitate the achievement of child centred aims.

The most important feature of any reform is that it must be flexible enough to achieve this end. Any rigid and rule bound system is almost bound to deny individual differences. But it is suggested that flexibility would be easier to achieve in a system which did not use grading, and which did not divide literary and scientific students into completely separate streams.

The proposed reorganisation of the structure of the educational system in Jordan would involve a compulsory general education cycle from the ages of 6 to 14, and a secondary cycle from the

ages of 15 to 17. Secondary schools should be diversified into two types, the general comprehensive and the vocational secondary schools.

The curriculum of the comprehensive schools should be widely based and include science, and optional studies to meet the individual differences and interests of students. It should include special and honour courses, and advanced placement programmes as a means of promoting the potentialities of talented youth. In addition, remedial courses for under-achieving pupils and special classes or schools for handicapped students should be instituted, to achieve the stated aims of education.

But it is worth noting that educators in Jordan should not depend on school structure alone for basic educational reform. Since school structure is but a shell, dropping the grading system, and adding or changing nothing else, leaves curriculum and institutions, the heart of the educative process, untouched.[25]

It should be noted that school organisation is not an end in itself. So attention to school organisation should be an aid not a hindrance in achieving the aims of education. Goodlad remarks,

> "An organizational scheme cannot teach, cannot provide the substance of curriculum, cannot place materials in a classroom. But it can, should and does affect the progression of students from entry until departure, from the major units (elementary, secondary or higher) of the vertical school organization".[26]

References

1   Ministry of Education, Jordan, **Collected Laws and Bye-Laws of the Ministry of Education**, Part 1, Arabic Text, Amman: 1966, pp.46-47.

2   Goodlad, J.I., **School, Curriculum and the Individual**, Wallham, Massacusetts: Blaisdell Publishing Company, 1962, p.14.

3   Ibid, p.22.

4   Ibid, p.27.

5   Ibid, p.45.

6   Ibid, pp.63-64.

7   Ibid, p.60.

8   Ibid, p.64.

9   Ibid, p.66.

10   Ibid, p.36.

11   Pratt, D., **Curriculum Design and Development**, New York: Harcourt Brace and Jovanowich, 1981, p.357.

12   **Ibid.**

13   Goodlad, J.I., **op.cit.**, p.38.

14   Pratt, D., **op.cit.**, p.351.

15   Goodlad, J.I., **op.cit.**, p.49.

16   Pratt, D., **op.cit.**, p.352.

17   Taba, H., **Curriculum Development: Theory and Practice**, New York: Harcourt Brace and World Inc., 1962, p.168.

18   Quoted in Metwally, M.M., "A Comparative Study of Secondary Education in the United States, England and Sweden after 1945, with reference to Emerging Policy in the Arab Republic of Egypt", London: Unpublished thesis, 1979, p.363.

19   Pratt, D., **op.cit.**, p.352.

20   **Ibid.**

21   Metwally, M.M., **op.cit.**, p.360.

22   Pratt, D., **op.cit.**, p.358.

23   **Ibid.**

24   Goodlad, J.I., op.cit., p.28.

25   Ibid, pp.42-43.

26   Ibid, p.39.

CHAPTER FIVE

The Curriculum in Jordanian Schools

The educational administration in Jordan, that is the Ministry of
Education, designs the curriculum in accordance with the
organisation of the schools. So, it assigns materials to each
grade level, in an effort to realise the aims of education, but
without success. As has been noted in the last chapter, this is
the reverse of what is normally considered good practice, where
the structure and organisation are designed to facilitate the
achievement of curriculum objectives. Moreover, it is the natural
outcome noted in the last chapter, of a rigid grading system
coming to be seen as an end in itself.

Consequently, before embarking on a detailed description of the
curriculum, it is necessary to take into account some elements of
curriculum theory, i.e. objectives, content, methods of teaching
and evaluation. By looking at curriculum theory in general, and
then, relating each aspect to practice in Jordan, it will be
possible to highlight the failings of present curriculum
policies, and to make recommendations which are relevant to the
conditions in Jordan.

1 Curriculum Theory

In general terms, Holmes maintains that curriculum theory is,

> "a composite stemming either implicitly or explicitly from a
> philosophical position that includes theories about the
> nature of man, knowledge and society. Logically, curriculnm

theory frequently seems to be closely connected with
epistemologies, but generally it has to be justified in
practice by reference to psychological and social
theories".[1]

It follows that a curriculum theory which is acceptable in a

particular country will be connected with other deeply held

beliefs and mental states which relate to the social organisation

and way of life of that country. This makes curriculum theory one

of the elements of education which is least easily transferred

from one country to another. According to Holmes,

"It is doubtful whether any current pattern of curriculum
theory could usefully be raised to the status of 'general'
theory".[2]

Since this study is centrally concerned with the transfer of

pragmatic curriculum aims to Jordan, where pragmatic curriculum

theories have not been generally accepted, it is useful to start

from Holmes' general description of different styles in

curriculum theory.

For the purpose of comparing national curricula in a wide

theoretical context, Holmes suggests four main curriculum

theories which have considerable bearing on the selection of

content and the choosing of teaching methods; encyclopaedism,

essentialism, pragmatism and polytechnicalism.[3] In the study of

the Jordanian curriculum, the two which are most directly

relevant are encyclopaedism and pragmatism; encyclopaedism

because it is typical of current practice and the system

inherited from France, and pragmatism because of the introduction

of pragmatic aims. However, the new aims are not uniformly

derived from the pragmatic tradition, nor were the French the

only colonial power to have influence in Jordan. It is therefore
useful to start with a brief description of all four curriculum
models.

Encyclopaedism

As a curriculum theory, encyclopaedism can be briefly described
as the belief that all knowledge of the real world is valuable
and should be included in the content of the curriculum. In
practice the content consists of more than ten subjects, and
produces conflicts over the depth and breadth in which subjects
should be studied. As Holmes states,

> "In practice this has meant, even in the most senior classes
> of the academic secondary schools, a curriculum consisting
> of ten or more subjects. The encyclopaedists favoured modern
> rather than classical languages and the natural sciences
> rather than literary studies".[4]

The dilemma is that if encyclopaedic knowledge was beyond the
capacity of ordinary people in the seventeenth century, how much
more difficult is it the twentieth, which is characterised by an
explosion of knowledge. Holmes argues that,

> "The explosion of knowledge and specialized research needs
> have created serious problems in countries where
> encyclopaedism continues to inform curriculum theory. The
> need has been felt for depth studies in the last years of
> secondary education in those subjects which pupils intend to
> study in the university or other institutes of higher
> learning. Earlier curriculum practice made it possible to
> emphasise classical languages, modern languages, mathematics
> and science, or the social sciences, in separate upper
> secondary schools...Today a system of options in the upper
> (pre-university) classes is being introduced to balance the
> conflicting demands for breadth and depth".[5]

Holmes notes that in countries which have an encyclopaedist
tradition, debate generally centres on a struggle to retain a

broadly based curriculum while reducing the number of subjects.

"Educationists in countries which have inherited an encyclopaedic curriculum are struggling to retain a broadly based curriculum while reducing the number of subjects. A pattern of study consisting of up to ten subjects does usually include mathematics, modern languages, the natural sciences and some social sciences. The emphasis given to any one of these subjects of the curriculum is reflected in the examination system and in the choice of optional subjects".[6]

Therefore, encyclopaedism is no longer widely accepted in its traditional form; broadly based curricula allowing for different emphases and options are now typical of the continental European pattern, where encyclopaedism is most commonly found. The aims of encyclopaedic curriculum theory are highly rational, deductive and intellectual. It promotes habits of thought favouring the learning of general principles in order to specify details. The view that all knowledge of the real world should be included in the curriculum has prevented curriculum development from being adequately responsive to social change. It combines the advantages of a clear philosophical foundation with the defects of being relatively unresponsive to social pressure arising from social, economic and political changes.

Essentialism

Essentialism maintains that there are certain essential subjects that men should know if they are to be considered educated. It holds that these elements of education should be selected from historical and contemporary knowledge. The identification and selection of subjects for inclusion are philosophically justified.[7] The task of the school in general, is to distinguish elements that make up the academic disciplines and explore them

systematically through a study of separately organised subject matter. Essentialists, therefore, support mental discipline at the expense of the student's interest. In general, any society holding an essentialist educational philosophy views the school as an agent performing the practical function of delivering the 'essentials', as well as the basic skills, free from political or religious opinion. The aims of liberal education to which an essentialist theory can contribute are, in Holmes words, "social and individual - the potential of the latter ought to be actualised and the development of the society ought to be ensured".[8]

Curriculum organisation in accordance with this theory is based on the view that a small number of essential subjects will provide a liberal education, professional training, and lead to a useful life. Essentialism in curriculum theory supports change if it is adequately implemented. Its philosophical bases emphasise the importance of nature and the environment as a source of knowledge. Factual mastery of content and organisation is necessary if one is to learn through observation and nature. It emphasises that the learner should be adjusted to and become aware of his relation to the physical world. The observable facts of the external world of nature constitute a source of knowledge. Thus scientific facts and laws of nature are very important. Mathematics and the natural sciences are examples of subjects which contribute to the learner's knowledge of his environment.

The explosion of knowledge has also produced a dilemma for

essentialist curriculum theorists over which subjects should be considered essential. These are not necessarily seen as the same for all individuals, and relatively early specialisation in accordance with the interests of the pupil is generally accepted. More important than what is studied, is the role of study itself in developing mental faculties, critical skills and character in a desirable fashion.

From the application of essentialist theory in other countries, such as England, Jordan could learn to avoid early specialisation in secondary schools, which results in the neglect of the cultural, vocational and practical areas of knowledge. It could also learn that it would be unwise to neglect important aspects of the social studies such as sociology, economics and politics. If a student has to know about his society, he should acquire knowledge of society in a more direct fashion.

Pragmatism

The pragmatic movement grew out of the conviction that there is an intimate relationship between thinking and doing. It suggests that the content of education should be organised in accordance with the immediate or future problems that students face or might face.[9] In this theory considerable stress is placed on the process of learning. Pragmatism favours a scientific method of teaching and learning, which helps the student to develop the process of thinking rather than to memorise facts. Pragmatists suggest that learning through problem solving should replace the inculcation of subject matter. Hence, flexibility is an important feature of pragmatic curriculum design. The theory places

emphasis on experimentation with no subject or subjects stressed more than others. It also supports a child-centred approach rather than subject centred approach to curriculum organisation.

A basic problem with which educators have wrestled is how to provide a curriculum for each individual that would lead to definite personal goals, and at the same time meet broad social needs. This conflict, as Dewey suggested, could be tackled in two ways; by viewing the curriculum in the context of the needs of the individual and by regarding what appear to be opposing elements as complimentary and essential parts of the whole.[10]

The application of a pragmatic curriculum theory may encourage socio-economic, technological and political changes such as those which occurred in the U.S.A. Within this approach, curriculum theory has given support to vocational training and practical preparation which encourage proficiency in industry, agriculture and commerce. So, in addition to the preparation of youth for colleges and universities, the preparation of youth for a changing society, and particularly for their future occupation through academic, technical or vocational programmes, are among the main aims of the pragmatic school of thought.

Polytechnicalism

Polytechnicalisation of the content of curriculum suggests that "every aspect of school work should be seen in the light of its relationship with the productive life of society".[11] The purpose of education according to polytechnicalism is to provide a basic

knowledge of nature, individuals, society and thought, and combine it with knowledge of the intellectual achievements and practical skills of mankind in ways that are essential to every individual regardless of his future in life. M.N.Skatkin maintains that,

> "The mastery of these subjects form the basis for the scientific outlook on life and helps to develop the individual's cognitive powers and capabilities".[12]

Polytechnical education helps to develop creative technical ability, and helps to inculcate respect for manual and physical work. It allows youth an opportunity to choose suitable types of occupation freely, to master a variety of the tasks to be done in production, and to play an active role in technical progress.[13] Also, it gives understanding of the crucial technological process which enables the individual to change jobs with ease and confidence. In addition, it helps to prepare pupils for socially useful work, intelligently to choose an occupation on the basis of an independent mastery of knowledpe. Therefore, the basic idea of polytechnicalism is the rejection of the classical dichotomy between pure and applied knowledge and the belief that there is a unity of knowledge which must be applied. This idea of combining instruction with productive work emerged as a result of radical changes in the methods of production and in the development of science.

In this age of scientific technological revolution, a labourer will need to have the skills of a trained technician, or a wide knowledge of the principles of science and technology and an acquaintance with all aspects of modern production. Therefore a

combination of theory and practice and between instruction and productive labour has become inevitable.[14] As Holmes puts it,

> "In general, the aim is to abolish the deforming divorce between mental and manual work, or in educational terms to bridge the gap between general education and vocational education. According to communist theory, polytechnical education provides this bridde".[15]

Polytechnical education covers the study of the humanities with regard to their influence on the social forms of labour in particular, and on social life in general. It accustoms young people to work and serves as a basis for vocational training and for participating in decision making concerning the major problems of the economy and production.

On the whole, polytechnicalism requires that the curriculum should be organised so that it enables students to to become familiarised with the fundamental theoretical principles of modern production and to participate in socially useful work. Therefore compulsory subjects, elective courses and extra curricular activities should be organised to provide a unity between the theoretical and practicel aspects of the humanities, science and technology.

It is worth mentioning that theories of curriculum have a significant influence on the organisation of content, the practice of teaching and the treatment of learners. They also guide reform movements and inform educationists faced with problems of adapting the content of education to changes in society and school systems.

Curriculum theory in Jordan

The curriculum in schools in Jordan follows the encyclopaedic model. It consists of twelve subjects. These subjects contain many details which student ought to memorise and which cannot be linked with every day life. The student crams them to pass school examinations in order to be promoted to a higher grade, or to pass the general entrance examinations to universities. Consequently, the curiculum does not facilitate the achievement of either child or society centred aims of education.

The curriculum in Jordan is still characterised generally by its theoretical and unfunctional character. So, it concentrates on academic subjects with little attention given to technological and practical subjects. It is thus relatively unresponsive to social pressure arising from social, economic and political changes. The encyclopaedic, knowledge centred model followed in the schools of Jordan has prevented the curriculum from achieving most of the stated aims of education. Thus a new basis for curriculum development should be established, taking into consideration the contextual variables in Jordan. In order to build a comprehensive theory of curriculum, it is also necessary to consider how it will accord by widely held beliefs as to;

    a) the nature of man, or the individual learner,

    b) the nature of knowledge, and

    c) the nature of society and its needs.[16]

Ignoring such beliefs would invalidate the acceptability of any proposed curriculum theory.

In the development of a new curriculum theory in Jordanian schools emphasis should be placed upon the sciences and practices to close the gap between theory and its applications, and upon experience, reasoning and a scientific method of thinking. So a new curriculum theory for the schools of Jordan would fall, in principle somewhere between the pragmatic and polytechnical schools of thought. In accordance with polytechnical principles success depends on the elimination of the gap between thought and action, and on the importance of linking education to social change. Pragmatism emphasises science and democracy. Science for society has been considered the basis of a cultural revolution. Democracy and freedom have been stressed in pragmatism. Organised freedom must be explicit in society and in schools. Thus each pupil must have an education which suits his ability and interests and provides him with the knowledge and skills needed for making scientific and democratic decisions.

2 The Aims and Objectives of Curriculum Development

This section will review the aims of curriculum development in general, before turning to the Jordanian context to draw specific conclusions and make recommendations. A range of theoretical considerations can then be brought to bear on the issue of whether the curriculum aims in Jordan are in accord with the more general aims of education.

Aims of the the Curriculum

According to D.Pratt,

"'Aim' is used to refer to a statement of general change to be brought about in a learner".[17]

Therefore, writing out curriculum aims is the first stage in the design of a curriculum. It is relatively straightforward, but its importance should not be underestimated. The aim is of major importance so any defect in the aim efiects the entire curriculum.[18] Pratt states that six main criteria can be applied to curriculum aims. According to him, aims should specify an intention, identify a significant intended change in the learner, and be concise, exact, complete and acceptable.[19]

Taking each of these criteria in turn, it is important that the aim states something that the curriculum designer intends a programme to achieve. The function of the aim is not to define perfection, but to identify a strategic goal; such terms as "it is hoped" and "ideally" do not belong in an aim.

A curriculum aim should specify a significant change, because educators are in the business of changing people. A student who after instruction has a new skill, or new understanding, a new insight, or new attitudes is a changed person, not simply in an abstract sense, but in the literal and actual sense.[20] An aim should show clear links with the student's actual life. So the first task of the teacher to define what new or changed behaviour, concepts, insights or dispositions he wants to bring about. Diffidence often prevents designers from stating explicit and ambitious outcomes. But if a desired outcome is not achieved, the curriculum itself will be a waste of time. The curriculum designer is more likely to elicit a constructive and

knowledgeable response from a teacher participating in the process if the aim is explicit. Thus an outcome that is desired but not stated in the aim is unlikely to be achieved.[21]

It is also an error to state an aim in a way that describes what will happen during instruction, rather than state what the result should be. It is not uncommon to read such aims as "to provide the student with an opportunity to understand mathematical operations". This is a suitable way of passing responsibility from the professionals to the clients. If the curriculum is intended to develop an understanding of mathematical operations in students, it should say so without equivocation or ambiguity.

Conciseness is the soul of good writing, and is nowhere more important than in writing aims. Aims chould be written in short statements.

Exactness is also a quality of writing which is more important in aims than elsewhere. Difficulties in drafting precise and concise curriculum aims often indicate that the designers are working at too detailed level. However, designers must beware of being so general that the stated aim ceases to communicate the intention behind the curriculum.[22] Therefore, it is necessary to state specific curriculum intentions without going into detail.

Completeness is also important in an aim, which should encompass all the main intended outcomes. Specific objectives will be derived from general aims. Curriculum content and methodology will be developed to meet specific objectives. So any major

omission in the statement of aims will be reflected in the curriculum. Designers should redraft aims a number of times until they are satisfied that all major aspects of the intention have been included. But while an aim should avoid becoming a catalogue of specific intentions it may contain more than one focus.

Besides these various criteria which concern the content and construction of aims, the final criterion deals with the acceptability of aims. An aim should be acceptable to teachers, to learners and to the community. An aim could jeopardise the entire curriculum if it arouses great antipathy. For instance, a number of vocal citizens and self-appointed public spokesmen have criticised schools for offering full-time vocational work. To attempt to anticipate at least some of the objections of antagonists, several thoughtful evaluators should review the acceptability of every curriculum aim before it is published. This is not to say that curricula must merely reflect existing cultural norms and mores. Rather it is a recognition that when official curriculum aims are seen as a rejection of significant community values, the curriculum is likely to be killed before it is adopted. Therefore, in this context, acceptability simply means political feasibility. The aim itself must be acceptable enough so that the reader is prepered to examine its rationale which is an argument that seeks to justify the pursuit of an aim.

Objectives of the Curriculum

After determining the main aims of the curriculum, curriculum planning, in order to design a curriculum design, should identify

the objectives of curriculum. Specific objectives for each subject or area of knowledge should be formulated to bring about desired changes in student behaviour. Since this is the real purpose of a planned curriculum, it is important that any statement of objectives should state the changes to take place in student behaviour. Therefore, Phillip H.Taylor states,

"Learning, as psychologists have made us aware, brings about a change in behaviour. This being so it would seem that the purpose of the curriculum is to seek to bring about valued changes in pupil behaviour. These changes can be specified as the intended outcomes or the objectives of the pupil's curricular experiences".[23]

J.E.Kerr also sets sets out the function of objectives:

"So a curriculum objective is a more conditional specification than an educational aim. An aim is no more than a target, but there are operational criteria associated with an objective, that is, the pupil must have been or will be involved in a particular kind of behaviour if the objectives have been achieved.[24]

Ralph W.Tyler uses the term curriculum objectives to mean the changes in pupil behaviour which it is intended to bring about by learning. And clearly formulated objectives, as Tyler explains, must have two aspects; the content and the behavioural aspects.[25]

Also B.Bloom has defined educational objectives as follows;

"By educational objectives, we mean explicit formulations of the way in which students are expected to be changed by the educative process, that is to say the ways in which they will change in their thinking, their feelings, and their actions. There are many possible changes that can take place in students as a result of learning experiences, but since the time and resources of the school are limited, only a few of the possibilities can be realised".[26]

In addition H.Taba maintains that the objectives of education

must change individuals. She points out:

"The chief activity of education is to change individuals in some way, to add to the knowledge, to enable them to perform skills which otherwise they should not perform, to develop certain understandings, insights and appreciation".[27]

Taba means that educational objectives must bring about positive changes in student behaviour. So she states:

"Statements of objectives should describe the kind of behaviour expected and the content or the context to which that behaviour applies. Too often, the expected behaviour is not specified... only the coverage of the content is explicit, and it is not clear whether this content is to be memorized, thought about or acted upon to produce a change of attitude... statements of behaviour must have an indication of the kind of content in which this behaviour is to apply".[28]

A number of attempts have been made to classify educational objectives. Grouping of the specific objectives is needed to permit rational thinking about them and to suggest the types of learning experiences needed to attain them and types of evaluation techniques necessary to appraise them adequately. Three classifications will be briefly considered here; those which have been offered by Bloom, Pratt and Taba.

