A COMPARATIVE STUDY
OF THE REORGANISATION OF SECONDARY
EDUCATION IN THE UNITED STATES, ENGLAND
AND SWEDEN AFTER 1945 WITH REFERENCE TO
EMERGING POLICIES IN THE ARAB REPUBLIC OF EGYPT

by

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ABSTRACT

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Asynchronous changes in the socio-economic aspects and in the educational system in Egypt have created the problem of the inadequate response of secondary education to the needs and aspirations of Egyptian society after 1952.

This study attempts to propose alternative policies of reorganising Egyptian secondary education in order to solve, or eliminate, such a problem. To accomplish this, a comparative analysis of some models of the reorganisation of secondary education after 1945 is carried out. The countries chosen in this study are the United States, England and Sweden since they had faced similar problems and offered successful solutions of reorganising their secondary schools on comprehensive lines.

Following the 'problem approach' this thesis is examined in five parts. In addition to the statement of the problem and the outlining of the aims of the study, the first part discusses the methodology used and the basic characteristics of a typical comprehensive school.

Part Two, which comprises two chapters, deals with the problem analysis and its intellectualisation through the identification of changes and relative non-changes in some aspects of Egyptian society since the 1952 Revolution. While Chapter Two explores the normative changes in terms of policy statements on justice, industrialisation and education, Chapter Three identifies the actual changes in such aspects.

Part Three examines the Egyptian educational policies and practices through a critical investigation that confirms the emerging need for the reform of Egyptian secondary education. It also discusses recent Egyptian experimentation in this field.

Part Four includes seven chapters dealing with the comparative analysis. This part covers: basic forces behind the comprehensive education movement, comprehensive school models, selection and allocation of pupils to comprehensive schools within tracked and unified systems, grouping in the comprehensive schools, and the curriculum organisation and processes. Finally, Part Five puts forward the proposed solutions and the prediction of their workability within the Egyptian initial conditions.
ACKNOWLEDGEMENT

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PART ONE
CHAPTER ONE

INTRODUCTION

1. Introductory Remarks
2. Problem Statement
3. The Aims of the Study
4. The Method of Inquiry
5. Characteristics of the Comprehensive School
INTRODUCTION

In this chapter an attempt is made to state the problem and the aims of the study. Then a discussion of the method of enquiry will be outlined. Finally, the basic characteristics of the comprehensive school are examined.

1. Introductory Remarks

Egypt is the land where agriculture was born, where medicine first became a science, where astronomy was highly developed, where settled life replaced nomadic, where man acquired the art of phonetic writing, and where religion was first regarded as a comprehensive way of life. Hence, Egypt is considered as the cradle of civilisation.

Unfortunately, modern Egypt lived for long under two fixed regimes, though they may have appeared in different shapes and varying guises: the feudalist regime and the imperialist regime. These two regimes determined the type of social relations in Egypt, the forms of economic activity, the elite class which held all the wealth resulting from exploiting the people and the lack of power of the people to direct their policy.

Prior to 1952, the Egyptian people were suffering from the autocracy of the monarchic family, the exploitation of capital, the dominance of feudalism, the existence of the occupation troops, and the weakness of the political parties which made democracy only a symbol and political freedom just a matter of form. Despite the repeated national upheavals, no effort was made to reform the Egyptian institutions or to attempt such a shaking up, nor was it expected that foreign rulers would make such an attempt because they were necessarily conservative. The Egyptian Constitution promulgated in 1923 had neither checked the autocratic tendencies of the ruler nor secured freedom for the people. Moreover, it was accompanied by disturbance and agitation which obstructed the progress of the country and impeded its potentialities for growth and development. No doubt, there were good patriots who called for political freedom, religious reform and social welfare, but they were powerless and there was a continuous frustration to such claims.¹