Bloom's Classification

Bloom's classification comprises three domains. The cognitive domain includes those objectives which deal with recall or recognition of knowledge and the development of intellectual abilities and skills. This is the domain in which most of the work in curriculum development has taken place and where the clearest definitions of objectives are to be found as descriptions of student behaviour. Behaviours are arranged from

the simplest to the most complex, primarily from the curriculum viewpoint. The classification ranges from the simplest knowledge of specific facts to an understanding of abstract theories. The highest proportion of educational objectives fall into this domain. Bloom's taxonomy of the cognitive domain is hierarchical, including the operations of recall, comprehension, application, analysis, synthesis, and evaluation, in which it is supposed that the later processes involve the earlier ones.[29]

The affective domain includes objectives which describe changes in interests, attitudes, values, and the development of appreciation and adequate adjustment. The affective domain contains five major classes which can also be ordered in a hierarchy; these are receivng or accepting, responding, attitude, organisation, and value characterisation.[30] It is more difficult to make objectives in this domain precise, or to describe behaviour appropriate to these objectives. Bloom points out that,

> "Objectives in this domain are not stated very precisely, and in fact teachers do not appear to be very clear about the learning experiences which are appropriate to these objectives".[31]

In addition, assessment procedures in the affective domain are still in the most primitive of states. If the affective domain objectives are to be realised, they must be defined clearly, learning experiences to help the student's development in the desired direction must be provided, and there must be some systematic method for appraising the extent to which the objectives are achieved.

The psychomotor domain covers the manipulative or motor skill area. Some objectives are to develop specific psychomotor skills in students. These may be taught through art education, physical education, manual training or handicrafts. Psychomotor objectives emphasise muscular or motor skills, the manipulation of materials and objects, while others stress some act which requires neuro-muscular coordination. They are most frequently related to handwriting, speech, physical education, trade and technical courses.

The separation of educational objectives into cognitive, affective and psychomotor domains is an artificial division, but it is sometimes convenient for the purpose of curriculum development and evaluation to consider each of them separately.

Pratt's Classification

After considering existing taxonomies of objectives, including those suggested by Bloom, J.P.Guilford and R.M.Gagne, Pratt suggested his own. His major objection to the existing taxonomies was that they paid relatively little attention to physical development or experience. He proposed instead a scheme which involved five main kinds of objectives; knowledge, skill, physical development, disposition and experience.[32]

According to Pratt, knowledge includes a wide range of states of awareness from knowledge of individual facts to comprehension of complex concepts. Knowledge objectives can use the verbs "know" and "understand" without becoming obscure. Such terms as "know" and "understand", although not "behavioural", do provide for

relatively clear communication among educators. What is required is not identification of behaviours, but clear statements of the state or capability to be developed in the learner. So terms such as "be aware of" or "be familiar with" should be avoided in writing objectives.

Skills usually rest on a knowledge base, but skills involve more than knowledge. When we perform a skill many different processes and actions are ordered and coordinated in a temporal sequence. The coordination can be developed only by practice which is necessary for the development of competent performance and skill. Two main areas of skill may be distinguished; cognitive skills such as recognising, discriminating, analysing or problem solving, and motor skills relating to the control of physical movement primarily through muscular operation, such as running and swimming.

Motor and cognitive skills are closely integrated (and it is difficult to separate them from a curriculum viewpoint) in many composite skills such as reading and speaking. In writing curriculum objectives, it is useful to use the term "be able" for skill objectives. Knowledge without skills is inert and attitudes without skills are ineffectual. Ensuring that a student has a skill will not ensure that he will use it, but this can come about through the development of attitudes. But a student who does not have a skill cannot use it. Skills training increases the range of possibilities open to the student, and extends his range of choice.

Physical development objectives differ from those in knowledge and skill areas, in that they are not learned. This in itself does not justify their exclusion from taxonomies of educational outcomes. The relationship between fitness, state of health and state of mind are now well enough known to justify the identification of objectives in this area as critical in every student's schooling. Although a healthy mind in a healthy body is recognised as a truth,it seems to have eluded Bloom.

A disposition is a state of mind involving a qualitative (usually positive or negative, and often conscious) judgement that influences an individual to act in a certain way toward a material or ideational object. But an attitude is an individual's state of mind and has rational value. Dispositions include attitudes, affect, belief, character, outlook, emotion, feeling, interest, inclination, motivation, opinion and value. Dispositions are not concerned with the ability of the learner but with the will of the learner.

> "A teacher who teaches mathematics or languages effectively, but is unconcerned whether the learners like or detest the subject, is not morally conscientious but unscrupulous... So those who mold the dispositions of the young help to determine the future of society".[33]

Pratt notes that it is difficult to develop desired dispositions, and requires wise and skilful teachers.

> "The man in the street could teach a class of children the two times table, but teaching students to like mathematics, to develop a scientific attitude or to have confidence in their own capacities calls for a professional".[34]

Pratt considers dispositions the most significant kind of objectives. Without approrpiate attitudes, skills remain unutilised potential. All the training in logic in the world will not make a person behave logically, unless that person has developed a positive disposition toward the use of logic in human thought and conduct.

An experience is valuable if the subject actually finds it directly enjoyable, satisfying or interesting. Schools should concentrate on training and education. This education should include the provision of significant experiencs. Pratt states that,

> "If we could accept the distinction that training consists in developing new attitudes in the learner, but education includes the provision of significant experiences, we could resolve the sterile controversy whether the schools should concentrate on education or on training; clearly they are responsible for both".35

Taba's Classification

Taba classifies objectives under five headings; knowledge, reflective thinking, values and attitudes, sensitivities and feelings, and skills. There is some overlap with Bloom and Pratt in the area of knowledge, which includes facts, ideas amd concepts.

Taba stresses reflective thinking, which she thinks desirable in a democratic society, and values and attitudes, including democratic creeds, the principle of individualism and of equality of opportunities, cooperation, tolerance and respect for the value of work. Taba notes that the development of values is

usually inefficient.

> "The teaching of values is largely of three types: teaching
> about them, moralising, and hoping that they will emerge as
> a by-product of other things in the program. It is no wonder
> then, that school programs have less of an effect on the
> development of values than might be expected and offer
> meagre experiences for the internalising of important
> values".[36]

Sensitivity and feeling are very important to extend the

capacities of the students. Using literature systematically is

among the chief ways of extending the capacity to feel, to

respond and to identify values.

For Taba, there are skills to be learned in connection with any

area of competency. Objectives range from those pertaining to

skills such as reading, writing and reckoning, to those which

relate to more diffuse skills such as exercising democratic

citizenship and group living.

Curriculum Objectives in Jordan

Although the three taxonomies discussed here differ in a number

of important ways in the classification of objectives and in the

stress placed on different categories of objectives, there are

also significant areas of agreement, concerning the areas which

should be covered, the level of specificity of objectives and the

kind of changes in the pupil to which objectives should relate.

There is also clear agreement that the objectives should be

derived from, and consistent with, the general aims of education.

In the light of these general remarks about objectives, the

curriculum objectives in Jordan can be considered. In this section, attention will not be paid to such external criteria such as acceptability, but only to such internal criteria such as precision, consistency, and whether the objectives define learning outcomes, and so on. Since Jordanian legislation specifies objectives for different levels of education, this discussion will also deal with the levels separately.

a) Kindergarten (ages 3 to 5)

The 1964 Education Act did not define any objectives for this cycle, and therefore there are no specific written objectives produced by the Ministry of Education.

b) Compulsory cycle (primary for ages 6 to 11 and preparatory cycle for ages 12 to 14)

The objectives for this cycle were defined by the 1964 Education Act.

> "Compulsory education is the base of education and the foundation on which other cycles depend, and it is considered the most significant means for supporting the nation's unity. It aims at realising the general aims of education to the level which suits students' maturation in this cycle. This can be achieved by realising the following special objectives.

> 1   A sound physical development of the student, so he can maintain himself in health.

> 2   A sound mental and attitude development of the student so that his performance in various attitudes of life is based on facts and organised thinking and far from prejudice.

> 3   The development of the student socially to a level which enables him to live in the community maintaining his rights and performing his duties with a cooperative and positive spirit and conscious of his responsibility.

4   To develop the student emotionally to a level at which he develops self-confidence and shows this in his dealing with others.

5   To develop the student spiritually, so that he can follow the injunctions of his religion to live in accordance with its high ideals.

6   To learn the basic skills to a level which he can use his Arabic language with facility and easy speech and writing, and can use numbers easily in his daily life, develop keen powers of observation, listening skills, objectivity in criticism and scientific method in thinking.

7   To provide the student with social and natural sciences which enable him to understand his local environment, his homeland, Jordan, and the Arab world through the scientific method.

8   To learn one foreign language to help him in his study in the different educational cycles, or in his profession in future life.

9   To develop in the student respect for manual work as well as an appreciation of those who perform these tasks.

10   The student must develop innocent recreational habits, an appreciation of Fine Arts and different types of Arab and Jordanian folklore.

11   To discover student's interests, aptitudes and abilities to specify - at the end of the cycle - his attitudes towards the following cycles: academic or vocational study with its varied types, or enters the labour field".37

(Translation from the Arabic text)

c) Secondary Cycle (Ages 15 to 17)

The secondary cycle is intended to prepare the trained manpower which Jordan needs in its development and growth towards the stage of an industrial society. This preparation must must suit the interests, aptitudes and abilities of students on the one hand, and the present and future needs of society on the other, by diversifying secondary education for boys and girls. In this cycle suitable maturation and experience should be realised. This

can be achieved by realising the following objectives:

1   To enable the student to reach a level where he develops an integrated personality, a feeling of self-worth, self-respect and dignity.

2   To help the student to reach a level at which he knows the significance of the family in the life of the individual and society, and knows the modes conducive to creating a happy family.

3   To attain knowledge, skills, and to learn attitudes and acquire practical experience, so he will be a citizen who can maintain himself and benefit society.

4   To help him to become accustomed to using his leisure time in innocent recreation.

5   To develop a custom of performing his duties and bearing his responsibilities, and training himself in a democratic life and to be a responsible citizen doing his best to contribute to a democratic way of life by his knowledge, experience, cooperative and positive work.

6   To enable the students who have the necessary requirements to proceed to their higher studies.[38]

[Translated from Arabic]

d) Institutes

Education in the institutes aims at preparing the manpower which the society needs for its development. This preparation should produce individuals in society at a middle level of specialisation between the secondary cycle and university study. It should enable the graduates of these institutes to perform their duties skillfully in education, industry, agriculture, commerce and women's arts fields.

In addition, the institutes are intended to realise the aims of education at a level suited to the maturity of students in this cycle, by further realising the objectives of the previous two

cycles to a level suited to the students' experience.[39]

e) Vocational Education

In the compulsory cycle the emphasis of the new approach to

vocational education was on the following objectives:

1   To use the local environment to the benefit of the
     student and other students at school.

2   To use resources and the facilities of the school for
     vocational training which demands the cooperation of
     the student team.

3   To diversify activity which encourages initiative, free
     thinking and invention by students.[40]

[Translated from Arabic]

In the secondary cycle, the general objectives of vocational

education are:

1   To prepare the students vocationally to suit the
     present and future needs of Jordanian society in its
     development phases and in accordance with students'
     interests and abilities.

2   To help the student to acquire knowledge, skills and
     practicel experience which will prepare him to be a
     skilled labourer and righteous citizen, maintaining
     himself and benefiting his community.

3   Enable the student to develop his ability and skills to
     realise the two previous objectives.[41]

[Translated from Arabic]   .

In reviewing these general objectives in the light of the

previous discussion of the purpose of objectives and the criteria

which objectives should meet, very little needs to be said; the

failings of the Jordanian curriculum objectives are all too

apparent. They are at the wrong level of generality. They are so

vague that they add little or nothing to the more general aims of

education. They mention, in general terms, knowledge, skills and abilities and attitudes, without anywhere specifying which particular knowledge, skills, abilities and attitudes should be promoted. Few of the objectives specify an educational outcome which can be identified in a specific change in behaviour, knowledge, or attitude on the part of the students.

This general vagueness makes it almost impossible to evaluate whether the objectives are in fact being realised, and may lead to a situation where different teachers interpret them quite differently in practice.

In the process of curriculum development, the first step is to adopt general aims of education. Then general objectives should be set. Then content should be selected in accordance with those objectives, and organised into teaching schemes with appropriate teaching methods. In Jordan, the second stage of selecting general objectives is, to all practical intents and purposes, missing. And this in turn means that there is no effective way of linking the curriculum development process to the general aims of education. Content selection and teaching methods will continue to be influenced by traditional attitudes and practices. These features will be dealt with in the following sections of this chapter.

It should be noted, however, that if the Ministry intends to achieve the general aims of education set out in the 1964 Education Act, it will need to find an adequate way of connecting those aims to the curriculum development process. The simplest

and most effective way of achieving this would be the complete redrafting of curriculum objectives, taking into account the analysis made and criticisms raised in this section.

3 The Content of the Curriculum

The content of the curriculum is selected to meet the curriculum objectives. Given that the objectives are poorly expressed in the Jordanian system, it is necessary to look at the way the content of the curriculum links with the broader aims of education.

As has already been noted, the encyclopaedic model and pragmatic model are those which should have had the greatest impact on the Jordanian system; the encyclopaedic model in terms of current practice, and the pragmatic in terms of the newly adopted aims. It has also been noted that the encyclopaedic model is associated with a subject centred organisation of the curriculum, generally including ten or more subjects, while the pragmatic curriculum is organised around ideas about the learner's experience rather than around subjects.

Educators, in organising curriculum content, tend to follow one of two basic concerns. One group places more emphasis on the knowledge to be acquired, whereas the other concerns itself with the needs and interests of the learner. If it were simply a question of introducing a completely student centred curriculum organisation, in place of a rigidly subject centred curriculum, it would probably be necessary to conclude that it was impossible

to reform Jordanian schools in this way. However, recently, these alternatives have been viewed as the extremes of a spectrum, in which some compromise organisation might be possible.

Taba has distinguished five patterns of curriculum organisation within this continuum: subject organisation, broad fields, a curiculum organised around a common core, a curiculum based on social processes and life functions, and an activity based curriculum.[42] Goodlad has classified the organisation of curriculum content into three patterns: a single subject pattern, a broad field pattern, and a core curriculum pattern.[43] Smith, Stanley and Shores, have also identified three patterns, but their classification includes the activity centred curriculem referred to by Taba: a subject centred pattern, a core curriculum, and an activity centred pattern.[44]

The classification suggested by R.Taylor is very similar to those mentioned above, and will be used in this analysis. Taylor suggests four patterns of curriculum organisation;

a)   specialist subjects like geography, arithmetic, history, handwriting and spelling,

b)   broad fields, like social studies, language arts, mathematics and natural sciences,

c)   a core curriculum for general education combined with either broad fields or specialist subjects,

d)   a completely undifferentiated structure in which the total programme is treated as a unit as is found, for example, in some of the programmes of less formal educational institutions such as boy scouts or recreation groups.

The Subject Curriculum

The subject curriculum remains the most widely used curriculum design especially in secondary or high schools. It is assumed that certain subjects have a special value as mental discipline. This assumption endows the subject organisation with a certain compartmentalisation and rigidity.[45] The supporters of such a pattern argue that subjects constitute the logical and effective method of organising knowledge and therefore an effective method of learning it. They state that following compartmentalised subjects systematically provide disciplined knowledge and may develop certain ways of critical thinking, by utilising the scientific approach of instruction. They also suggest that, in the rapid explosion of knowledge, the subject approach has permitted an ordered, segmented approach to study new subjects.[46]

This pattern has been criticised, and it has been suggested that recent moves away from subject centred organisation are due to the inherent weaknesses of this approach.

> "Because of the sterility and inflexibility of subject organisation, there has been insufficient experimentation with ways in which to combine the logical organisation of the content with the psychological patterning of learning, without danger either to the psychological criteria of learning or to the logical criteria of disciplined knowledge".[47]

Another criticism has been the detachment of the subject based curriculum from life and from the experiences, interests and needs of students, which has weakened student motivation. As a result, this form of curriculum organisation created a setting

which was sterile for the acquisition of values and loyalties. In this setting it was difficult to use the facts presented to develop attitudes and values, or to devote attention to their development. Perhaps the most serious criticism of the subject curriculum was that it overstressed the learning of details, and paid little attention to the development of active thought processes and critical thinking; it failed to teach for transfer and for active connection between ideas and facts in different fields. Perhaps its most serious weakness is, that it is assumed,

> "that a rigorous training in academic disciplines detached from social reality develops the abilities and skills most needed in meeting the demands of life's problems".[48]

It may be said that a major reason why young people are unable to solve out-of-school problems is that the secondary schools give them little opportunity to master important abilities which the out-of-school world will require of them.[49]

The Broad Field Curriculum

One response to criticism of the subject organisation of the curriculum, and a sign of the recognition on the part of educators of its weaknesses, has been the development of the broad field approach to curriculum organisation. This approach, which brings together two or more traditional subjects into a broad field provides an opportunity to overcome some of the shortcomings of having a rigid compartmentalisation of knowledge. On the other hand, it is not as radical as a complete change to a student centred or activity centred curriculum, and conservative teachers may feel comfortable with an organisation where some of the traditional subject boundaries remain.

Two major styles of developing broad fields have been attempted;
the correlated approach and the fused approach. The correlated
approach is seen as a step away from the strict subject
curriculum in the direction of integration of learning
experiences. While the correlated approach maintains the usual
subject division, it attempts to establish some bridges between
certain subjects. A single teacher who instructs in two or more
courses, may attempt a correlation between them, or it may be
attempted by two or more teachers who cooperatively plan to help
students understand and appreciate interdisciplinary subjects.[50]

Correlation may be arranged between two subjects in two different
instructional fields, such as history and literature, or science
and mathematics, or it may involve two subjects in the same
field, such as history and geography. Since such an approach
leaves curriculum organisation very similar to the traditional
subject curriculum, any benefits derive from a change in emphasis
in teaching style, and are by no means automatic. For some
commentators, such a curriculum organisation is simply an attempt
to save the subject centred curriculum with cosmetic measures.
P.Tanner states of the correlated approach, that,

> "...although correlation represents an attempt to reduce or
> eliminate the isolationist and compartmentalised
> chracteristics of the subject-centred curriculum it,
> nevertheless, leaves each subject intact. Correlation does
> not necessarily require changes in the actual methods of
> teaching. The subject matter may continue to follow a
> logical pattern of organisation - ignoring the interests,
> needs and motivations of the learner".[51]

The fused approach is the fusion of two or more closely related

subjects into a new and broader course. The content of the two or more combined courses furnishes most of the study material. One of the earliest examples of fusion was the combination of zoology and botany into biology. More recent examples include the merging of ancient medieval and modern history into world history and the combination of several sciences subjects into a general science course. The fused approach is used particularly in the preparatory schools, where the purpose is to give students as broad an introduction as possible to all fields of learning.

The correlated and fused approaches must both be considered unsatisfactory, as they produce curiculum reform in a single field of the curriculum. Properly speaking, a broad fields curriculum requires, not only that various broad fields be arranged, but that a balance between broad fields is maintained in the curriculum as a whole. Dissatisfaction with the the correlated and fused approach has led to efforts to avoid unmanageable conglomerations of courses, and has brought about the broad fields curriculum. Such a pattern is regarded as an attempt to combine several specific areas into larger fields to reduce atomisation of the curriculnm.

> "History, geography and civics were combined into social studies. Reading, spelling, composition and handwriting were combined into language arts, specialized sciences yielded to such general fields as general science, life science and physical science".52

The supporters of the broad fields organisation argue that it permits a wider coverage of material, allows for the elimination of factual details, and for a greater integration of subjects,

and facilitates a more functional organisation of knowledge. The broad fields curriculum is widely practised in general education. While it has become standard particuluarly in the elementary cycle, it has only partially developed at the secondary level.

The opponents of such a pattern argue that the integration and unification of knowledge has not materialised. Therefore, in many instances, the areas of knowledge have been only superficially integrated, and broadened in name only.

> "Separate units on the subtopics of 'condensed' courses replaced the separate subjects. The first courses in general science were composed of special sections of chemistry, physics, zoology, astronomy and geology".[53]

Some progressive educators would argue that the subject matter in the broad fields pattern is not based on social problems, and therefore does not take into account the needs and interests of the learners.

Activity Centred Curriculum

The broad fields curriculum does not concern itself with the psychological interests and needs of the learners, nor does it reduce subject matter to its lowest common level. Despite that the broad fields curriculum can be considered a step towards the elimination of conventional subject boundaries in general education. In response to the many criticisms levelled at the conventional subject curriculum, Dewey called for learning to be viewed as a process of inquiry, rather than a passive absorption of information.[54] This insight is the basis of the activity centred organisation.

The results of research in the psychology of learning encouraged some progressive educators to call for a new pattern of curriculum organisation centred round problems from life, and students' needs and interests. Combined with the criticism of subject centred organisation, this led to the development of the student centred organisation.

The extreme form of such an organisation tends to consider the child as the sole centre of learning, whereas less extreme forms are organised around key social problems closely related to the needs and interests of the pupils. There are serious difficulties in implementing such a curriculum, especially where teachers are not in sympathy with the goals of the activity centred curriculum. The curriculum is not planned in advance, but guidelines are established. Pre-planning of subject matter is considered impossible and even undesirable. This is intended to help the students to choose alternatives intelligently as they proceed through the programme.[55] Activities are cooperatively planned by students and teachers. In such an organisation, problem solving becomes the major method of teaching, and children learn by solving actual problems that help them to meet real needs or that connect them with active interests. These characteristics of the activity centred curriculum make very considerable demands on the teachers involved.

The Core Curriculum

The core curriculum can be drawn from either a subject centred philosophy or from an activity centred philosophy. There are,

therefore, different forms of core curriculum. The term "core curriculum" involves different meanings and causes confusion. Some use it to mean general education, others use it to denote an approach for developing social values and problem solving. There is considerable diversity of opinion as to what a core programme really is. Nevertheless, the core curriculum can be seen as a most ambitious attempt to develop integration, to serve the needs of students and to promote learning and more significant relationships between school and life.

Wheeler's analysis of core theory shows that programmes have a number of important characteristics.[56] The core progrgmme attempts to meet the needs common to all children, though in secondary schools it may be combined with required courses or electives or both. The traditional divisions between subject matter areas are abolished, to promote a greater integration of learning by unifying subject matter. It uses longer and more flexible periods. It provides for a closer teacher pupil relationship by using extended periods and counselling. And a great variety of learning experiences is used.

While it is recognised that core programmes can offer better chances for the integration of knowledge, criticisms have been made that the activity of life or social processes or problems, as treated in schools may well be as discrete and compartmentalised as the subjects themselves.[57]

In the majority of the schools, core patterns are organised on

subjects lines. This can lead to a core which is heavily bisaed in favour of one subject or group of subjects, and the core may become divorced from social problems and moral values.[58] An integrated core based on problems may be hard to achieve in certain specialist areas.

Finally, core programmes or unified programmes suffer in practice from a lack of teachers competent to teach them. Such teachers require broad competence and need a breadth of liberal and specialised education that is hard to find. This lack, combined with the lack of adequate curriculum guides and the cost of teaching materials make it difficult to implement the core curriculum effectively. Therefore, the core curricuium organisation has not yet received a fair trial.[59]

The Content of the Curriculum in Jordan

The programmes of general education in Jordanian schools are laid down by the Ministry in terms of subjects. This makes it relatively easy to see how much time is devoted in schools to each subject.

In compulsory schooling, covering the primary and preparatory cycles, the subject and periods alloted are as follows:

Table 5: Subjects in Compulsory Education

Cycle	Primary						Preparatory		
Grades	1	2	3	4	5	6	1	2	3
Number of periods devoted to each subject									
1 Islamic Education	3	3	3	3	3	3	3	3	3
2 Arabic	9	9	9	9	6	6	7	7	7
3 English	-	-	-	-	5	5	6	6	6
4 Mathematics	4	4	4	4	4	4	4	4	4
5 Social Studies	2	2	2	2	2	2	2	2	2
6 Sciences	3	3	3	3	4	4	4	4	4
7 Art Education	2	2	2	2	1	1	1	1	1
8 Physical Education	1	1	1	1	1	1	1	1	1
9 Vocational Education	2	2	2	2	2	2	2	2	2
Total	26	26	26	26	28	28	30	30	30

Source: Ministry of Education of Jordan, **Regulations for Promotion, Re-sit and Retention,** No.14, 1981, p.12.

Similarly, a table can be constructed showing the number of periods devoted to each subject in the secondary school. In this case there is the additional difficulty that not all students follow the same course, some are in the literary stream and others are in the scientific stream. The resulting table is as follows:

Table 6: Subjects in Secondary Education

Stream Grade	Literary			Scientific		
	1	2	3	1	2	3

Number of periods devoted to each subject

	Lit 1	Lit 2	Lit 3	Sci 1	Sci 2	Sci 3
1 Islamic Education	3	3	3	3	3	3
2 Arabic	5	6	6	5	5	5
3 English	5	5	5	5	5	5
4 Mathematics	4	3	3	4	5	5
5 Social Studies						
General Geography	2			2		
World Regional Geography		2				
Geography of the Arab World			2			
History of Islamic and Arab Civilisation	2			2		
History of Western Civilisation and the Modern World		3				
Modern Arab History			3			
Economics		2	2			
6 Sciences						
Natural Sciences	4			4		
Biology	2			2	2	2
General Science		3	3			
Chemistry					3	3
Physics					4	4
7 Physical Education	1	1	1	1	1	1
8 Vocational Education	2	2	2	2	2	2
9 Manual Training	1	1	1	1	1	1
10 Arab Society and the Palestine Problem			2			2
Total	31	31	33	31	31	33

Source: Ministry of Education of Jordan, **Regulations for Promotion, Re-sit and Retention,** No.14, 1981, pp.13-14.

Each period is 45 minutes.

From these tables, it can be seen that the subject based curriculum in Jordanian schools is strongly biased towards literary studies, and the sciences and mathematics only come to

occupy an important part in the curriculum in the last two years of the secondary cycle, and then only in the scientific stream. This imbalance in the curriculum will need to be corrected if the students are to develop the knowledge and skills which are relevant to the scientific and technological world in which they now live, and thereby meet the broader social aims of education.

Furthermore, the inclusion of too many subjects in the curriculum, each of which has only a small amount of time devoted to it, stretches the students, and encourages rote learning and cramming. Many areas of skill have been neglected as a result. Most importantly, the skill which constitutes the basis for academic study, that of independent study and thinking, has been almost completely ignored. Taba points out that these include,

> "The skills necessary for independent and creative
> intellectual work, the ability to locate and evaluate
> information from sources other than text books, and the
> processes of solving problems and analysing data".[60]

These skills are especially important in a programme of instruction which requires a transition from following text books to assignments which require the use of multiple sources. Despite the fact that curriculum planners have recognised their importance, no action has been taben to develop them in students. One of the most serious deficiencies is a lack of skill on the part of students in the effective functioning of group participation and teamwork.

High value is placed on the logical organisation of subject matter. Therefore, the logical organisation of the curriculum

takes precedence over the problems and interests of pupils, as well as the socio-economic and political demands of society.

There is no effort to stress the relationships between different areas of knowledge. Instead of placing grammar, composition and literature with language arts, or combining geography, history and Arab Society and the Palestine problem, into social studies, each of these is taught as a separate subject, in a separate lesson and with separate textbooks, and, of course, by separate specialist teachers. Each of these subjects is evaluated as a separate course in a separate examination paper.

Even within one subject, isolation and separation are marked features of content organisation. For example, mathematics is taught as four branches; algebra, geometry, trigonometry and mechanics, with four text books and four separate lessons. Similarly, Arabic language is taught as four branches; composition, literature, grammar and rhetoric. Again, each of these branches has its own text book and lesson. Such a rigidly compartmentalised curriculum inhibits the development of concepts in the social studies, and a perspective on how these concepts can be related to work going on in other areas of knowledge, so that the student develops an increasing unity of outlook.

Within the subject areas, curriculum content is frequently organised in a chronological sequence, without any regard for the learning needs and capacities of the students. This is particularly true in history and literature. Thus, the ancient times have been the subject of the first secondary form, the

middle ages are placed as subjects in the second secondary form,
and the modern age is the subject of the third secondary form.
This has resulted in many difficulties, especially when the
language used is drawn from the history of each age. Similarly,
in literature the student has to study the pre-Islamic age of
Paganism in the first secondary form, where he encounters in the
accounts of events, a difficult language style, whether in poetry
or prose, while in the second and third forms, when he is more
able, the language of the modern age is much easier to
understand.

In reviewing the possible ways in which curriculum content can be
organised, and the criticisms of the ways in which it is in fact
organised in Jordan, it has become clear that there are a number
of ways in which moves could be made towards accommodating the
child and society centred aims of education, without necessarily
introducing a completely activity centred curriculum. There is
some indication, from the prestigious private schools in Amman
which already offer some foreign programmes, that reforms along
these lines would not meet with violent opposition, so long as
they are gradual, and do not conflict directly with the Islamic
traditions of Jordan.

To date, however, the Ministry has been completely ineffective in
introducing reforms of the curriculum. As noted in the earlier
part of this chapter, concrete curriculum aims and objectives
have not been formulated. Without the guidance of such
statements, the curriculum is open to undirected influences, most

importantly from the traditional teaching methods and systems of assessment, which dictate what can easily be taught and assessed. This is the exact contrary of rational curriculum design, where teaching methods and assessment methods are selected to suit the curriculum content. It is to methods of teaching and evaluation that the argument now turns, in the next chapter.

References

1   Holmes, B., "Some General Issues and Proposed Solutions in Curriculum Development: A Comparative Survey", **Educational Documentation and Information: Bulletin of the International Bureau of Education**, Paris: Unesco/IBE, No.19, Vol.48, 1974, p.23.

2   Holmes, B., **Some Consideration of Method in Comparative Education**, (Student Seminar Papers), London: London University Institute of Education, 1974, p.143.

3   Holmes, B., "Some General Issues and Proposed Solutions in Curriculum Development: A Comparative Survey", **op.cit.**, p.23.

4   **Ibid**, p.24.

5   **Ibid**, p.25.

6   **Ibid**.

7   Holmes, B., **Some Consideration of Method in Comparative Education**, op.cit., p.143.

8   **Ibid**.

9   **Ibid**, p.144.

10   Dewey, J., "Current Problems in Secondary Education", **The School Review**, Vol.10, January 1902, p.21, cited by Metwally, M.M., unpublished thesis, **op.cit.**, p.412.

11   Holmes, B., "Some General Issues and Proposed Solutions in Curriculum Development", **op.cit.**, p.25.

12   Skatkin, M.N., "Marxist-Leninist Ideas on Polytechnical Education", in Shapovalenko, S.G., **Polytechnical Education in the USSR**, Amsterdam: Unesco, 1963, p.17.

13   **Ibid**, p.18.

14   Holmes, B., **Polytechnical Education in the USSR: Various**

Essays in Education, London: p.2.

15   Ibid, p.2.

16   Holmes, B., Some Consideration of Method in Comparative
      Education, op.cit., p.143.

17   Pratt, D., Curriculum Design and Development, New York:
      Harcourt, Brace and Jovanovich, 1981, p.139.

18   Ibid, p.147.

19   Ibid, pp.147-152.

20   Ibid, p.147.

21   Ibid, p.149.

22   Ibid, p.150.

23   Hooper, R., (Ed.) The Curiculum: Context, Design and
      Development, Readings for the course team at the Open
      University, Edinburgh: Oliver and Boyd, 1972, p.154.

24   Ibid, p.185.

25   Ibid, p.185.

26   Bloom, B.S., et al. (Eds.), Taxonomy of Educational
      Objectives Handbook I: The Cognitive Domain, New York: David
      McKay, 1956, p.25.

27   Taba, H., Curriculum Development: Theory and Practice, New
      York: Harcourt Brace and World Inc., 1962, p.194.

28   Ibid, p.200.

29   Madkour, A.A.A., "Curriculum Development in the General
      secondary School in Egypt since 1952 with Comparative
      Reference to the Secondary School in America and Grammar
      School in England", Unpublished thesis, London: 1979, p.424.

30   Bloom, B.S., et al. (Eds.), Taxonomy of Educational
      Objectives Handbook I, op.cit., p.7.

31   Ibid.

32   Pratt, D., Curriculum Design and Development, op.cit.,
      p.172.

33   Ibid, p.178.

34   Ibid, p.178.

35   Ibid, p.179.

36   Taba, H., Curriculum Development, op.cit., pp.222-223.

37   Ministry of Education (Jordan), "Collection of Laws and Bye-Laws", **Risalat al-Mu'allim** (The Message of the Teacher), Vol.10, No.1, Amman: 1966, pp.50-51.

38   **Ibid**, pp.52-53.

39   **Ibid**, p.54.

40   Shami, M.M., and Faudah, H.M., **Educational Innovations in Jordan** (Arabic Text), op.cit., p.101.

41   Ministry of Education (Jordan), "Educational Process Conference", op.cit., p.51.

42   Taba, H., **Curriculum Development**, op.cit., p.412.

43   Goodlad, J.I., **The Instructional Programme of the Public Schools, Planning and Organising for Teaching**, Washington, D.C: National Education Association, 1963, pp.42-47.

44   Smith, B.O., Stanley, W.O. and Shores, J.H., **Fundamentals of Curriculum Development**, New York: Harcourt, Brace and World Inc., 1957, pp.225-232.

45   Holmes, B., and Ryba, R., (Eds.), **Curriculum Development as the Second Level of Education**, Prague: Proceedings of the Comparative Education Society in Europe, 1969, p.61.

46   Smith, B.O., et al., **Fundamentals of Curriculum Development**, op.cit., p.250.

47   Taba, H., **Curriculum Development**, op.cit., p.389.

48   **Ibid**, p.391.

49   **Ibid**.

50   Tanner, P., **Schools for Youth: Change and Challenge in Secondary Education**, New York: Macmillan, 1955, pp.243-244.

51   **Ibid**, pp.244-245.

52   Taba, H., **Curriculum Development**, op.cit., p.393.

53   **Ibid**.

54   Dewey, J., **Democracy and Education**, op.cit., pp.185-186.

55   Smith, B.O., et al., **Fundamentals of Curriculum Development**, op.cit., pp.271-281.

56   Wheeler, D.K., **Process of Curriculum**, op.cit., p.242.

57   **Ibid**, p.244.

58   Smith, B.O., et al., **Fundamentals of Curriculum Development**,

op.cit., pp.339-340.

59   Taba, H., Curriculum Development, op.cit., p.412.

60   Ibid, p.225.

CHAPTER SIX

Methods of Teaching and Evaluation

1 Methods of Teaching

Methods of teaching can be simply divided into three main categories; teaching by oral and written methods, teaching with visual aids, and practical teaching. The teaching method used should be carefully selected to match curriculum content as teaching methods will promote a view of cognition as well as a particular content. Oral and written methods promote a dependence on learning facts and reliance on authority, while practical teaching can promote independence and enquiry on the part of the student.

The various methods of teaching are not separated in teaching, but interrelated. However, the use of oral and written methods must be restricted, while the use of visual aids and practical methods must be extended. All these methods are essential and they must all be used, each at the proper time and in proper combination with the others. Whichever teaching methods are used must give the pupils a proper knowledge of scientific method, must arouse the active interest of the pupils and develop in them the spirit of inquiry, initiative, independence and a creative approach to any subject. The methods used should inculcate in the pupils the habit of self improvement, strengthen the ties of the school with life and with practical work and should improve the ideological and political education of the pupils and their

creative work must be developed in every way. Teaching methods should not direct pupils towards cramming, dogmatism or formalism. Also, emphasis on memorisation should be abandoned because it contributes little to understanding. The principle of learning through experience should be encouraged and concern with the development of the student's personality should be encouraged through the teaching and learning process.

Methods of teaching must be supplemented by everything that links the school with life. A system of education which consists solely of lessons in class is already outmoded. Of course lessons in class are the most effective way of organising the study of the natural, technical and human sciences, and they remain, therefore, the basic form of instruction. But stereotyped methods in lessons cannot be tolerated. Of course lessons may be given in the traditional manner, but side by side with them, there should be lessons in which only new subject matter is expounded or only consolidation of previous subject matter takes place, or only independent creative work by the pupils is carried out, or in which there is only checking of the degree to which the pupils have mastered the subject matter studied. Side by side with lessons, homework and discussions, wide use must be made of practical activities, practical productive experience by the pupils and socially useful work in production, excursions (cultural, historical and scientific), lectures, debates, competitions and exhibitions, optional classes and group activities.

Besides, working in classes, which is the basic form of stimulating the pupils to work, various other ways of grouping them should be used, such as teams consisting of pupils from various grades. We know that not all individuals learn most effectively by the same metbod of teaching, by the same type of activity, or by using the same media. Different individuals also need different types of learning activity for their self improvement. Students need to acquire various types of methods of learning which will help them to continue their education by themselves after leaving school. Taba writes,

> "The wider the range of learning techniques which an individual masters, the better equipped he is for continuing to learn after formal schooling has ceased".[1]

> "For all students to use identical methods of learning, no matter what their abilities and backgrounds, is a highly questionable procedure from the standpoint of efficiency in stimulating and using intelligence".[2]

It is also a fact that interests do not attach only to the content of learning, but also to the methods of learning. We can say that a balanced array in the methods of teaching and in the conditions under which teaching takes place is required, if there is to be equality of opportunity to learn. But there are a large number of elements which need to be balanced. Taba mentions that,

> "Learning activities need to represent a balance of various means of learning: reading, analysing, doing research, observing, writing, experimenting, manipulating and constructing. Too often there is a tendency to depend more or less exclusively on one mode of learning and thus to limit the scope of learning".[3]

Often the traditional means of teaching, such as reading books, or some new teaching techniques which has inspired interest, such as group discussion, tend to dominate. Such a dependence on one

way, or a small number of ways, of learning deprives some students of an adequate access to learning. Students who study in a physics class which takes the principles of physics from the physics text books only, have less opportunity to learn physics than those who study the same principles by operating and manipulating machines, studying blueprints or experimenting.

A balanced variety in learning techniques also makes possible a flexibility in approach, which is desirable in coping with a heterogeneous groups. Perhaps a more effective way of providing for heterogeneity in abilities is to design methods of learning according to differences in needs, levels of comprehension or ability. But this way leads to a problem of formulating open ended tasks which serve a similar purpose for all, but enable students to use alternative procedures and different materials. The students of high ability would have worked below their capacity, and the low ability students would have learned little or nothing.[4]

Gagne stresses that learning is an individual matter. It should determined by what the learner does and not by what the material does or what the teacher does.[5] So, if one is concerned about how to make learning efficient, the focus of emphasis should be the student. The design of efficient conditions for learning demands that learning be conceived as an individual matter. It should be noted, however, that the choice of methods of teaching, whether individual or group instruction, should be influenced by considerations of resources and by the quantity and quality of

teachers available and often by the architecture of the educational institution. Thus, methods of teaching, like curriculum objectives, are constrained by a large number of factors. They do not exist independently of the context in which they are employed.

Methods of Teaching in Schools in Jordan

Learning in schools in Jordan is characterised by learning in words by words. Students sit passively on the seats of classrooms and take notes. This traditional method of teaching is based on cramming by students, and lecturing by teachers. The teacher has to make sure that the students have memorised and finished all the prescribed pagss of the text book within the allotted period of time. The students thus spend most of their time memorising text books which they study without deriving any meaning from them, because the books have no relevance to their social life or environment. It is clear that no attempts in the teaching methods are used to stimulate the imagination or curiosity of the students, to develop their abilities for creativity, critical thinking, problem-solving, independence or wide knowledge, or to take account of the individual differences among students.

The teacher in Jordanian schools may be forced to restrict himself to one or two methods of teaching either because of his poor professional training, or because his old fashioned supervisor had advised him to teach in a particular way. This may be attributed also to overcrowded classrooms, with from 35 to 40 students in a single class, or to the heavy teaching load on staff of between 22 and 27 periods a week. A teacher working

under such conditions and pressures, obviously cannot look after his students, their individual differences, interests and abilities. Such dependence on one way of learning deprives students of adequate access to learning.