By 1952, the feeling all over the country was that the whole edifice
of Egypt had cracked. Every day the situation became more tense. Public opinion was excited by the critical essays about the deeds of the King, the palace, the monarchic family, and the government. Much of the centre of Cairo was set on fire on the Black Saturday, January 26, 1952 as a result of a long-felt revolutionary tension.\textsuperscript{2} The peasantry became restive and uprising broke out on several of the largest estates and cost the lives of fourteen fellahen. The internal political chaos, accompanied naturally by the frequent breakdowns of public order, reflected the disarray of the ruling class. The traditional political parties vainly tried to replaster the tottering building but it was a waste of time.\textsuperscript{3} The anger of the Egyptian people which paved the way for change "was no longer confined to a few individuals, it spread among the entire people."\textsuperscript{4} Fundamental changes were needed, but so strong were the vested interests that they could not have been carried out without revolution.\textsuperscript{5} Experience has shown and confirmed the fact that revolution is the only course which the Egyptian struggle can take to head from the past to the future. The revolutionary path was seen as the only bridge which Egypt can cross to reach the future it aspires to.\textsuperscript{6} The Charter manifestly clarifies this notion of revolution by stating

"Revolution is the only means by which the Arab nation can free itself of the dark heritage which burdened it. For, the elements of suppression and exploitation which long dominated the Arab nation and seized its wealth will never willingly submit.

Revolution is the only way to overcome underdevelopment. For, the conventional methods are no longer capable of bridging the gap in development which has long existed between the Arab nation and the advanced countries."

\textsuperscript{7}

Thus, in the dawn of the 23rd of July, 1952 the Egyptian people embarked on a unique revolution that made itself felt in all aspects of life. The 1952 Revolution flared up, breaking the vicious circle and opening vistas for national action. It marked the beginning of a new and glorious era in the history of modern Egypt. Hence, the Egyptian people have been able to change their life radically and profoundly towards the realisation of their wide humanitarian aspirations. However, despite the fact that the Egyptian army led the people to the revolution against the backward conditions, the fall of the old regime was not the only objective of the revolution, but rather the building of a new social order characterised by justice and prosperity.
2. **Problem Statement**

A significant effort was devoted during the revolutionary era to realise modernisation. New aspirations have arisen regarding social justice, political independence and self-realisation, and education. Radical measures have been taken to rebuild the political, economic and social institutions. Although positive results have been achieved, other negative sequences have occurred. The problems of modernity and reform were too many to overcome at once. The Revolutionary Government could solve some, other problems have emerged and discrepancies existed between the actual capacity and great expectations of the country.

Egypt faces, more or less, acute inter-related problems arising from rapid population growth, rapid urbanisation, little change in the quality of human resources and retarded economic development.

The implementation of the process of development, however, depends for its success primarily upon human resources. This is particularly so in the case of Egypt. Accordingly, Egypt's capacity to realise sound development and thorough modernity depends in large measure on her ability to produce a sound system of education in both quantity and quality.

The generally held belief that education is instrumental in creating the conditions for sustained progress goes back to the Enlightenment and still has a powerful influence on national policy-making. The rapid scientific and technological developments in industrial societies since World War II have had deep implications for sustained growth and modernisation. Simultaneously, the emergence of the developing and underdeveloped countries, in which the drive for political, social and economic modernisation and development was set off against the almost total lack of modern skills and institutions, has strengthened the faith in the capacity of education as the "key that unlocks the doors to modernisation". 

Education is one of many elements which influence economic growth. Several studies have emphasised the relationship between educational provision and the rate of economic growth. They have also stressed that there is a strong link between a nation's educational system and its present and future level of economic performance. Many economists agree that education contributes to economic growth. Edward Denison, for
example, has found the increases in the education of labour force may account for as much as 23% of the growth of national income in the USA between 1929 and 1957. Moreover, a recent attempt applied Denison's method to Britain and concluded that increases in education contributed 10-14% of the growth in the national income between 1951 and 1961.\(^9\)