The main method of teaching is that students should memorise the subject matter and repeat it by heart in order to pass examinations, in order to acquire a certificate or to be promoted to a higher form. Therefore, teachers concentrate on preparing their students for general examinations. They teach precisely the subjects named in the curriculum, guided by prescribed textbooks and they follow the instructions issued by the central and local authorities in so far as they can understand them. So the general exeminations which are set, implemented and corrected by persons from outside the schools have great influence on the teacher and how they teach. These methods of teaching develop students' abilities to cram and keep the crammed knowledge for a sufficient period of time to write it down in the examination without thinking. Thus the teaching methods used do not promote the achievement of child and society centred aims.

The teaching methods employed are inappropriate even in the literary subjects for which they were developed, but the problem is more severe in the experimental sciences, where a more active involvement of the student is imperative. Methods of teaching sciences should shift the emphasis from factual information to understanding, enquiry and discovery. They should seek to develop understanding of the structure of science and stress science as a

method of inquiry, rather than as a body of knowledge. They should emphasise the importance of critical thinking as a desirable ingredient in human beings in a democratic society.

So science should be integrated with practice and with every day life of the environment. Courses in the natural sciences should develop the concept that men can have a significant influence on his environment through technology and that he is the master of the machine. In practice, the science teacher does not pay attention to industrial applications or social consequences and never talks about the relation between science and democracy. As a result, students in Jordanian schools are not adept at either analysisng or attacking problms or in using what they know to solve problems.

Applying facts and principles to the solution of new problems and to the prediction and explanation of new phenomena is another aspect of thinking. Taba points out,

> "The fact that the effectiveness of school learning depends on the extent to which students can apply to new situations what they have learned makes the transfer of learning an extremely important objective. And the greater the leap of transfer, the more profitable the learning".6

Therefore, it is recommended that schools in Jordan should follow a more pragmatic approach to the method of teaching. Team teaching should be introduced and encouraged. It involves two or more teachers cooperatively planning, instructing and evaluating one or more groups of students in order to take advantage of the special competences of the team members. Teams would operate in much the same manner whether their members came from one subject

area or cut across two or more subjects. Teachers within each area of knowledge should be assigned to work cooperatively from time to time.

To facilitate the application of curriculum and cutting across subject matter barriers, audio-visual aids should be developed and provided for instruction. Which brings the discussion to the topic of educational aids.

2 Educational Aids

Educational aids are the equipment, tools, apparatus and instruments which are employed in educational attitudes to help students to understand easily and clearly the subject matter and to facilitate teaching. These educational aids include photographic pictures, moving pictures, film pictures, strips, drawings, graphs, models, globes, plays, picnics, field trips, shows, radio, programmes of school radio, television, records, tapes and video tapes. But in spite of all these aids, traditional lecturing techniques, talk and chalk, still occupy a central role in the teaching process. At the moment, a host of audio visual aids are at the teachers disposal.

The power of these aids to evoke affective, as well as intellectual, responses has been stressed. The teacher's task has not been made easier, but he has more aids to help him to in achieve a broader range of aims than ever before, so long as he knows how to use them. Instead of the teacher having to

communicate in one language, he now has to have a command of several. Visualisation takes many forms and uses many forms of symbolism; it enables knowledge to be spread more widely. So teachers and educators have in their hands a powerful tool, and could create, if they tried, the necessary climate for a broad spectrum of learning experiences, of thought and feeling, not only for rich children, but also for children in the city, village, hamlet and in desert and remote areas. Audio visual aids can be used to clarify information, but their unique contribution is as a means for the enrichment of experience.[7] Through immediate experience, we take the school to the world, but there are limits of time, place, and possibility. But audio visual aids give the opportunity to bring the world to school, not in sensory completeness, but to a degree that is often can be made to serve our purpose.[8]

Educational aids ease the problems of learning and the acquisition of experience than would otherwise be possible. The learner may be inspired with the desire and activity necessary for effective instruction, and drive him to invention, encourage his independent thought and create a viable classroom climate. Also, educational aids encourage the interaction between the learner and his environment, keep knowledge valid in the learner's mind and help learning by doing.

No single medium is likely to have properties that make it best for all purposes. There is, so far as we know, no special magic in any particular medium. Choice of medium depends often on the nature of the learning task itself, that is the objective of

instruction. But it seems likely that a careful combination of media may be required to achieve the kind of instruction that is most effective and which at the same time exploits the properties of those media to the fullest advantage.[9]

Educational Aids in Schools in Jordan

In contrast with the wide possibilities which educational aids now offer, very little has been done to take advantage of them in Jordan. Where educational aids have been used, the view taken of their use has been dominated by traditional educational attitudes and practices.

The use of educational aids should reinforce text books. That should help students to learn rapidly, to accustom them to depend on themselves through auto-education, creative and positive participation and the diversified technologies. They should help the teacher to improve his teaching method through typical curricula programmes which is transmitted in the presence of students. It helps the teacher and the pupil to keep pace with the rapid scientific and intellectual development and to connect theory with reality.

But the introduction of educational technology in education is hindered by the inertia of the system of education itself, because teachers do not like technology, and they do not agree to change their methods of teaching. R.Hooper points out that,

> "...A major obstacle to the introduction of technology into education is the inertia of the educational system itself. There are few incentives for teachers to change their methods, and educational institutions seem to be designed to

> resist change. Schools and colleges too often take on the outward appearance of innovation, but not its substance... Each new technology intent on transforming educational procedures soon finds itself the one that is being transformed. This inertia is fed by the strong antipathies to technology, found both inside and outside education".[10]

Hooper adds,

> "Technology is resisted in education because it builds up new power centres and weakens traditional ones".[11]

It is assumed, quite simply, that communication through more than one sense organ is in some sense better than communication through only one. For example, television is better than radio, sound film is better than silent film. However, educational television has made a fresh disclosure of an old fact, that great teachers are few and far between. Through television, a great teacher confined in the past to the range of his voice or the walls of his classroom, can now reach the remotest hamlet and desert area. But television, by itself, canot make a good teacher out of a bad one. There is an obvious need to explore the relative effectiveness of television teaching and the use of classroom teachers. Simply televising traditional lessons, which often happens in Jordan, does not involve any significant change in what goes on in the non-television classroom. The educationists stress the widened scope that television gives to the really gifted teacher. They tend, therefore to favour the form of television lesson. The reason for this is that in this mode television offers a solution to a pressing educational problem, the vast geographical area and the remoteness of many rural communities coupled with the shortage of teachers. They see television as a means of giving an equal opportunity to the most isolated children. It is also regarded as a means of improving

standards of instruction generally.[12]

This emphasis on using television to achieve the same functions as traditional teachers is an important feature of school television in Jordan. The rapid increase in the number of students in the last 15 years, the shortage of qualified professional teachers and of educational facilities led the Ministry of Education to employ television programmes as a means of solving these problems. At the beginning of the school year 1968/69, educational television programmes were introduced in English language, sciences, mathematics and physics for the second grade of secondary schools (11th form) for both literary and scientific streams for three periods weekly.[13]

A.Tell states that,

> "Television programmes were viewed by all students. Therefore, shortage of qualified teachers has been solved, and the school was liberated from its isolation by providing it with necessary amount of knowledge which is bigger and better than before".[14]

But it is evident that the problem of the shortage of qualified professional teachers could not be solved by transmitting for a few hours weekly on television a few limited programmes.

Jordan TV currently transmits programmes on the subjects which students find difficult, on account of the preponderance of unqualified teachers and shortages of adequate educational aids. These subjects are English, Arabic, geograppy, physics, and chemsitry for forms 11 and 12. Educational television transmits

its programmes through Jordan TV Corporation during school hours.

Jordan was the first Arab state which introduced educational television programmes in schools. But television has been seen as a way of replacing, rather than complementing, the traditional skills of the teacher. Television has not, therefore, been properly integrated into the teaching process, where television might be supported by the use of film, tapes, preparatory materials, programmed learning, computer assisted instruction, locally produced closed circuit television, and so on.

School television has been the focus of innovations in educational aids in Jordan. No doubt this is partly because it is a medium which lends itself to the centrally controlled system of administration of the Ministry. It is also probably the case that it has attracted attention because television is the most modern, and hence most prestigious, of educational aids. In this context it is worth remembering what Holmes said in this connection:

> "It should not, of course, be assumed that the latest equipment necessarily ensures the most effective teaching. When funds are scarce, the purchase of less advanced equipment, more easily operated by non-technical teachers, might be sound policy. In addition, there is also the question of providing facilities which will make it possible for teachers to be selective in their use of visual material. It is now possible to maintain in libraries collections of film, film strip, tapes,..".[15]

While not exactly audio-visual aids in the normally accepted sense of the term, some mention must be made here of the provision of school laboratories, which are central to the teaching of the sciences by any method which does not rely completely upon learning by heart.

School laboratories in Jordan should employ modern instruments in teaching sciences, which are principally and methodologically based on experiments in research. This is to develop the scientific mental abilities of students to solve problems in accordance with scientific method. This would help them to adopt the scientific attitude in thinking, precision in observing, and the capacity to analyse results and experimental facts before making decisions. Therefore, teaching sciences effectively necessitates the provision of suitable laboratories for each secondary school. But laboratories in arts academic secondary schools are extremely limited in equipment. Even scientific secondary schools have insufficient equipment and need more than is available now, in order to meet the needs of the various branches of the sciences. As for compulsory cycle schools, the laboratories are very poorly equiped, or in some cases not available at all.[16]

This lack of laboratory services leads to weaknesses in the development of science education, which is not only important in its own right, in the preparation of scientists and technologists who are necessary for the development of the Jordanian economy, but also more generally for promoting attitudes of self motivated study and critical thinking which study of the sciences are idealy suited to promoting. These attitudes of private study also require more general aids to be available in the schools, among the most important of which are libraries.

Library services are under the supervision and management of the library section in the Ministry, and also the sections of devoted to libraries in governorates and districts. There are mobile libraries in each Directorate of Education in the governorates, which the Mimistry provides with books. Every year the number of books in school libraries increases, but the students derive little benefit from them because their teachers, on the whole, do not encourage them to study and research in the books available in libraries. The use of libraries cannot flourish without suitable adjustments in the curriculum, which the Ministry should encourage.

While libraries are available in most schools, they are not well enough furnished for adequate use to be made of them. These libraries do not maintain collections of films, film strips, tapes and so on, which would make it possible for the teacher himself to select and use visual and sound recordings as a generally available resource in teaching. In dealing with educational aids, it is not only a matter of providing the necessary equipment, but also a question of making adjustments in the curriculum and in teaching practices so that teachers and students to use them effectively. Otherwise, the equipment will just stand unused on shelves. Educational aids do not simply have to be provided, but must be integrated into a more far reaching reform of education.

3 Text Books

In spite of the impact of new twentieth century inventions on the

functions and activities of the school, the text book, that is an ancient learning machine, remains the chief tool used by classroom teachers, with the possible exception of the blackboard. Its influence in determining what is taught as well as shaping methods of teaching remains prodigious. It is as strong now as it was a hundred or more years ago. Of course, the current text books are different in presentation from those common a few generations ago. The whole presentation is more lively and attractive, but this does not necessarily mean that the new text books are more effective teaching tools.[17]

State production of text books does not automatically guarantee good technical quality or even full use of the present day printing techmqiues. Holmes affirms that,

"Careful examinstion of the content and presentation of material in Soviet books confirms this impression; the material itself is good and modern, but judged by pedagogical standards, the order of presentation as well as pedagogical outlook is extrsmely old fashioned. Thus, the style of teaching is poorly didactic, formal, passive and teacher cxentred".[18]

Nevertheless, there is a fairly widespread and continuing belief that official production of texts for schools might be wise, and that it could help some of the newly independent countries which are endeavouring rapidly to establish mass systems of education.

"The first argument used by those who favour nationalised production and prescriptions of textbooks, is an economic one. They argue that a monopoly vested in the State would save the tax payers money".[19]

But it may be argued that production of school text books by independent publishers yields books which tend to be more up to

date, more attractive in appearance, and probably less expensive than books published by government agencies. The most powerful arguments against government production of school text bokk are those which have to do with diversity and with freedom of teachers and freedom of expression.

From another point of view, only those who are entrusted with the teaching of young citizens are capable of choosing the books to be used in that process. So, the wider the choice of text books from which they can choose, the more likely they are to find one which exactly suits them.[20]

But certain exceptions should be noted. In some under-developed countries it may well be that because teachers are not well trained, some form of prescription is necessary and even some form of officiel production. But state text book production should not be a prescription of one book for each subject, in order to avoid bribery or corruption. Holmes points out thtt,

> "Yet, even then, there should not be a prescription of only one book per subject. Such restriction paves the way to bribery or corruption. In addition, it discourages teachers from thinking for themselves. The list of prescribed books 'in other words', should always offer as many alternatives as possible. A policy of this kind would, in any case, be a wise one in every low income country".[21]

Holmes set up a number of criteria on which government production of textbooks might be justified.[22] Government production of text books would be justifiable in countries with a liberal tradition and a free economy only if it could be shown that it ensured: a) economy of production and distribution; b) better and modern

books; c) a wide choice of books so that experimentation in school would be encouraged; and d) rapid changes in books, so as to keep constantly up to date. It may be that, in theory, all these criteria might be met, if only government officials were always very wise, very bold, very generous and far sighted.

But despite these criteria, Holmes describes the government production of text books as follows:

> "In fact, however government production is likely to turn out hackneyed, old fashioned, formal, badly printed books. Exceptions to this are rare. In communist countries, naturally enough, all textbooks are and will be produced under the sponsorship of the state authorities and prescribed for use in school. Given the forms of ownership, production and distribution, this is unavoidable"[23]

But the success of Soviet education comes from the tremendous hard work of the pupils and the excellent quality and devotion of the teaching staff: it is a success earned in spite of, and not because of, the kind of text book used.[24]

The Text Books in Jordanian Schools

The Ministry of Education established a curricula and text books section in 1964, according to the 1964 Education Act, Article 35. This section was developed into "The Committee of Curricula and Textbooks", to supervise, and to cooperate with the Directorate of Curricula and Textbooks of the Ministry in all matters concerning curricula and text books. Sub-committees assist this committee in designing curricula for various subjects and institutions, composed of experts from various sectors. A specialist in education and psychology advises on the control and arrangement, orgsnisation and distribution of subject matter in

acccrdance with students' maturation, needs and interests.[25]

Text books are chosen by free competiton. The Ministry of Education advertises to the public concerning their need for specific text books according to certain conditions. From texts received in answer to these advertisements, it chooses the most suiteble one through its specialist subcommittees on text books. The Ministry pays the author whose book is prescribed a sum of money and the book then becomes the Ministry's property.[26] The Ministry prints these text books and distributes them to students in schools. The text books of compulsory cycle schools are given free to the students of public schools, while all the students of secondery cycle, whether they are students of public, private or UNRWA schools, pay the cost price for their text books.[27]

No educational institution is permitted to use any book for teaching which has not been sanctioned by the Ministry.

This concentration of attention on a narrow range of books encourages the cramming, and the belief that one book holds the answer to all the students' problems, which run directly counter to the child and society centred aims of education. This would be true whatever the quality of the text books themselves.

However, the quality of the text books in Jordan is relatively poor. The text is over-theoretical, and tends to stress details to be learnt for the examinations rather than broad principles. And the quality of production is often dated, which reinforces the

view that education is in some way isolated from real life. Thus the actual text books used actually support the traditional aspects of teaching which are inhibiting the achievement of the new aims.

Furthermore, the monolithic organisation of text books makes the system cumbersome and relatively unresponsive to change. A large investment has been made in specific texts, which cannot easily be altered. In order to promote rather than stifle change, it might be sensible for the Ministry to look at other forms of production. P.Coombs suggests a series of pamphlets rather than a single book, on the grounds that parts of such a text might be more readily updated.

> "The traditional text book, Mr.Coombs thought, might evolve into a series of monographs to be altered at will, thus providing greater flexibility of course content".[28]

In conclusion, a review of educational aids and text books in Jordan, reveals that insufficient attention has been paid to integrating provision in these areas into reforms which were at least preseaged by the introduction of new aims in the 1964 Education Act. Rather than supporting such a reform, the way in which educational aids have been provided has actually helped to prevent any far reaching changes taking place in teaching methods.

4 Evaluation of the Curriculum

From what has been said so far, it is clear that evaluation processes are prominent in the Jordanian educational system, from

examinations for students to assessment of teachers. However, since curriculum aims and objectives are not clear, the purposes to which evaluation is put is not very clear either. Through the study of the functions of evaluation in general, and the practice of evaluation in Jordan, it should be clear how the system of examinations could be reformed to help in the achievement of the more general aims of education.

Evaluation is the process of determining changes in the behaviour of students. These changes in behaviour should be those which are specified in the objectives of education, enabling appraisal of the changes against the values represented in objectives. In this way, it can be established how far the objectives of education are being achieved.[29] Therefore, without evaluation it is impossible to tell whether behaviour, knowledge, skills, values, and attitudes have been instilled, inhibited or altered. Behaviour is more difficult to measure than knowledge, but changes in behaviour are among the important expected outcomes of education. Evaluation is a central element in the whole process of curriculum development. The nature and the extent of the behavioural changes must be measured for each pupil and some evaluation of the change or lack of change must be made. Wheeler expresses the purposes of evaluation as follows:

> "In addition to assessing behavioural changes in individuals or groups, it is necessary to make judgements about the objectives of the school and the suitability of the learning experiences, the content, organisation, and teaching methods used to attain them. This means that it is necessary to consider at least the following: assessment of relevant student behaviour and of the background factors liable to affect this behaviour, the effect of the evaluation programme on student motivation and learning and the evaluation of all phases of the curriculum process.

Obviously, the first three points will bear directly on the fourth".[30]

Evaluation enables us to compare the actual outcomes with the expected ones. It is sometimes assumed that evaluation serves only a single purpose: to help teachers make grading decisions. But evaluation has at least eight identifiable functions.[31] The first is inform learners of their achievement: knowledge of results is one of the corner stones of learning theory.

The second function of evaluation is to diagnose areas of strength and weakness. It is not enough for evaluation merly to indicate that the student has "passed" or "failed". If remediation is to be effective in bringing the student up to the required standard, both the instructor and the student must know the area of student weakness. If remediation is to be efficiently directed, they must also know the areas in which the student is competent.

Arising out of this second function is the third, of providing guidance about the student's future. Adequate academic and career guidance must be based at least in part on sound data about the learner's aptitudes, interests and attainments. Decisions sometimes will be made to include some aspirants and exclude others, for certain courses, programmes, institutions and careers. Whether such decisions are made by educators, by students or by others, if they are not based on valid assessment they will be open to question. So assessments of the highest technical quality are essential to eliminate charges of real or

apparent discrimination.

A similar, but distinct funtion of evaluation is to provide information for interested agencies of the student's compentence, for selection for a job or admission to a university or institution. Parents have a right, indeed a responsibility, to discover what their children have learnt. Employers need to know what capabilities potential employees have acguired. Universities, in order to design appropriate programmes, need to know what attainments incoming students possess.

At a more general level, evaluation provides feedback into the instructional system. An instructional system can achieve its potential only if the results of instruction are monitored and corrective action taken when necessary. Professional educators do not blame the students or themselves if objectives are not achieved; they first remedy the learning deficiency, and revise the instruction. Their professional life is a repetitious cycle of develop - try out - evaluate - revise.[32]

A sixth function of evaluation is to provide an operational target for the learner. Ideally, students should be motivated most strongly by wanting to learn something that they believe worthwhile. Thus a group of students may be motivated by the objective, for example, of learning to swim. But in practice, they will often tend to concentrate on the measure of assessment, which might be specified as swimming for ten minutes. This tendency to focus on the test is quickly learned by students and reinforced in most schools. While not in itself harmful, care

should be taken when this tendency comes to dominate the instruction process; teachers should remember that the function of instruction is to enable the learner to develop a capability, not to pass a test. They should avoid using examinations as a system of rewards and punishments.

Evaluation is also used to license candidates for a profession or an occupation. The public expects that the competence of those who work in areas related to public health or safety will be formally assessed before being let loose on the community. Barbers, physicians and airline pilots must normally pass examinations of minimal competence prior to certification. Many professions are extending their requirement for initial assessment and for periodic re-examination to maintain professional standards. [33]

The eighth and final function of evaluation is to assist in ensuring a minimal degree of educational equality. Differences in the quality of education will always persist, between different regions, different schools, different classrooms. In the absence of achievement data, the nature and extent of such differences will be obscured. Under-achievement resulting not from student deficiency but from inadequate services may be unrecognised: neither the public nor the administrators will have the information required to make appropriate decisions. Objective data on the present level of achievement is, therefore, an imporant foundation for securing equality of educational opportunity.

There is, however, no guarantee that any one examination can perform all these functions effectively. On the contrary, it seems likely that different types of examination or test are needed for different functions, particularly under modern socio-economic conditions.

Evaluation should therefore be closely linked to a specific purpose, or evaluation objective. It must also be linked to the curriculum objective which relates to the performance to be evaluated. Taking into account these two sets of objectives which form the framwork within which evaluation is conducted, it is possible to specify a number of criteria which good evaluation procedures must meet. Most of these criteria are comprehended by the single term "validity".[34] Validity has a number of aspects that need separate discussion. But in general validity can be described as the capacity of the evaluation to assess what it was designed to assess. This is even more important in improving curricula and teaching methods than dependability and objectivity.[35] But it is impossible to construct a valid test without clear and detailed knowledge of objectives, so that to measure the nature and the extent of behavioural change, it is essential to know exactly what behaviour is to be measured. This means that curriculum objectives must be defined, preferably in behavioural terms. Difficulties with validity increase when the objectives are diffuse, vague, abstract and bear no relationship to recognisable behaviour.

Six specific criteria for measures of achievement will be

described here; congruence, completeness, objectivity, directness, reliability and efficiency.[36] All but efficiency represent aspects of validity.

Congruence

The first criterion that a test must meet is that it actually measures the attainment of intended outcomes. A history teacher may claim to be aiming at development of good citisenship, but design tests measuring recall of specific bits of historical information. By doing this, he does not realise the intended outcome, and at the same time violates this criterion.

Completeness

A good performance criterion should assess all the important aspects of the capability being evaluated in sufficient detail so that sound generalisations can be made regarding the competence of the learner. It also could be said that the performance criterion must assess a sample of behaviour large enough to allow a judgement regarding total performance. How large the sample should be is a matter of judgement that depends on the importance of the objective and the consequent level of reliebility required.

Objectivity

Research suggests that assessment of student performance is affected by how closely the student's attitudes approximate those of the evalustor. So, subjectivity colours many of the judgements teachers regard as objective. Complete objectivity is in many

evaluative situations unattainable or impractical. Carefully designed performance criteria can, however, keep subjectivity within narrow limits. Two principles are of particular importance: to make the criteria of judgement explicit and to quantify the criteria whenever possible.

Discreteness

A performance criterion should measure only the quality which it is intended to measure. If a test is to determine whether a learner has mastered objective 'x', this evaluation should ideally be unaffected by factors, 'y' and 'z'. In practice, this is difficult to achieve. To succeed in any written test, the student must be able to read, whether or not reading is the skill being evaluated. But essay tests give an advantage to the students who have the gift of fluent self-expression under artificial conditions, and of rapid and legible handwriting. If these are the qualities being assessed validity is unaffected.

Reliability

Reliability refers to the stability or consistency of the results produced by a test. In a typical classroom test we may find two students whose ability is in fact equal although they may receive different grades. The same student may perform differently on equivalent tests given on different occasions even though he has learned and forgotten nothing in the interim. Two teachers may give different scores to a student's paper. The severity or liberality of a single teacher may vary substantially in the course of marking a large number of students' papers. In all of these cases we would say that the test was unreliable. Its

inconsistency would also force us to conclude that it was less than completely valid.

There is a substantial interplay between objectivity and reliability. A test that lacks objectivity will allow scope for bias to affect the judgement. This will result in inconsistent, or unreliable judgments, to the degree that the biases or different judges are different in type or intensity. Therefore, three strategies may be mentioned to improve reliability:

a) Allow the student an adeguate number of trials. We would not test a student's spelling with a one word test. So unreliability due to chance is reduced as the number of trials is incressed.

b) Test different abilities separateiy. One test designed to measure several distinct qualities is likely to be unreliable, and attempts to give it more internal reliability will be counter-productive.

c) Where evaluation is subjective, provide more than one judge and average the results. This strategy will reduce the unreliability due to individual subjective judgement.

Efficiency

The five previous criteria relate to the validity of the test in a way that efficiency does not. Efficiency is a prudential criterion, which, though of secondary importance, should also be taken into accownt. Choosing efficient tests is particularly important when the curriculum calls for evaluation of learner achievement of every objective, rather than for the conventional once only test at the end of the course or semester.

The familiar assertion that every test should be a learning experience, may be a threat to efficiency as well as to some of the other criteria. A test may well be a learning experience, and if so, so much the better. But the purpose of testing is evaluation, not instruction. To attempt to make a test serve two purposes may simply result in an inefficient test that is neither a good measuring instrument nor good instruction.

Having discussed the various criteria which evaluation must meet, attention must now be paid to the range of evaluation techniques which are available. The most important of these can be grouped together under the general heading of examinations.[37] Examinations, whether written, oral or practical, are used to judge the student's achievements and the efficiency of the curriculum process as a whole. Essay tests, or written examinationss, are still perhaps the most widely used, and they are also subjected to the most criticism. On difficulty in assessing the effectiveness of essay type tests, is that there is often no consensus of opinion as to what they should do or evaluate. Those concerned frequently think of them as performing functions very different from the officially stated intentions of the examiner. Parents, employers and teachers have many different opinions about what examinations and tests ought to do. Psychometrists have paid great attention to the validity and reliability of psychological tests.

Essay Type Examinations

The essay is most widely applicable as a form of evaluation at

secondary and tertiary levels, not only for assessing native langauge, but in many subjects which do not call for calculation, practical or other operations. In theory it offers more scope for the display of higher educational qualities such as reasoning, organisation and originality, though in practice, the assessment of these is considerably more subjective than that of straight factual knowledge. The main weakness of the essay tyupe of examination is that it is used too haphazardly by educationists who rely on the infallibility of their own judgements and standards.

The common plan of allowing candidates a wide choice of questions is almost certainly mistaken, since it allows them to concentrate on a few aspects of the work, which frequently turn up, and neglect the rest. this violates the criterion of completeness for evaluation. Naturally the candidates themselves prefer this, but the only justification one can suggest is that it provides some insurance against several questions being badly set.

The reliability of marks in this type of examination can be much improved, if the judgements of several examiners are combined, since their various biases in assessments tend to cancel each other out. Second and even third markers should mark independently wherever possible, and their judgements averaged or discussed.

Short Answer Papers

In most subjects other than English or Arabic composition and

philosophy it is possible to cover most objectives by setting twenty or so rather specific questions each of which can be answered in a sentence or two or a short paragraph. No choice of question is allowed. These can be marked much more objectively than three to six full length essay questions and will spread out the candidate's marks more widely. Thus the short answer paper possesses several of the advantages of the objective test, but does require candidates to formulate their answers in their own words. While obviously most appropriate to the sampling of factual knowledge, arithmetical skills and the like, it can certainly bring in organisation and application of knowledge and, less easily, original independent thought.

Objective Tests

The opposition between these and conventionel exams has been overstressed. Both have their subjective components. Both also are liable to distortions and inadequate sampling of competences. On the whole, therefore, essay examinations are likely to continue to be the predominant instrument for advanced secondary and university examinations. Obviously there is no reason why both types of test should not be employed to test rather different aspects of achievement. In combination they are likely to provide distinctly better sampling. Objective examinations provide no incentive to students to write well, and it has been found that they tend to read text books with an eye to likely questions. However, the answer to this objection this is not an appropriate objective for such test to be used for, and that students should be forced to learn to write English by setting essays during ordinary school or homework periods. Almost all

objectives tests at present rely on multiple choice questions, with four or five alternatives, though sometimes an extended form of multiple choice known as matching items is useful.

Continuous Assessment and School Records

These have the great merit of reflecting work done under normal conditions over a considerable period. This can provide a good estimate of educational capacity over the student's years of study. The students would be awarded marks during the year, by each teacher, for each course, on the strength of essays written, tests answered, demonstration lessons given, contributions made to discussion and so on. Without a once for all final comprehensive examination, a grade would be awarded.

There are a number of arguments used against this system of evaluation, particularly by those who are unfamiliar with its operation.[38] In the first place, and this is a fundamental objection, it alters radically the relationship between teacher and student. The student is continuously on trial, constantly being examined. The teacher is always evaluating and weighing, which is a task which is difficult to reconcile with helping and guiding. Too much power is placed in the teacher's hands.

Moreover, teachers being kind and generous are rather easily pressed, often without knowing it, into awarding better marks than they should to weak students who have tried hard. Also, the anonymous examination may well provide a defence for gifted students who lack social grace and who antagonise their teachers

with their manners and personalities. Teachers may tend to overrate students whom they like personally and underrate the less well behaved student.

The introduction of continuous assessment also raises the difficulty that it is almost impossible to equate continuous assessment grades awarded in one institution with those of another; each is bound to have its own internal currency and there is no agreed rate of exchange. Finally, no exams fulfill the certification and information purposes unless some candidates fail, and it is precisely failure that some reformers have objected to, and which continuos assessment has been introduced to avoid.

The method of continuous assessment offers some advantages in assessing some objectives, especially for internal purposes: the teacher and student can obtain immediate feedback as to how the instruction process is advancing. A number of conditions particularly favour the use of continous assessment. These are where the percentage of failures is exceedingly small, the skills to be evaluated are largely practical, and the grades awarded are not important for the selection process. But of course, a combination of marks awarded by continuous assessment and marks awarded by the traditional method may well prove to be the most acceptable way of awarding final grades, at least at the present time.

Oral Examinations[39]

This type of examination is apt to be unreliable. Many skills

involved in foreign language usage can be tested objectively, by tape or recorder. The tape recorder is proving of value not only in presentation of tasks, but also for recording responses which can be marked carefully afterwards.

Practical Examinations[40]

In the conventional examination in the natural sciences, very few practical problems can be tackled within a reasonable time. A better examination can be devised along the lines of the short answer paper. Numerous short practical tests are chosen to sample important skills. And a large number of candidates can be examined simultaneously, moving round from one test to another. Also, somewhat greater reliability and objectivity, can be achieved if the examiners check a standard list of rather specific behaviours.

This consideration of the different types of assessment raises a number of issues about the role of assessment in the learning process.[41] Measurement and other kinds of assessment can play an important part in the motivation of learning, and in learning itself. The energising function of examinations is exemplified by the amount of cramming that goes on in schools. The directive function of assessment also seems clear. Students tend to attech importance to the things on which they know they will be examined, while teachers tend to stress the objectives that they know will be tested by others, or that they themselves can most easily test. Where schools, teachers and pupils are related to some extent by the test results, the nature of the tests largely

determines the quality of the schooling process. In addition, the type of examination strongly influences the type of study procedure used by students preparing for it. The danger here is the type of assessment procedure used may influence other phases of the curriculum process.

Adequate assessment is possible only if specific objectives are detailed with reference to all the categories of the particular subject. Unless the teacher and the examiner have both made a similar analysis, it is likely that the examiner will be attempting to assess with respect to objectives which the teacher has not considered, or at a level and to a degree of precision different from those which seem satisfactory to the teacher. It may even happen that the examiner does not attempt to assess the attainment of objectives on which the teacher has spent a great deal of time. Most disputes between teachers and examiners about subject examinations can be attributed to a lack of agreement, or even lack of explicitness, over objectives. If the teacher and students say that an examination is difficult, it often means that there is disagreement about the level and degree of precision of knowledge (for instance) that is being assessed.

The dangers indicated are not inherent in tests and examinations, but arise from the use to which they are put. Because some of the most important objectives of education are extremely difficult to measure on a quantitative scale, the simple objectives which can easily be measured may be accepted as substitutes for objectives more difficult to assess. This process is aided by the pseudo-precision of the percentage mark.

Consideration of examinations raises the question of standards, a term which is used in different senses. Examiners standards are usually their estimates of what candidates should do, and maintenance of standards usually means making the examination difficult, or not letting too many candidates pass. Unless objectives are very clearly defined, and examinations test all these objectives, in a valid and reliable way, there is room for divergence of opinion about these standards. The extensive experimental evidence shows clearly that different expert examiners in the same examinatinn do not agree about the standards of individual papers, and that, in addition, the same examiner will give different marks to the same paper at different times. Standards are desirable levels of achievement which should be expressed operationally as instructional outcomes. They are, therefore, goal objectives. Evaluation is concerned with actual outcomes and not intended outcomes.

Conventional practice calls for academic credit to be given if the student achieves an arbitrary mark, often fifty percent. Regardless of what a mark of fifty percent is intended to represent, the inference drawn by many students is likely to be that success will follow the learning of half of the knowledge or skills assigned. If this were so, half of the content or objectives would be unnecessary. In fact, students could be forgiven for reasoning that as they are normally permitted to learn any half, then none of what is to be learned is essential, and hence to ask why they are required to learn the subject in

the first place.

It is likely that convention has established a passing grade of fifty percent not through a belief in half learning, but beceuse it is considered that a higher standard would inevitably result in unacceptable numbers of failures. This belief is related, in turn, to the conviction that only a small minority of students can achieve high levels of excellence. The assumption is that a normal curve, with a mean of sixty five to seventy percent, and very few students scoring over ninety percent or under fifty percent, properly represents the range of achievement to be expected from a typical group of learners. This conviction often persuades a teacher to adjust grades downwards if a class appears to have produced too many high grades.

The school of thought called "mastery learning" maintains that curricula should be designed to produce a high level of success in almost all learners (in principle, all but the five percent or so with special learning difficulties).[42] It is important to note that the most compelling reason for designing programmes to produce consistent excellence of student performance is thet academic failure tends to be cumulative. If a student does not learn something that is a prerequisite for later learning, subsequent failure is assured. Equally significant is the eftect of failure on the student's self-concept, particularly regarding ability, which is a strong predictor of school achievement. Consistent failure through the years of elementary schooling is associated with a progressive decline in the student's self concepts of ability. The cost of this process must be counted in

pain as well as underachievement.

So the cumulative evidence points decisively to the feasibility of the principles of mastery learning. Mastery learning was also associated with more positive attitudes toward the subject and instruction and a higher academic self-concept.

The interpretation of evaluation data involves judgement in the light of philosophical and psychological principles and the principles of social value. Taba points out that,

> "...evaluation data have little meaning until one applies the psychological principles of learning and growth".[43]

Interpretation also needs to be analytical enough to suggest a hypothesis regarding the causes of strength and weakness in individuals and groups. This implies the need for an examination of the patterns of beheviour shown in data. An interesting problem in connection with this task is caused by the fact that evaluation is both an analytic and synthetic process. But interpretation must chiefly serve the synthesising function.

The students success or failure in his academic work should be seen in the light of his attitudes, work habits, interests and social adjustment. So, as Taba remarks,

> "A special weakness of current evaluation programmes is the fact that data about the progress of students towards educational objectives are evaluated or interpreted without sufficient knowledge of the nature of students as learners and of the nature of the instructional program".[44]

One important task in interpreting evaluation data is to search

for critical imbalance in the profile of attainment, either individual or group. To locate the causes for strengths and weaknesses it is important not only to develop profiles of performance from all available evidence, it is also necessary to see the current state of students in the light of their history and their development up to this point.

Interpretation should also suggest possible hypotheses regarding remedial action. This needs thought and action. One needs to consider the objectives of the schools in relation to each other in order to determine which weaknesses most need to be remedied. So, it is necessary to perform a careful analysis of the curricula, and the methods of teaching in the light of the psychological learning principles to determine what might be the best way of remedying any given weakness. The usual automatic answer to most weaknesses is to give more stress to the performance in which weakness is shown, although the cause of difficulty may be elsewhere. Taba writes,

> "Therfore, the cause of difficulty must be clear in order to decide what particular remedial action is likely to be effective".[45]

It is important to remember that evaluating data themselves does not solve the problems of what to do in teaching or in guidance. Evaluation only calls attention to the problems to be solved, it does not provide the solution.

Interpretation of evaluation data should also provide the basis for examining the hypotheses that underlie the school programme.

Changes in curricula are often introduced in the hope of improving student performance. There are two methods of interpreting such data.[46] It can be interpreted for individuals; the first task is to understand thoroughly the meaning of all individual data, by reference to the pattern of the group or another available norm. Then each specific score or judgement is related to the total pattern of the individual. Data can also be interpreted for groups; it is necessary to determine whether a class or school is attaining the major objectives. Attention in this case must be focused on averages, distributions of scores and frequencies. Progress needs to be examined also by comparing the performance of several grade levels with each other.

It can be concluded that despite the criticisms and attacks which are levelled at examinations, they should not be abolished. Examinations play an important part in evaluation, but this must not be used for purposes to which they are not suited, nor be thought to give information which they do not give. They are instruments of assessment like any others. If they are properly used and if their limitations are recognised, they supply useful information to the school. But they are not the only instruments of assessment, and, above all, they must not provide educational objectives.[47]

Again, in spite of all the criticisms and attacks, the importance of success in examinations, particularly those set up by external authorities, grows continually. Two chief reasons for this can be readily identified. Firstly, success is often rewarded by the granting of certificates or diplomas, which are labels which are

easily recognised by employers and indeed the public. Secondly, for the are extensively used in the selection processes for higher cycles of education.

It therefore seems that the progress of a democracy involves the strengthening of the power and influence of examinations at least at all points where selection is essential. It is certainly not beyond the wit of man to devise procedures of assessment and examinations, which while respecting social and democratic ideals will also serve to reinforce sound educational practices, which will do justice both to individuals and society, and which will be accepted as both just and wise. As technical and professional competence become ever more important, and as the range of professional activities grows, the need for tests of them become more urgent.

Examinations in Jordanian Schools

Examinations in Jordan, which are mostly of the essay type, can be subdivided into two groups; School examinations or inoternal examinations, and General examinations or external examinations.

School examinations are set by the teacher at the end of each study semester, in order to evaluate the work of the student by assessing his results. In the first three forms of the primary cycle examination results are combined with continuous observations of the activity of the child. In the rest of the forms of both cycles (i.e. compulsory and secondary cycles) the

marks of study of each semester are obtained by adding the marks of the first half semester (30 percent), a final examination (40 percent) and marks from daily activities assessed by the teacher (30 percent).[48]

The marks are entered as symbols on the student's annul school certificate. Each letter indicates a percentage mark and a verbal assessment as follows:

Symbol	Marks	Assessment
A	90 to 100	Excellent
B	80 to 89	Very Good
C	70 to 79	Good
D	50 to 69	Fair
E	Less than 49	Fail

Source: Ministry of Education (Jordan), Regulations of Promotion, Re-sit and Retention, 1980, No.14, p.3.

These marks are recorded on sheets, and marks for the two semesters of the school year are obtained by averaging the two marks. The pass mark used to decide promotion in all grades where promotion depends on examinations is fifty percent. This a system of marks is applied to general education as well as to vocational education.

The Ministry of Education is responsible for holding general examinations at the end of the secondary cycle according to the 1964 Education Act, Article 56, and students who pass should be awarded a certificate named the General Secondary Education Certificate (G.S.E.C.). To perform and to supervise such a task,

the Ministry established The General Examinations Board, and a Directorate performs its tasks in cooperation and coordination with the Directorates of Education in governorates and districts by appointing examiners, preparing places for examined students, and publishing the results to students and their general announcement. That the extent of this work is very considerable can be seen from the number of participants in the General Secondary Education Certificate Examinations. In the 1981/82 school year these amounted to 53,145. In that year, about 62.8 percent of the participants passed. This examination is held twice a year, at the end of each semester. Formerly, this examination was held once a year, with all subjects being taken at the same time. It is now necessary to take the examination in two sittings. This means that examinations now have an even bigger impact upon the academic work of the school than they did before.

The overall conclusion which has to be drawn about examinations in Jordan is that they have actively obstructed any sort of reform in the schools. In the first place, the examination system examines only the narrowest range of attainment, using only essay type examinations which depend very largely on recall.

But to understand fully the effect of the rigid examination system in schools, one has to take the examination system in conjunction with the absence of well defined curriculum aims. This means that examinations primarily serve the function of providing teaching objectives. Rather than designing the evaluation programme to meet the objectives of the teaching

programme, the Jordanian educational system has functioned completely in reverse. The examinations provide the objectives which dominate the programme of instruction. In itself, this is not necessarily bad, but excessive emphasis on this single function of examinations inhibits reform, and particularly reform which moves away from knowledge centred aims towards child and society centred aims.

Thus a narrow range of types of assessment are used to perform all the functions of evaluation which have been discussed in this chapter. Examinations which are primarily designed for the purpose of assessing attainment for selection to higher cycles of education, have come to be used for all the evaluation functions in the schools, including, indirectly, the performance of teachers.