Education contributes to economic growth in several ways. As Rogers suggests, it provides people with the specific skills useful in productive processes. Skills such as typing, accounting, chemical engineering and the like are developed by education and markedly increase the capacity of those individuals possessing them to contribute to the production of goods and services. In addition, education provides general knowledge and methods of problem solving which individuals can apply to their work. Moreover, education can contribute to economic development by providing or developing attitudes conducive to production. Change of attitude towards work is of great importance especially in underdeveloped or developing countries. Such a change from attitudes prevailing in traditional societies (i.e. children are expecting to do the same work as their parents did) to those observed in modern societies (i.e. great occupational mobility with closely prescribed working conditions) are usually developed by schooling. Furthermore, education may serve development by providing a screening system that assures that the most able individual reaches the highest position in the most economical fashion.\(^10\)

In Egypt the demand for economic development is urgent, particularly in the industrial field. Kerr points out

"Industrialization requires a greatly increased force of skilled workers and foremen. So far the educational system has produced very limited numbers of such persons and instead has created a surplus of university graduates in such unproductive fields as law, commercial, accounting, and liberal arts."\(^{11}\)

Egyptian educators in their reports and in various conferences, however, acknowledge that the system of education as it is in Egypt, does not adequately help the country to achieve the process of development. El Koussy, for example, has stated

"The ultimate aim of education from the point of view of most parents has been securing a post in the government or similar organisations."\(^{12}\)
In his thesis, Galal has found that this kind of education tends to create persons who try to avoid responsibility wherever possible. He points out:

"The product of such an education is an individual neither ready to accept seriously his share of responsibilities nor well-equipped to share in the process of development that is going on around him."

Thus, the backwardness of Egypt's human resources is largely due to lack of education and training, since the educational system has not been able to cope with the industrial development. Egypt as a developing country needs certain kinds of skilled manpower for its industrial development. A Commission of the National Assembly, which investigated this phenomenon in 1958 found:

"a vast unsatisfied demand for technicians and specialists in government offices and industry, and for persons conversant with foreign language for work in business."

Furthermore, one survey of the labour force potential in Egypt, for example, found that:

"In all types of Egyptian enterprise there is a critical shortage of professional managers, engineers and other technically trained personnel."

Daniel Nugent in a report compiled for the Agency for International Development in Cairo, also stated:

"A critical problem in Egypt's plan for industrialisation is the development of her manpower to meet the challenges created by the expansion of old, and establishment of new, industries. Rapid industrialisation which is taking place requires manpower development at all levels - including semi-skilled workers, skilled craftsmen, technicians, and 'middle' management ..."

This, too, was brought into focus in 1970 by an estimate of the rate of the growth of labour productivity in Egypt, which stated:

"The shortage in technicians was 71% in 1970 and mounted to 91.6% in 1985, while the shortage in skilled workers started from 13.7% in 1970 and mounted to reach 24.2% in 1985, and the shortage in semi-skilled workers was 25.1% in 1970 and will fall to 19.8% in 1985."
It is observed that despite this shortage of skilled and specialist manpower, and the need for a productive labour force, there is still great pressure on general secondary schools. Also there is a clear distinction between the students who attend academic secondary schools and those who attend technical secondary schools.

Thus, considerable demand for academic education in spite of the acute shortage of skilled workers and technicians creates a case of inconsistency between the relatively non-changed educational system and the various economic changes in Egypt. In other words, the present educational system in Egypt is inadequate in its response to the requirements of national development plans. Or rather, the Egyptian educational system has not been adapted to the requirements of the socio-economic institutions. Therefore, it is necessary to develop the educational system to cope with stated national goals and the circumstances of the technological age.

3. The Aims of the Study

It follows from the above discussions that one solution of the problem would be for Egypt to organise its secondary education system in order to close the gap between the shortage of, and the great demand for, efficient skilled workers who are needed for all production sectors. Such reorganisation is necessary to avoid a cumulative number of unemployed graduates of general secondary schools and to lighten the pressure on admittance to the universities and higher institutions. Moreover, this reorganisation would help to reduce the effect of the selective educational system in Egypt which has resulted in a high rate of wastage and drop-out, inequality of educational opportunities and distinctions among students that has affected the nation's solidarity.