The examination system has recently been reformed, to make the G.S.E.C. into two examinations instead of one. This was a clumsy and ill thought out attempt to meet some of the criticisms of a single, once and for all examination. However, the effects have been the exact opposite of those intended, making the influence of the examination on the schools even stronger.

In the light of these remarks, a number of recommendations can be made. The first, and most far reaching, is that curriculum objectives need to be set so that the functioning of the evaluation programme can be viewed in the right perspective. All the other reforms are intended to move the emphasis in evaluation

away from simple judgements of pass or fail, and to make it more responsive to the needs of teachers and students.

Some elements of continuous assessment should be introduced, so that examinations should not occur only at the end of a term or school year. Evaluation should be an integral part of the of the total teaching and learning process. Such assessments would help the pupils to know their strengths and weaknesses and to see measurable progress as a reward for their efforts. Continuous assessment would also help the teacher to do some intensive self-evaluation as regards their teaching methods and approaches. Since most of the evaluative techniques are plagued by limitations, teachers should employ multiple measures in their assessments. Observation of pupils, and involvement in learning activities, in spite of their subjective nature, are regarded as important ways of generating feedback, as well as being popular with teachers and students as part of a programme of continuous assessment. Other techniques, including oral, practical and non-standardised and standardised tests should be used in such a process.

Objective tests should also be more widely used. There are some dangers in this, as objective tests, like the present examination system, focus on recall and memorisation of facts. However, objective tests could cover these aspects more efficiently, and could also add to the completeness of cover of the examinations. Objective examinations should include such forms as multiple choice, true/false, sentence completion, matching and so on. Such examinations could include both teacher made tests and

standardised achievement tests. Since the majority of teachers in Jordan, particularly at the primary level, lack the ability and experience of designing objective examinations, it will be necessary for experts to devise standardised tests at the national and regional level, and to train teachers to use such tests. Comparative analysis shows that standardised tests are widely utilised because of their value in allowing schools or classes to compare their results with a national sample used in establishing norms for tests. Accordingly, it is suggested that objective tests be used in both internal and external examinations.

In order to reduce the influence of external or general examinations on the teaching process, the Ministry should revert to its practice of setting only one general examination, at the end of the secondary school cycle, and at the end of the school year.

References

1   Taba, H., Curriculum Development, op.cit., p.307.

2   Ibid, p.308.

3   Ibid.

4   Ibid, p.309.

5   Hooper, R., (Ed.) The Curiculum: Context, Design and Development, op.cit., p.121.

6   Taba, H., Curriculum Development, op.cit., p.211.

7   Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) Communication Media and the School, The World Year Book of Education, London: Evans Brothers, 1960, p.33-35.

8   Ibid, p.70.

9   Hooper, R., (Ed.) The Curiculum: Context, Design and Development, op.cit., p.317.

10 Ibid, p.411.

11 Ibid, p.412.

12 Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) Communication Media and the School, op.cit., p.106.

13 Ministry of Education (Jordan), History of Education in Jordan 1921-1970, (Arabic Text), Amman: 1980, p.230.

14 Tell, A.Y., Education in Jordan, op.cit., p.228.

15 Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) Communication Media and the School, op.cit., p.20.

16 Ministry of Education (Jordan), Educational Process Conference, op.cit., p.20.

17 Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) Communication Media and the School, op.cit., p.21.

18 Ibid, pp.24-25

19 Ibid, p.25.

20 Ibid, pp.25-26.

21 Ibid, p.27.

22 Ibid.

23 Ibid.

24 Ibid.

25 Shami, M.M., and Fauda, H.M., Educational Innovations in Jordan 1976-1979, Amman: 1979, p.34.

26 Ministry of Education (Jordan), Collection of Laws and Bye-Laws, op.cit., p.60.

27 Ministry of Education (Jordan), Development of Education in Jordan, op.cit., p.281.

28 Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) Communication Media and the School, op.cit., p.109.

29 Taba, H., Curriculum Development, op.cit., p.312.

30 Wheeler, D.K., Process of Curriculum, op.cit., p.269.

31 Pratt, D., Curriculum Design and Development, op.cit., p.196.

32 Ibid, p.197.

33 Ibid, p.198.

34 Ibid, p.202.

35 Taba, H., Curriculum Development, op.cit., p.327.

36 Pratt, D., Curriculum Design and Development, op.cit., pp.203-209.

37 Lauwerys, J.A., and Scanlon, D.G. (Eds.), Examinations: The World Year Book of Education, London: Evans Brothers, 1969, pp.47-49.

38 Ibid, pp.8-9.

39 Ibid, p.50.

40 Ibid, pp.50-51.

41 Wheeler, D.K., Process of Curriculum, op.cit., pp.280-283.

42 Pratt, D., Curriculum Design and Development, op.cit., pp.216-217.

43 Taba, H., Curriculum Development, op.cit., p.327.

44 Ibid, p.332.

45 Ibid, p.334.

46 Ibid, pp.334-6.

47 Wheeler, D.K., Process of Curriculum, op.cit., p.282.

48 Ministry of Education (Jordan), Regulations of Promotion, Re-sit, and Retention, op.cit., p.3.

CHAPTER SEVEN

Teacher Education in Jordan

Teacher education is very important in any educational system, especially where reform is introduced into the system. The teacher is the pivot on which the renewal of education hinges and consequently his training is decisive importance. The study of teacher education in Jordan will reveal how the preparation of teachers has been an obstacle to reform, as well as indicating areas in which improvements could now be made.

Despite the importance of teacher education, Jordan had no teacher training institutions in the first half of this century. R.Mathews and M Akrawi stated that,

> "No post secondary schools exist. Students were sent to study outside Transjordan... Some students have been sent to Palestine to the Arab College[**] and the Teacher Training College for Women in Jerusalem... and others were sent to the Higher Teachers' College in Baghdad".[1]

([**] A teacher training college for men in Jerusalem, Palestine, during the Britis Mandate.)

This means that there was no teacher education or any type of higher education in Jordan before 1950. Therefore, most of the elementary boys' school teachers were holders of a Matriculation certificate, without professional training. Most women teachers were not educated beyond the elementary cycle. So the chief problems with regard to teacher education were both quantitative and qualitative. Consequently, a forward looking policy was needed to prepare professional teachers in adequate numbers to

meet the demands of the public schools.

Jordanian educators, after the unification of the two Banks in 1950, saw the need to establish teacher education institutes. Thus in 1965, a class unit was opened in Al-Hussein College (a secondary school in Amman) to train teachers in a one year course of post secondary education.[2] In 1952 an institute fo teacher training was opened in Amman to train teachers for two years on courses for two years of post secondary education to teach in the primary cycle. This institute was independent and linked directly to the Ministry of Education. G.L.Harris states that,

> "Apart from financial limitations, a major impediment to expansion of the educstional 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".[3]

In order to solve the problem of the shortage of qualified professional teachers at that time, the Ministry of Education was obliged to appoint as teachers a considerable number of secondary education certificate holders and people with less than this qualification without any professional training. Therefore, in 1956/57 there were 3447 teachers from 4367 who were inadequately qualified, or about 75 percent of all teachers.[4]

The World Year Book of Education for 1963 points out that,

> "At the present time many countries which are still at an early stage in their educational development are working on the assumption that an elementary teacher ought to have at least secondary education.
>
> In some countries such as Jordan, secondary school graduates begin teaching without any professional preparstion".[5]

To meet the problem of teacher training (as a forward policy) the
Ministry of Education established, from the fifties onwards, the
following institutes of teacher training: on the West Bank, Beit
Hanneina Teacher Training Institute (Jerusalem), Rammallah
Teacher Training Institute (Rammallah City), and Al-Aroob
Institute (Al-Khalil or Hebron City); on the East Bank, Howara
Institute (Irbid City), Ajloun Institute (Ajloun Town 1964),
Amira Alia Institute (Amman 1972), Al-Salt Institute (Al-Salt
Town 1973), Irbid Institute (Irbid City 1978), Al-Shoubak
Institute (Al-Shoubak Town 1974), and Al-Karak Institute (Al-
Karak Town 1979).[6] Some of them are residential and give free
training, food, board and education. Most of them accept day
students.

In addition to that, the Ministry encouraged the participation of
the private sector in teacher training. A private training
institute was opened in Nablus City (in the West Bank in which
the writer was a part time teacher). In 1977, when Al-Najah
National University (a private university) was established in
Nablus, the teacher training institute was affiliated to it.
Private institutes for training teachers were also established on
the East Bank; Al-Ada'ab Teacher Training Institute (Amman 1975)
and Al-Kulliya, Al-Arabiya (Amman 1975).[7] The private sector in
the late seventies and early eighties proceeded to establish
institutes very rapidly, but very few of them have teacher
training programmes. All the above mentioned institutes were
called teacher training institutes until the school year 1980/81,
when the Ministry of Education developed them into community

colleges.[8]

Despite these efforts in extending teacher training, a number of inadequacies remain. Some of these stem from the failure of institutes to keep up with the increasing demand for teachers. But other failings are apparent even when the teacher training process is working as intended, and arise from the fact that the aims of teacher preparation have not been adjusted to promote the new general aims of education introduced in 1964.

Aims of Teacher Education

The 1964 Education Act, Article 20, states that the aims of teacher training institutes are:[9]

a) continuing to develop the personality of the individual in a correct way physically, mentally, socially and emotionally,

b) continuing the creation of the righteous citizen in accordance with the general aims of education,

c) providing the students with general culture and with general and specialised technical, vocational, professional and other training, which will enable them to raise the level of the fields in which they specialise, and

d) providing students with practical training, to enable them to gain direct experience and sufficient practice in the fields of specialisation.

If these aims of teacher edtcation are assessed in terms of the criteria already discussed for judging curriculum objectives, it is clear that they are not well defined and are so vague that

they cannot be used as the basis for an instruction plan. They do not define goals in terms of outcomes of learning experiences, and they are not comprehensive in covering all areas of teacher preparation. Consequently, these aims do not promote the preparation of the ideal teacher, whose thinking is rooted in the people, who takes an active share in developing society, who has a basic scientific training and works constantly to improve his knowledge and whose character is marked by an unselfish devotion to the children entrusted to him.[10]

Therefore, the following are proposed as new aims for teacher education in Jordan:[11]

a)   Student teachers should to have a high standsrd of specialised knowledge in the subjects they are to teach, and to be thoroughly conversant with educational theory (pedadogics, psychology, etc.).

b)   Student teachers should learn how to study independently, to conduct and analyse the educational process in scientific way and to contribute to improve their own knowledge after graduation.

c)   Student teachers must be in close in contact with educational practice (teaching and extra curricular work) during training, so that they can do good work as soon as they start their teaching careers and take an active part in getting new things introduced into their schools.

d)   Student teachers should have the traits of character which will enable them to continue improving their qualifications as teachers to cope with the responsibility restind upon

them for the future of the children in their care.

e)   The personality of student teachers must be developed so that they are in a position, as highly trained and cultured people, to act as models for their pupils through their entire personalities, their optimism and their sense of responsibility.

But these new aims of teacher education cannot be achieved unless they are institutionalised, and this can be realised by the following measures:[12]

a)   Teacher training institutes in Jordan should provide a more profound basic training in the social sciences and philosophy which should help students to integrate the knowledge gained in special subjects into a broader framework and to give the framework ideological content, and also to consolidate the methodological foundations for their own scientific work.

b)   Teacher treining institutes in Jordan should introduce new study programmes centred round the most up-to-date scientific knowledge and taking into account tendencies towards differentiation and integration in the development of knowledge. Differentiation means that newer disciplines should be included, particularly programmes of training in special subjects. Further, teachers should receive compulsory training only in two main subjects and one additional subsidiary subject (such as craft, physical education, music or art). Integration means that the training in the two teaching subjects and in the science of education should begin with a compulsory basic course on

which the specialised courses in the various newer disciplines are built. A compulsory course (in logic and theory of science) should be introduced for all student teachers. These courses of integration would ensure a higher level of child centration and a higher level of society centration in teacher training.

c)   Teacher training institutes should have the task of productive work. Therefore, in the process of acquiring theoretical knowledge (i.e. self-teaching) students should learn to master the methods of independent scientific work and should have an opportunity to apply their knowledge and skills in practice. The idea here is for them to help actively, under expert guidance, to apply new knowledde in practice.

Also, in working out new study programmes, the principles of linking teaching with research should receive special attention. Students should take a direct part in research projects in their special subjects and in educational sciences. All students should be drawn into research work in each department and subject (practical school work).

Quality of Teacher Education

Holmes, Bereday and Lauwerys jointly state that,

> "The strength of an educational system must largely depend upon the quality of its teachers. However, enlightened the aims, however up to date and generous the equipment, however efficient the administration, the value to children is determined by the teachers. There is therefore, no more important matter than that of securing a sufficient supply

of the right kind of people to the profession, providing them with the best possible training, and ensuring to them a status and esteem commensurate with the importance and reeponsibility of their work".[13]

It is evident from the above statement that the chief problems with regard to teacher education are quantitative and quelitative. On the qualitative side, there is need of adeguate numbers of trained teachers to meet the rising demand for teechers in compulsory and secondary education. In Jordan, supply is still far short of demand, which compels the Ministry of Education to employ considerable numbers of unqualified teachers. As for teacher education quality, there is a close linke between this and the ability of an educational system to achieve its aims.

Holmes states that,

"Three main features of teacher education may have some bearing on its quality".[14]

These features are:

1) The academic and social background of entrants to teacher education.

2) The content of courses they follow as students. That is to say the sequence of courses, modes of assessment and certification procedures.

3) The way in which teacher education is financed, administered and controlled. That is to say the institutional arrangements in terms of finance, control and administration and whether the institutions are multi-purpose, single sex or co-educational.[15]

The assumption is that if these factors are changed, the quality of teacher education will be changed, and that reforming these aspects of teacher education provides an opportunity for

improving teacher preparation in Jordan.

Background of Entrants to Teacher Education

The selection of students for teacher training institutes in Jordan rests with the authorities of each individual institute, though minimum standards are prescribed by the Ministry of Education. In brief, these are that the applicant should be in good health and have attained a satisfactory academic standard as measured by their achievement in the General Secondary Education Certificate examination. This means that the applicant should pass G.S.E.C. with an avergge of not less than sixty percent of the grand total of marks.

In fact, the institutes of education usually select the candidates who have the highest marks. Whilst considerable importance is attached to acedemic ability, little or no attention is paid to the personality of the candidate as displayed in an interview, or to the report submitted by his headmaster on his role in school life. Thus the selection process ignores important and desirable characteristics in the personality of the candidates, such as a strongly integrated personality, leadership qualities and interest.

The Ministry of Education, anxious to develop educational opportunities in remote areas, sometimes accepted candidates from such areas for training, even though they failed to satisfy the minimum requirements, because of the need for teachers in these areas.[16] However, even in these cases, not enough atention was paid to other personality traits, and the result has been

reflected in poor quality teachers being prepared for remote areas.

Therefore, it is recommended that in the selection of prospective teachers following factors should be taken into consideration:[17]

1) An intending teacher should have attained an adeguste level of education and reached a stage of intellectual growth upon which his future training may be established. The only criterion according to which that level of education and intellectual growth may be measured is the educational stage which the applicant successfully finishes prior to admission to a teacher training institute.

2) A prospective teacher should possess a strong, integrated personality and have the characteristics of an effective leader.

3) A prospective teacher should also be gifted with an innate interest in teaching.

The admission of unsuitable people to the profession is bad for the children, for the state and for the candidates themselves. This means that at the time of his application for admission to training, the candidate's mental ability and educational achievement should be appraised by reference to his prior school records, and testing as to character. Evidence of artistic and practical qualities should be sought, as well as his suitability for the teaching profession. Of equal importance are his personal, social and health standsrds. In addition to tests and reliable testimony, a personal interview or series of interviews

should be arranged before admission.

At present, school records are largely unrelimble for the purpose of selection of intending teachers, as they are not always available in adequate quantities in schools; even when or where obtainable they are not properly made because of a lack of experience and interest on the part of the staff responsible for making these records. This can lead to the selection of unsuitable candidates for teacher education, and points to the need for reforms which extend beyond the teacher training institutes themselves.

At present the only way to overcome the shortcomings of the records from the applicants' schools is by personal interview, and all teacher training institutions depend partly on personal interview for the selection of the intending teachers. But this interview is conducted by persons who are not skilled in human appraisal and who are not well acquainted with the application of the various methods of selection, because of the scarcity of properly trained personnel. As a result, the judgement of the interviewers is subjective, and the questions directed to each applicant vary in their degree of difficulty from one selection committee to another. These committees seldom take the accepted basis of personal interview into considerstion. Furthermore, personal interview often paves the way for nepotism and personal recommendation. It is recommendeds therefore, that the interviews as presently constituted should be abolished, and research carried out with the aim of revealing the best techniques for selecting teachers with the required cherecteristics.

The selection processes for intending teachers is unduly dependent on the short term supply and demand situation. When the supply exceeds the demand, more care is taken in selction, while when demand exceeds supply, new teachers are recruited who are not suitable. This rests on the assumption, during periods of teacher shortage, that any teacher is better than no teacher, but this is not necessarily true. Steps should be taken to insulate the selection process from such short term fluctuations in demand.

To tackle the problem of the selection of unsuitable students for teacher training, it is recommended that continuous efforts should be made to improve selection processes throughout the course of training. By comparing ratings made at the time of selection with records of later accomplishments, it may be possible to remove from teacher training institutions those students who are likely to proved unfit for the profession, provided that they are helped to turn towards some other profession for which they are more suited.

Concerning the problem of recruitment and selection, two main assumptions may be mentioned:

1) There are two aspects of recruitment and selection which are sometimes difficult to reconcile; one of quantity and the other of quality. Reforms in education have led to bigger enrolments in both the compulsory and secondary schools and created a general shortage of teachers. The situation is

aggravated by the growth in the school age populationas a result of a high birth rate. The problem raises the question of availability of large numbers of applicants from whom intending teachers may be selected. The problem is not only of securing the required numbers of teachers, but also of ensuring that the right kind of people are admitted to the profession.

2) The more the privileges a profession offers its members in terms of social prestige and financial rewards, the greater its attraction for practitioners.[18] While institutions providing, for example, for the education of doctors, engineers and pharmacists are in a position to select candidates of the highest academic and intellectual standards, teacher educstion institutions have not always been successful in recruiting the right number and kind of students. Presumably, the main reason that teaching, as compared with the medical and engineering professions, is not very popular is that it does not offer the same rewards.

In spite of the general lack of attractiveness of teaching as a profession, there are some aspects of teaching which make it particularly attractive to some able candidates, especially candidaes who come from under-privileged groups in society.

For example, the number of occuaptions which an educated woman can enter has been limited in Jordanian society, and since education is usually not an occupation of this type, the field of teacling has profited by this fact. (See Table No.7). In this

connection, it can be mentioned that females bring a number of desirable qualities to teaching which males do not. Many studies reveal besic differences between the two sexes, particularly those from which the teaching profession can benefit. Studies on the sex differences in career choice among students suggest that in generals men tend to be more ambitious than women. They are more eager to develop their future social status, their opportunities for promotion and take up responsibility, whereas women tend to be more attracted by work which is socially useful, which provides opportunities to meet people and especially children. They are also more likely to be interested in a career which can readily be adjusted to marriage and family requiremente. In general, teaching as a career seems to be more suited to the aspirations of women than those of men.[19] Jordan could profit from this fact and encourage more recruitment of females for training as teachers to staff the primary educaiion cycle. Table No.8 indicates that already the number of female students exceeds the number of male students in this sector. However, women do face obstacles in the teaching profession if they wish to teach in boys' schools above the primary level.

Other under-privileged groups, besides women, have used teacher training as a means of social mobility. As the educational system in Jordan is the responsibility of the state, the recruitment and training of teachers have not been left to chance. For those in Jordanian society who do not have the means to provide for the education of their children, this avenue beocmes a very desirable one. In this sense, teacher education is a socially honourable

means of acquiring a highly prized value.

Some teacher training is conducted in the faculties of education of Jordanian universities, and these faculties are faced with very similar conditions to those found in the institutes of teacher training. Students admitted to the faculties of science are the best, and the distinguished graduates of the faculties of science refrain from becoming teachers. The fact that teachers' posts in universities and other higher education institutions and industry and other government employment all offer better conditions of work, accounts for the inability of the faculty of education to attract the best graduates. The only ones who enter the faculty of education are the less talented who can find no work other than teaching. This is also the case with respect to graduates of the faculties of arts.

So, generally speaking the attempts of educational authorities to plan for recruitment will be hampered by the unattractive status of teachers. In fact, planning for the recruitment of intending teachers is not only a matter of estimating the number of teachers required for each educational cycle and the provision of facilities for their education. It is also a matter of planning for the promotion of the status of the profession, and attracting the best people to it. Therefore, to secure a somewhat steady supply of recruits for teacher training institutions the imrpovement of teachers' status is recommended. This can be accomplished by equalising them with other civil servants in salary and promotion, and the improvement of their conditions of work in terms of smaller teaching loads, less crowded classes,

facilities for accommodation in remote and rural areas, freedom to plan their work better and better relationships between them on the one hand and administrators and supervisors on the other. These measures would bring about a gradual change in attitudes towards the teaching profession, and improve the quantity and quality of recruits.

It could be expected that such changes in the professional situation and professional requirements would open a new field of recruitment and therefore a new possibility of training and that this, in turn would assist in the achievement of the aims of education.

Table No.7 Comparative Staistics of Teachers, by Sex, in the
Ministry of Education for the last Ten Years

School Year	Sex	Number of Teachers
1972/1973	Total	9,824
	Male	5,662
	Female	4,162
1973/1974	Total	11,293
	Male	6,423
	Female	4,870
1974/1975	Total	12,814
	Male	7,213
	Female	5,601
1975/1976	Total	14,191
	Male	7,806
	Female	6,385
1976/1977	Total	15,502
	Male	8,183
	Female	7,319
1977/1978	Total	17,688
	Male	9,079
	Female	8,609
1978/1979	Total	19,300
	Male	9,673
	Female	9,627
1979/1980	Total	20,635
	Male	10,176
	Female	10,459
1980/1981	Total	21,788
	Male	10,719
	Female	11,069
1981/1982	Total	22,948
	Male	10,899
	Female	12,049

Source: Ministry of Educaion (Jordan), The Statistical
Educational Year Book of 1981/1982, pp.64-65.

Table No.8 Comparative Data of Teacher Training Institute
Students and Graduates for the last Ten Years

School Year	Sex	Students	Graduates
1972/1973	Total	2,243	858
	Male	1,567	609
	Female	676	249
1973/1974	Total	2,893	1,346
	Male	1,873	917
	Female	1,020	429
1974/1975	Total	3,314	1,657
	Male	2,050	1,074
	Female	1,264	583
1975/1976	Total	5,104	1,583
	Male	3,234	910
	Female	1,870	673
1976/1977	Total	7,006	3,294
	Male	4,283	2,149
	Female	2,723	1,145
1977/1978	Total	6,542	3,326
	Male	3,522	1,843
	Female	3,020	1,483
1978/1979	Total	6,808	3,038
	Male	2,908	1,416
	Female	3,900	1,622
1979/1980	Total	8,621	3,561
	Male	2,410	1,347
	Female	6,211	2,214
1980/1981	Total	9,535	
	Male	1,831	
	Female	7,704	
1981/1982	Total	8,692	
	Male	1,593	
	Female	7,099	
1982/1983 **	Total	9,017	
	Male	1,294	
	Female	7,723	

Source: Ministry of Educaion (Jordan), The Statistical
Educational Year Book of 1981/1982, pp.64-65.

** Higher Education Council (Jordan), Comparative Data of Higher
Education Students in Jordan for Year 1982/1983,
irregular periodical, No.5, 1984, p.78 (Arabic Text).

Curricula and Content of Teacher Education

Uniform curricula are followed by all teacher training institutes, whether public or private. Their prime purpose is to prepare teachers for compulsory education cycle whether general or vocational. These currirula include required general studies, one field or subject of specialisation which the student chooses, and required courses of professional education.

General studies include general science, mathematics, Arabic language and literature, English language and literature, fine arts (manual education), Islamic Culture, physical education and Arab Homeland.

Fields of specialisation are selected from Islamic religion and social studies, Arabic language and literature, English language and literature, elementary education, physical education, domestic science, nursery and kindergarten, musical education, libraries, school laboratories technicians, vocational education and commerce.[20]

Professional studies comprise psychology, introduction to education, school administration, curricula, measurement and evlaution, and general and special methods of teaching relating to the field of specislisation. And also, all student teachers have practical teaching in schools for six weeks divided into two periods in the second year of their courses and supervised by their specialist teachers.

The study of teachers' training programmes is performed currently

in community colleges and called educational professional specialisations. This is for two years, on a semester basis and credit hours (each year consistis of two semesters) and the students must earn a minimum of 75 credit hours in order to acquire their certificate from those community colleges.[21]

As for teachers of secondary cycle, the Ministry left their training to the faculties of education in Jordanian Universities. The course provided for training in the faculty of education lasts for one academic year and is devoted entirely to professional studies, since all who embark upon it have already completed four years of intensive studies in the fields of specialisation which they intend to teach. In addition, some university graduates received their professional training in a university faculty of education in the course of their specialisation studies. To be awarded the faculty of education Diploms in Education students must successfully complete 33 credit hours according to a specified study plan.[22]

The uniform curricula are too theoretical and specialised, and do not promote initiative on the part of the students. In this way, the curricula are directly counter to the new aims of education of the 1964 Education Act. Neither do such curricula and content of teacher trainind do not help teachers in achieving the aims of education in the teachers' work in the schools. It is necessary to devise a curriculum for teacher training in Jordan to enable it to realise the stated aims of education. Thus the following are proposed as elements for teacher training curricula and

content:[23]

1) The future teacher has to have knowledge of the school in its social context. So, the teacher has to know the assumptions and conditions under which he can work and become efficient.

2) The future teacher muat acquire analytical understanding of educational knowledge and its realisation in prsctice. Therefore, his professionel studies should include pedagogicel studies such as curriculum theory, general and special didactics, theory of education, educational systems, comparative edtcation and technology of education. They should also include psychological studies such as psychology of development, of teaching and learning and social psychology and sociological studies such as sociology of education and methods of empirical research. Finally they should include practical and clinical courses, methods of observation and analysis of situations in teaching and education.

3) The future teacher should study academic subjects of his specialisation and should be trained in their methodology. The study of academic subjects demands from the teacher the capacity to follow up continually the development of sciences relevant to his teaching subjects. But training in the methodology of academic subjects is considered as training for techniques and conditions of transmissionas well as training for the selection and definition of curricula content and their underlying norms.[24]

4) Experience of transmission processes of the contents, and methods of teaching the content.[25] The teacher should

acquire a basic understanding of the socio-psychological and learning conditions of the transmission of subject contents and standards for different ages and achievement levels.

5) The process of curriculum revision; teachers should work activitely in the reform of curricula for their special subjects and should participate actively in the process of curriculum resesrch.[26] The ability for this task may be developed by the project studies. But in Jordan the teacher is only expected to implement curricula already designed by the central administration. And the system of teacher education aims at enabling future teachers to be qualified as cooperators in the process of implementing curricula. This does not help in realising the aims of education.

It can be concluded that if teacher training institutes in Jordan are to become a force for progress in school reform work towards the achievement of the stated aims of education a number of conditions must be met.[27]

Research into problems that are thrust up by the continuing work of educational reform should be pursued in close contact with teacher education itself. For this student teachers and teacher trainers should not be oriented only to the methods and results of reaearch, but they should be also actively involved in the research work. This applies in particular to the teacher trainers.

Every teacher training institution ought to be equipped with a

laboratory school for experiments and demonstrations. Such a facility should be to serve two purposes: to constitute an experimental school, where new types of teaching methods and aids are tested on a trial basis, and to give student teachers the opportunity to observe children more systematically than is possible in the normal school setting and even more important to enable students to see sophisticated work practice in concrete use.

The method teechers should be actively involved in the research and demonstration work that is carried on the laboratory school. When instructing in their subject they must be allowed to show concrete manifestations of the new methodological tools as well as to analyse their background more systematically. The method teacher also should take part in the work of developing new methods of instruction. It is worth noting that the weakness which has been attached to teacher education is attributed to the inadequete coordination of the theoretical foundations in psychology and education with methods and teachind practices.

Certification of Students of Teacher Training Institutes

The methods employed formerly in assessing students' work are determined by the teaching staff of each institute of education, and usually take the form of written examinations at the end of every semester, with assessment of competence in teaching during the second year of training. Usually external examiners participate in this assessment to ensure that the standards looked for are generally adequate and reasoneble.

It is important to note that the certificate issued to the
students at the conclusion of their courses are awarded by the
teachers' training institutes after its approval by the Ministry
of Education, and their holders are appointed in the compulsory
cycle schools. But recently, as already mentioned, the Ministry
awards diplomas of teaching (in educational professional
specialisation) only to those who psssed the comprehensive
examisation and appoints them in compulsory cycle schools. The
aim of this comprehensive examination (as stated by Said Al-Tell,
a former Minister of Education) is to raise the quality and
standard of education, and to attempt to discover the abilities,
aptitutes and potentialities of students to enable them to
proceed with their university educetion.[28]

It should be noted that recently the private sector established a
considerable number of community colleges (about 20) which
motivated the Ministry of Education to hold such a comprehensive
examinations, because these colleges, being in the private
sector, are very commercialised. This examination, which is
primarily designed as an instrument of control, does not serve
the teaching process. The teacher students pay all their
attention to cramming subject matter of text books, without
properly understanding the meaning and ideas and do not care much
for the practical application aspects of the educational process.
This means that the comprehensive examinations do not raise their
standard of professional training and consequently their
efficiency and competency in the teaching process and thus fails
to improve the quality of teacher education. Also their teachers

make great efforts to enable them to pass the comprehensive examination, without paying attention to teaching them how to think critically or to solve problems in a scientific way. So instead of training them in critical thinking, problem solving, auto-education and doing research independently, the comprehensive examination conduces to produce theoretical and inedequate educational training, due to its emphasis on the theoretical aspects and not on practical and professional ones.

In addition the examination does not promote the recruitment of talented entrants, since those who can perform well on such examinations can find more attractive courses in the universities and community colleges.

There is an element of mistrust in the setting of this examination, which constrains the community colleges to follow a conservative course in teacher education, and inhibits experiment. This also means that the responsipility is taken out of the hands of principals and teachers for awarding their studests diplomas and certificates, and this responsibility rests in the higher central authorities (i.e. the Minist$y oF Education).

It is hardly necessary to point out that teacher education standards are being maintained in many countries without the help of public or comprehensive examinations by raising the standard of educating teachers, by providing better equipped teacher institutess, by providing better libraries and laboratories and by a system of supervision which helps keep the teachers of

institutes alert and creates in them a sense of professional pride and responsibiyty by affiliating them to universities to help in exerting high academic and professionel efforts for teacher education improvements.

In conclusion, there is no urgent need for such rigid comprehensive examinations which create mistrust in all teaching bodies in community colleges, hinders experimentation, and is a constant source of neurotic worry for the teachers and trainers, besides being detrimental to the character in the incentive it gives to cheating. In short, such examinations should be removed, and replaced by methods of assessment more likely to stimulate individual effort, and eventually raise standards.

Finance, Administration and Control of Teacher Education

Teacher education in a centralised system of education is considered the responsibility of the state. The ultimate responsibility for teacher training rests with the government. The Ministry of Education prescribes regulations concerning any aspect of teacher training. It is charged with determining the requirements for teacher training and organising institutions in which such training shall be carried out. Further, the Ninistry is charged with issuing curricula, approving the issue of text books for specialised disciplines for teacher training institutions, holding comprehensive examinations for students who have concluded their course of study in their institutes, providing equipment of teaching and visual materials for teacher education institutions and covering the cost of buildings.

This policy delayed the participation of the private sector in teacher training until 1965. Recently, the Ministry permitted the private sector to establish teacher training institutes (community colleges). Private institutions of teacher training are almost entirely independent in their financial affairs. Their finance comes from the students' tuition fees. They receive no financial support from the State.

Teacher training institutes (or community colleges) can be classified in terms of their finance and administration into three groups: Public Institutes (Public Community Colleges) financed and administered directly by the Ministry of Education, Private Institutes (Private Community Colleges) financed from students' tuition fees and administered by the private sector, and UNRWA Institutes (UNRWA Community Colleges) financed and administered by the UNRWA educational authiority.

In spite of the extensive powers which the Ministry has, there has, in fact, been very little supervision of private colleges, nor has much interest been shown in what they do. The only effective control is the comprehensive examination of students, which has had largely negative effects. In general, the quality of private institutions is very poor, with poorly trained trainers performing badly in poorly equiped facilities.

It would be better to place teacher education institutes under the academic and administrative control of the Jordanian universities and associate the universities with all forms of

teacher education, in order to promote an academic atmosphere in teacher training, to forge links to higher degrees and research, and prepare teachers who are able to achieve the aims of education during their work in schools. But it is necessary to recognise that such a move might have some negative effects on the immediate supply of teachers. Holmes has indicated in the World Year Book of Education, 1963, that

> "Control of teacher training in most countries is now shared by the government and the university. In general, the former takes responsibility for the financing and administrative details and the universities are responsible for the content, methods of preparation and the conduct of the examinations".[29]

He adds that,

> "In the interests of maintaining academic standards, the universities may be unprepared to accept as many students as are needed to staff the schools".[30]

It is recommended that all teacher training institutes in Jordan should be upgraded to university status, because there is an almost universal tendency to upgrade all teacher training institutions to university status. In the most advanced country all teacher training institutes are already in the university or under the aegis of the university. This should promote the production of a good quality of qualified professional teachers with high competence for achieving the stated aims of education, as it is clear that the centralised administration of education which has had teacher education under its control has hindered this development.

In-Service Teacher Training

The teacher training institutions enjoy a strategic position in

the work of educational development, which follows from the new teachers they graduate as well as from assistisg in the further education of already practising teachers.

For in-service teacher training, the Ministry of Education established in 1964 an in-service centre in Amman Teacher Training Institute to train professionally, according to the 1964 Education Act, all the teachers who were appointed without professional training, to meet the rapid expansion of Education. In 1971 the Ministry established the Institute of Teachers' Qualification in Amman, for the same purpose, and gradually established branches in all governorates and districts of Jordan. Its programmes of training are parallel to those which are taught in pre-service training institutes in terms of training duration, credit hours and certificate. In 1974 the Ministry devolved to this Institute, powers over the qualification of hesdmasters of compulsory cycle schools in school administration.

In-service training also involves courses of further professional study for teachers who are alresdy trained, to promote the competency and efficiency of all those who are involved in the education field, whether they are teachers, headmasters or educational supervisors, by giving them opportunities for more professional training. Towards this end, the training section of the Ministry held many different refresher courses, conferences and seminars during the school year and in the summer vacation for all qualified educators.

In-service teacher training for the secondary cycle takes place in the faculties of education in universities. They offer courses leading to diplomas and masters of arts in education on the basis of part-time or full-time study. But the contact between theory and practice can be even closer in the part-time course than in the full-time course. However, the Ministry of Education should hold more and longer continuous in-service courses, and the emphasis should be on practical matters, in order to increase the efficiency of training and consequently teaching. In addition, the Ministry should cooperate with the faculties of education in the universities to provide many more opportunities for further professional studies to trein all teachers who are still without professional training in the secondary cycle. In-service training should be reorganised and operated regularly to provide teachers with up-to-date knowledge and skills, so that they can adapt themselves and their approaches to the changing needs of the pupils and society. In-service training should take place in teachers' trainimg institutes and faculties of education in Jordanain universities, because,

> "teachers need the chance to get in-service training from people not involved in assessing their performance and in institutions that are not employer-maintained. Polytechnics and universities can also provide the longer, award-bearing courses, that sometimes act as initial training for new responsibilities, such as a headship".31

It is necessary for Jordan to meet the post-experience needs of teachers, so a great variety of provision is reguired. Some future provision should be school-focused, resembling group consultancy rather than lecture courses. Some schemes should be in teacher-managed teachers' centres and some should be in

universities.[32]

The Professional Competence of Teachers in Jordan

Despite the efforts which various educational institutions have
made for training teachers, whether pre-service or in-service,
whether public or private institutes or universities, the
professional competence of teachers in Jordan is extremely low.

In 1980, ouut of 16,484 teachers working in the compulsory cycle,
5,225, or about 32 percent, were inadequately qualified in terms
of the criteria set by the 1964 Education Act. Most of those who
were qualified were graduates of the teacher training institutes,
and their training must be considered unsatisfactory, because of
the inefficient functioning of those institutes.[33] This situation
can be remedied by further professional studies i.e., in-service
professional studies, which can offset the poor initial training
these teachers have received.

The situation was similar in the secondary cycle, where, in 1980,
3,993, out of 4,354 teachers, or about 92 percent, were less well
qualified than the 1964 Education Act required. The Act specified
that secondary cycle teachers should hold a first degree from a
university, and professional training at least equivalent to
following a one year full time course. In addition, in this level
of education there was a shortage of 426 teachers, which was
partly made up by teachers coming from other Arab countries, and
partly made up by the existing teachers being paid to teach extra
periods.[34]

On average, teachers in the teacher training institutes are no better qualified, relative to the requirements of the 1964 Education Act, than teachers in any other level. These teachers should have a first degree, a diploma or masters degree in a teaching subject, and at least one year of professional study.[35] Again, the majority of teachers, from a total of 370, were not this well qualified.

It is obvious that there is an acute lack of professionally qualified teachers, particularly those of the secondary cycle and teschers of training institutes, due to the small amount of attention which has been paid by the Ministry to their professional training. Also, there have been no planned and large-scale efforts for this professional preparation.

Therefore, the Ministry of Education should at least exert more effort for training the rest of the professionally qualified teachers of the compulsory cycle, and the majority of secondary cycle teachers, and teachers in teacher training institutes, and shwsld take crucial planned steps to quality professionally all teachers who are not qualified in the various cycles of education. This can be accomplished only by cooperat between the faculties of education in Jordanian universities and the Ministry to raise the professional standards of teachers to perform their work adequately and satisfactorily towards achieving the stated aims of education. The poor professional situation of teachers in Jordan kas led to dissatisfaction with the work of teachers and

their educational attainment. This state of dissatisfaction may be traced to a group of factors, the most important of which is the inadequate professional standard of teachers.

In conclusion the quality of teachers in Jordan is lower than it should be. The generality of Jordan's teachers are unqualified professionally. In addition, those who have been qualified professionslly through the established institutes of professional preparationdid not receive an adequate training. Many of them lack the native talent demanded by the art of teaching. This, so much, depends on the way student teachers are recruited and selected for training in tescher training institutes, and faculties of arts and science in Jordanian univessities.

Also, Jordanian society has failed to raise the teaching profession to that stature and esteem that would make it attractive to highly talented people in numbers sufficient to satisfy the demand for qualified teaching personnel. This situation of education in Jordan is due in part at least to the fact that the education of prospective teachers in Jordanian society has quite failed to challenge the intellectual abilities of Jordanian students.

REFERENCES

1   Mathews, R, and Akrawi, M., Education in arab Countries of the Near East, Washington, D.C.: American Council of Education, 1949, p.305.

2   Ministry of Education (Jordan), Community Colleges Catalogue, Amman: 1980/1981, p.7, (Arabic Text).

3   Harris, G.L. et al., Jordan, its people, its society, its culture, New York: Grove Press, 1956, p.195.

4   Tell, A.Y., Education inJordan, op.cit., p.287.

5   Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) The Education and Training of Teachers, The World Year Book of Education 1963, London: Evans Brothers, 1963, p.375.

6   Ministry of Education (Jordan), Community Colleges Catalogue, op.cit., p.6.

7   Ibid, p.31.

8   Ibid, p.31.

9   Ministry of Education (Jordan), Risalat Al-Mu'allim, Collection of Laws and Bye-laws, op.cit., p.54.

10   Holmes, B., and Ryba, R., (Eds.) Teacher Education, Stockholm: Procedings of the Comparative Education Society in Europe, 1979, p.82.

11   Ibid, p.83.

12   Ibid, p.84.

13   Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) The Education and Training of Teachers, op.cit., p.xii.

15   Ibid, p.11.

16   Ministry of education (Jordan), Anba Al-Tarbiya Periodical, Vol.2, No.3, 1980, p.42, (Arabic Text).

17   Darwish, M.A.R.M., A Comparative Study of Some Problems in Teacher Education in the United Arab Republic (Egypt) and the United States of America, London: Unpublished Thesis, 1967, p.134.

18   Ibid, p.16.

19   Holmes, B., and Ryba, R., (Eds.) Teacher Education, op.cit., p.57.

20   Ministry of Education (Jordan), Community Colleges Catalogue, op.cit., p.19.

21   Ibid, p.16.

22   Jordan University Catalogue, Amman: 1966-1977, p.108, (Arabic Text).

23   Holmes, B., and Ryba, R., (Eds.) Teacher Education, op.cit., p.76.

24   Ibid, p.77.

25   Ibid, p.78.

26   Ibid, p.79.

27   Ibid, p.125.

28   Ministry of Education (Jordan), **Procedings of the Minister of Education Address in Alia Community College in Amman**, on 23rd December, 1980, p.2.

29   Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) The Education and Training of Teachers, op.cit., p.135.

30   Ibid, p.135.

31   Taylor, W., "Problems and Solutions in Relation to Education in Comparative Perspective: The kCase of Teacher Education", in Holmes, B., (Ed.) **Diversity and Unity in Education**, op.cit., p.168.

32   Ibid, p.168.

33   Ministry of Education (Jordan), **Anba Al-Taribiya**, Special issue on the Educational Process Conference in a Developing Jordanian Society, 13th-15th May, 1980, Vol.3, No.4, Amman: 1980, pp.139-140, (Arabic Text).

34   Ibid, p.142.

35   Ibid, p.143.

CHAPTER EIGHT

Conclusion: Planning for the Future

Until 1963 there was very little which could be called
educational planning in Jordan. At that time the Jordanian
authorities started to take seriously the proposition that
educational development could promote economic development, and
took steps to start educational planning on an organised basis.

> "Although little is know at present about the role of
> education in lifting economic life at the early stage of
> development, there is some evidence that education is one of
> the main pre-requisites to the movement forward into
> sustained growth".[1]

In Jordan, as elsewhere in the world, there has developed a
strong faith in education as the key to social and economic
development. In 1963 the Ministry of education established a
directorate of Educational Planning and Research. It was hoped
that this directorate could oversee planning which would rectify
the shortages of teachers, buildings and equipment which were
becoming chronic in the educational system.

The result was a seven year plan covering the years 1964 to 1970.
This plan dealt with a number of important issues which have been
discussed in this thesis, including the provision of compulsory
education for all children, improving the supply and training
(both in-service and pre-service) of teachers, improving the pay
and status of teachers, introducing a more decentralised system
of educational administration, reviewing curricula and text books
and expanding and diversifying vocational education. The

importance of these aims, collectively and individually, has been stressed throughout this thesis. However, very little was achieved in the period of the seven year plan because the process of reform was interrupted by the war of June 1967 between Israel and the neighbouring Arab States. The occupation of the West Bank of Jordan, and consequent disruption to economic and political integration between the two banks, and the increase in military expenditure, was in every respect detrimental to education in Jordan. Many projects of the seven year plan were never even started.

Despite this initial failure, the seven year plan was followed by a three year plan for the years 1973 to 1975, and by two five year plans for 1976 to 1980 and 1981 to 1985. With slight changes in emphasis, the aims of these various plans are similar to the original seven year plan.[75-78] The first five year plan included reference to the reduction of drop-outs from the compulsory cycle, and to specific areas of vocational education. The second five year plan included reference to increasing the percentage of children in compulsory education from 91 percent to 94 percent.

In spite of this national planning process which has been orientated towards similar aims over a twenty year period, the evidence discussed in this thesis illustrates that the process of planning has not been successful. This can be attributed to the backward state of educational administration in Jordan, and to the rigid and centralised system of administration in particular.

Educational administration is still generally viewed as an activity above teachers, and separate from the technical job of teaching. Administration is seen as a matter of holding the reins of power and dictating orders. Administrators still concentrate on the mechanics and clerical aspects of the task rather than on its human qualities, on minor details rather than on statesmanship, and on control and enforcement rather than motivation. Democratic administration, participation, collective leadership, freedom and individual initiative are still only slogans which remain vague.

The original foundations of the administrative structure are still intact in many cases despite the numerous attempts made to reorganise and reform it. This is shown by the fact that real authority still resides in the central administrative super-structure which is empowered to hire and fire and to draw up edicts, regulations, directives and mesaures on its own. The schools and local communities where admistrative decisions are put into practice are only to implement reforms, and have little or no freedom of choice and their scope for initiative is limited.

The traditional distinction between, on the one hand, administrative matters in the liberal sense, financial affairs, appointments, promotions, transfers, the holding of examinations, and on the other hand, professional or technical matters such as the definition of objectives, the design of new educational structures, curriculum development, the professional growth of teachers, still preveils; and yet the relationship between the

two is not precisely defined and they have not been integrated nor has a balance in their respective powers been established. When new practices were introduced such as planning, research, educational information and documentation statistics, they remained secondary on the margin with limited impact and effect. The same occurred when the importance of links between education and life, between the school and the ccommunity became apparent. There were no effective arrangements for tackling this aspect and the educational and school administrators mostly continued to be inward looking and hardly noticed or benefited from the abundant opportunities and possibilities which were available outside education and the school system.

In almost all cases, administration organisation in Jordan was based on common sense and individual judgement rather than on scientific knowledge and principles and continued to suffer from the difficulties of coordination and from heavy movement both inside and outside as well as from acute shortages of suitably qualified personnel which form the basis of every organisational structure. There is no, cr little, concern of the educational plans for improving administration in Jordan or providing the number of qualified administrative personnel needed in education.

The ways, means and tools of administration are still mostly derived from the pre-scientific and pre-technological age. This can be seen in the prevalence of traditional methods of preparing budgets, expenditure and financial transactions, of traditional tools for the collection, storage, retrieval and utilisation of

educational and administrative data, of traditional ways of communication and review, of traditional techniques for implementing and supervising projects, evaluating action and assessing output, and it can be seen, above all, in the ways in which decisions are taken and the principle of participation applied. Even these new ways and means which have been introduced such as planning and research overlooked amid out-moded survivals of the past and seem to have been enlisted in the service of perpetuating previous trends, these by losing their capacity for innovation.

Recently, administration has begun to shift from concepts, principles and theories to concentrate on administrative techniques and methods. And management science has begun to make room for administrative technology based on practical thinking and on objective systematic analysis embodied in new ways and means. These help the administrator to make wise decisions, to issue rational directives, to look discerningly towards the futrre, to make optimum use of resources and to carry out plans accurately and efficiently in many cases enlisting the assistance of useful tools provided by machine technology, the most important of which are computers. In view of the vital role played by information in modern administrative technology, new methods and tools have been developed for the collection, processing, storage, retrieval and utilisation of information through advanced data systems which form the cornerstone of the infrastructure and the life blood of administrative technology and its tools. The adoption of such systems has become one of the basic features of modern administration.

If we take an objective look at educational administration in Jordan, in the light of what has been achieved in administrative science and technology, we find that, as far as their foundations, structures and tools are concerned, this administration has so far derived little benefit from administrative science and technology, a fact which confirms its underdevelopment. It seems that in its educational policy and reform, Jordan has overlooked the importance of administrative science and technology and has no plans for training sufficient numbers of Jordanian citizens abrosd or for setting up institutions or departments in the faculties of education specialised in administration and administrative technology.

With a centralised administration which is vested in a sole Ministry of Education makes it difficult to take into account the local aspirations and possibilities. Thus decentralisation is needed, to arouse more interest of the people in the education of their children. But W.Samaan's point of view is that a centralised system of education is better at present than a decentralised system in Arab countries. Samaan points out that,

"It would not be advisable for Arab countries to decentralise power at present. This would not work well and would upset their educational systems. However, local educational directorates could share in policy making with the ministries and should be granted authority commensurate with their responsibilities".2

This is very true in the case of Jordan. As has been made clear in the analysis in this thesis, the administration of education needs reforming, but it still has some very important functions

to perform. What is wrong with it is that it has concentrated on evaluation and control. It needs to move away from these activities, towards more partnership and involvement of local personnel in many aspects of the educational process. But to achieve this change will require considerable and far-sighted leadership, which only the central authorities are currently in a position to provide.

The first function which needs to be performed, and which was attempted in Chapter 1 of this thesis, is to expand on the present aims of education, as set out in the 1964 Education Act, to explain to people in general, but particularly to teachers and administrators, how those aims are compatible with, but extend and complement, beliefs which form part of the Arab Islamic heritage. Aims which draw upon the deep popular concern for education which promotes the spiritual, physical, intellectual and vocational well being of all individuals are more likely to be achieved than aims which are viewed in isolation, as something which has been handed down from the central authorities.

The second function which needs to be performed, as has been set out in Chapter Five, is the elaboration of those aims in specific and comprehensive curriculum aims and objectives. In this way it will be easier to assess in practice whether the educational system is performing adequately in concrete cases. The curriculum aims and objectives will provide a framework within which local initiative can be permitted to operate, without the risk that activities will conflict with each other and produce counter-

productive competition. In order to see that the curriculum aims are not only concise, unambiguous and comprehensive, but also acceptable, the Ministry should involve a wide range of experts from both inside and outside the educational system, preferably in a committee specially convened for the purpose.

The Ministry should then move to dismantle the rigid supervision and assessment apparatus which it has built up over the years. This is not intended to permit a lowering of standards, but to permit greater freedom, and eventually innovation. assessment and evaluation will still be necessary, but this should be linked to the specific curricular aims and objectives which are developed. It is desirable that experienced supervisors should be involved in this process, but they should work in cooperation with local administratotrs and teachers to devise systems of evaluation which are suited to the local conditions and particular courses being assessed.

In all these associated reforms, the central Ministry should aim to be permissive rather than restrictive. A more extensive list of text books which permitted choice in each subject area would provide a framework within which experiments could be tried and initiatives attempted, while leaving the Ministry some measure of control to ensure that standards were not lowered. Examinations could be modified, probably with the more extensive use of objective tests, in such a way that they became less onerous, while still ensuring that the teaching process was adequately monitored, and that selection could be undertaken where this was necessary. Such changes should be made in the finance and

administration of education as would make greater local participation and interest possible, and indeed would encourage local communities to take pride in their schools.

But finally, and probably most importantly, all of these changes would place immense demands, and frequently new demands, on the people involved in the process of education. This applies not only to the teachers and headmasters of schools, but also to the supervisors who would be expected to operate in ways quite different from their present practices. This would require development of training and retraining facilities on a large scale, and while the universities and colleges would be involved, only the Ministry could sensibly be expected to coordinate such an effort.

More detailed proposals for each area of reform are included in the relevant chapters of this thesis. However, what needs to be stressed here is the overall unity of these proposals, which arise directly from the critical analysis of current institutions and practices in Jordan. That analysis reveals that there is a package of reforms which would be popular both with teachers and a broader public, and which would help the atainment of educational aims which have for a long time been very widely accepted in Jordan. Such reforms could be expected to make the educational system work more efficiently and effectively than it does at present, and might well provide further opportunities in the future for subsequent improvement.

References

1   Morsi, M.M., "The Control of General Education in State
     Schools in Egypt with special reference to the role of the
     Ministry of Education", unpublished thesis, London: 1966,
     p.48.

2   Samaan, W., "Cultural Diversity and Educational Unity in the
     Arab World", in Holmes, B., **Diversity and Unity in
     Education**, op.cit., p.110.

BIBLIOGRAPHY

Akil, F., An article written about aims of education, written in Risalat al-Mwallim (The Message as the Teacher) in Arabic, Vol.7, No.6, 1964.

Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) Communication Media and the School, The World Year Book of Education, London: Evans Brothers, 1960.

Bereday, G.Z.F., and Lauwerys, J.A., (Eds.) The Education and Training of Teachers, The World Year Book of Education 1963, London: Evans Brothers, 1963.

Blau, P.M., and Scott, W.R., Formal Organization: A comparative approach, Routledge and Kegan Paul, London: 1963.

Bloom, B.S., et al. (Eds.), Taxonomy of Educational Objectives Handbook I: The Cognitive Domain, New York: David McKay, 1956.

Broudy, H.S., Building a Philosophy of Education, Englewood Cliffs, New Jersey: Prentice Hall, 1969.

Brubacher, J.S., Modern Philosophies of Education, New York: McGraw-Hill, 1962.

Darwish, M.A.R.M., A Comparative Study of Some Problems in Teacher Education in the United Arab Republic (Egypt) and the United States of America, London: Unpublished Thesis, 1967.

Dewey, J., Democracy and Education, New York: Macmillan, (First published 1916), 28th Edition, 1955.

Dewey, J., "Current Problems in Secondary Education", The School Review, Vol.10, January 1902, p.21, cited by Metwally, M.M., unpublished thesis, op.cit..

Fakhuri, H., and Jur, Kh., Al-Falsafah al Arabiyah fi al-Maslina Wa al-Garb (Arab philosophy in East and West), Arabic text, Beirut, Dar al-Jil, 1982.

Galib, M., Fi Sabil Mawsu'at Falsafiyah al-Farabi (For a philosophical encyclopaedia al-Farabi, Beirut: Dar wa Maktaliit, 1979.

Goodlad, J.I., School, Curriculum and the Individual, Wallham, Massacusetts: Blaisdell Publishing Company, 1962.

Goodlad, J.I., The Instructional Programme of the Public Schools, Planning and Organising for Teaching, Washington, D.C: National Education Association, 1963.

Halpin, A.W., **Administrative Theory in Education**, Chicago: Chicago University Mid-West Administration Center, 1958.

Harris, G.L. et al., **Jordan, its people, its society, its culture**, New York: Grove Press, 1956.

Holmes, B., **Problems in Education: A comparative approach**, London: Routledge and Kegan Paul, 1965.

Holmes, B., "Some General Issues and Proposed Solutions in Curriculum Development: A Comparative Survey", **Educational Documentation and Information: Bulletin of the International Bureau of Education**, Paris: Unesco/IBE, No.19, Vol.48, 1974.

Holmes, B., **Some Consideration of Method in Comparative Education**, (Student Seminar Papers), London: London University Institute of Education, 1974.

Holmes, B., (Ed.), **Diversity and Unity in Education**, London: George Allen and Unwin, 1980.

Holmes, B., **Polytechnical Education in the USSR: Various Essays in Education**, London.

Holmes, B., and Ryba, R., (Eds.), **Curriculum Development as the Second Level of Education**, Prague: Proceedings of the Comparative Education Society in Europe, 1969.

Holmes, B., and Ryba, R., (Eds.) **Teacher Education**, Stockholm: Procedings of the Comparative Education Society in Europe, 1979.

Hooper, R., (Ed.) **The Curiculum: Context, Design and Development**, Readings for the course team at the Open University, Edinburgh: Oliver and Boyd, 1972.

Jordan University Catalogue, Amman: 1966-1977, (Arabic Text).

The Koran, **Al-Qura'n Al-Karim wa ma'ahu Safwit al-bayan Li-ma'ni al-Qura'n** (The Qura'n with a commentary by Haserein Muhammad Makhluf, Cairo: Dar al Kitah al-Arabi Press, 1957.

Lauwerys, J.A., (Ed) **Ideals and Ideology**, London: Evans Bros., 1969.

Lauwerys, J.A., and Scanlon, D.G. (Eds.), **Examinations: The World Year Book of Education**, London: Evans Brothers, 1969.

Madkour, A.A.A., "Curriculum Development in the General secondary School in Egypt since 1952 with Comparative Reference to the Secondary School in America and Grammar School in England", Unpublished thesis, London: 1979.

Mallinson, V., An Introduction to the Study of Comparative Education, 4th Edition, London: Heinemann, 1977.

Mathews, R.D., and Akrawi, M., Education in Arab Countries of the Near East, Washington, D.C.: American Council of Education, 1949.

Metwally, M.M., "A Comparative Study of Secondary Education in the United States, England and Sweden after 1945, with reference to Emerging Policy in the Arab Republic of Egypt", London: Unpublished thesis, 1979.

Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", Collection of laws and bye-laws, Vol.10, No.1, (Arabic Text), Amman: 1966.

Ministry of Education (Jordan), Collection of laws and bye-laws, regulations No.5, 1968, part I, Amman: 1970.

Ministry of Education, Collection of Laws and Bye-laws, Amman: Arabic Text, 1970, Part 1.

Ministry of Education, Collection of Laws and Bye-Laws, Pensions, (Arabic Text), Amman: 1975.

Ministry of Education (Jordan), Risalat Al-Mu'allim (Message of the Teacher", A special issue on the conference of educational supervision in Aqaba City from 4-7 February, 1975, Vol.18, Nos.3 & 4, July-December, (Arabic Text).

Ministry of Education, Education Development in Jordan, (Arabic Text), Amman: 1977.

Ministry of Education, Drop-out of Administrative and Technical Competents, (Arab Text), Amman: 1979.

Ministry of Education, The Statistical Yearbook of Education, Amman: 1979, p.16, and 1980.

Ministry of Education, Catalogue of Educational Programmes in Private Schools, Arabic Text, Amman: 1980.

Ministry of Education, History of Education in Jordan 1921-1970, Amman: 1980.

Ministry of Education (Jordan), Anba Al-Tarbiya Periodical, Vol.2, No.3, 1980. (Arabic Text).

Ministry of Education (Jordan), **Procedings of the Minister of Education Address in Alia Community College in Amman**, on 23rd December, 1980.

Ministry of Education (Jordan), **Anba Al-Taribiya**, Special issue on the Educational Process Conference in a Developing Jordanian Society, 13th-15th May, 1980, Vol.3, No.4, Amman: 1980. (Arabic Text).

Ministry of Education (Jordan), **Community Colleges Catalogue**, Amman: 1980/1981. (Arabic Text).

Ministry of Education (Jordan), **History of Education in Jordan 1921-1970**, (Arabic Text), Amman: 1980.

Ministry of Education, **Jordan's Education in Figures**, Amman: 1983.

Morsi, M.M., "The control of general education in state schools in Egypt with special reference to the role of the Ministry of Education", Unpublished thesis, London: 1969.

Musa, M.Y., **Bain al-adin wasl-falsafah fi ra'y Ibn Rushd wa falasifat al-as'r al-wasit**, (Religion and philosophy in the opinions of Ibn Rushd and the philosophers of the Middle Ages), Cairo: Dar al-Masarif, 1959.

Nadir, A.N., (Ed.) **Ara'ahl al-Madinat al-fadileh** (The ideas of the Inhabitants of the Ideal City), by Muhammed abu Nasr al-Farabi, Arabic text, 4th Edition, Beirut: Dar al-Mashriq.

Nasdwi, A.H.A.H., **Al-Sirat al-Nahawiyah** (The Prophet Mohammad's Biography), Jeddah: Dar al-Shorouk, 2nd Edition, 1979.

Parsons T., "Some Ingredients of a General Theory of Formal Organizations", in Halpin, A.W., **Administrative Theory in Education**, Chicago: Chicago University Mid-West Administration Center, 1958.

Pratt, D., **Curriculum Design and Development**, New York: Harcourt, Brace and Janowich, 1981.

Samaan, W., "Cultural Diversity and Educational Unity in the Arab World", in Holmes, B., (Ed.), **Diversity and Unity in Education**, London: George Allen and Unwin, 1980.

Shafiq, M.N., **Encyclopaedia of Education**, Vol.5, New York: Macmillan, 1971.

Shami, M.A., and Foudah, H.M., **Educational Innovations in Jordan: 1976-1979**, Arabic text, Amman: 1979.

Shapovalenko, S.G., **Polytechnical Education in the USSR,** Amsterdam: Unesco, 1963.

Skatkin, M.N., "Marxist-Leninist Ideas on Polytechnical Education", in Shapovalenko, S.G., **Polytechnical Education in the USSR,** Amsterdam: Unesco, 1963.

Smith, B.O., Stanley, W.O. and Shores, J.H., **Fundamentals of Curriculum Development,** New York: Harcourt, Brace and World Inc., 1957.

Taba, H., **Curriculum Development, Theory and Practice,** New York: Harcourt, Brace and World Inc., 1962.

Taylor, W., "Problems and Solutions in Relation to Education in Comparative Perspective: The Case of Teacher Education", in Holmes, B., (Ed.), **Diversity and Unity in Education, op.cit..**

Tanner, D., and Tanner, L.N., **Curriculum Development,** New York: Macmillan, 2nd Ed., 1980.

Tanner, P., **Schools for Youth: Change and Challenge in Secondary Education,** New York: Macmillan, 1955

Tell, A.Y., **Education in Jordan,** Amman: Ministry of Culture and Youth, Arabic Text, 1978.

Tell, A.Y., "Education supervision in Jordan", in **Risalat Al-Mu'allim,** Conference on educational supervision, op.cit..

U.N.R.W.A., **Fact Sheet 10,** Amman: 1979.

Wheeler, D.K., **Curriculum Process,** London: Hodder and Stoughton, 10th Edition, 1979.

Zarnuji, B.I., **Ta'lim al-Muta'alim Tariq al-Ta'allum** (Teaching the Learned the Method of Teaching), Cairo: Dar al-Kitah al-Arabi Press, 1948.