Secondary education has been going through a steady process of changes after 1945 in many countries all over the world. A variety of types of organisation have been introduced to suit particular initial conditions of certain nations. However, two broad types of new structure in lower secondary education have been developed. One is a parallel system using common basic curricula in different types of schools, with transfer facilities extending over several years between them. The other is a unified system providing education through comprehensive schools for
all children whatever their abilities. This may take the form of a common curriculum for all, or of a partly common and a partly differentiated curriculum, or a differentiated curriculum within the same school. Within the Organisation for Economic Co-operation and Development member countries, the parallel system, for example, is in force in Germany, Austria, and the Netherlands. The comprehensive type of junior secondary curricula is operating in Norway, Italy, Yugoslavia and France, while the fully comprehensive high schools exist in Canada, Japan, the United States and Sweden. The latter is now rapidly developing in the United Kingdom. In Egypt, there is a growing trend towards the experimentation of comprehensive organisation. Many Egyptian educationalists have expressed their views advocating the comprehensive school system. Moreover, proclaimed educational policy reveals the readiness of the country to try other forms of education rather than the rigid traditional one.

Two major hypotheses are assumed to be the focus of this study. The first is: if Egypt wishes to achieve social justice and national solidarity then a unified common school rather than parallel types of schools will be required. The second hypothesis is: given the dominant normative pattern towards manual work, if education is to be geared to Egyptian development plans, then secondary education should be organised along comprehensive lines.

The researcher aims at examining these hypotheses in the light of a comparative study dealing with the reorganisation of secondary education after 1945. The study attempts to examine comparatively certain aspects of the comprehensive school such as structure, selection, grouping, and curriculum content and processes within particular models. The chosen models are: the American, the English and the Swedish comprehensive schools. Bearing in mind that no society is perfect, nor can it be considered as such for the purpose of imitation, as well as the socio-economic institutions and their related value systems usually grow within a particular context of society, it is usually undesirable to copy the structure of any educational system. Nevertheless, these considerations should not prevent us from exploring the experience of other nations. Therefore, this study aims at enriching the Egyptian experiment through the comparative analysis of the chosen models of comprehensive schools in
order to adapt a model quite suitable to the initial conditions of the Egyptian society.

4. Method of Inquiry

While the traditional classic studies in comparative education have been historical in the sense that they have sought to establish and describe antecedent causes or factors which determined or moulded the character of national entities, the new comparative approaches (philosophical, functional and problem) attempt to make method and technique more precise. Since 1960, several remarkable developments can be identified. There has been, for example, a transfer from descriptive studies of national systems to analysis of problems, and from belief in universal solutions to the testing of alternatives. Moreover there has been a movement away from searching for historical factors or antecedent causes of contemporary events, to an interdisciplinary endeavour to explain and predict behaviour and institutional changes. Holmes argues:

"These trends reflect not so much a shift of emphasis away from identification and description, but rather an increase of interest in the role they play in explanation and in the kinds of explanation which are held to be important in the social science."

The Problem Approach' suggested by Holmes in 'Problems in Education' as a method of inquiry in comparative education will be employed as the intellectual framework for this study. Hence, a brief description of some main features of this approach seems necessary.

4.1 Theoretical Basis of the Approach

The theoretical basis of the problem approach can be defined as follows:

(i) Reflective Thinking

According to John Dewey, thinking arises out of a directly experienced situation; from a situation which is always confused at the beginning but which becomes more and more clear through reflection or reflective activity. The function of the reflective thought is to clarify a situation in which
obscurity and doubt are experienced.  

Reflective thinking is the intellectual framework within which are located all the processes implied in the problem approach. The selection of the problem, the identification of initial conditions or contextual determinants and its analysis, the choosing of the starting point for the analysis, are example elements of the problem approach very well interrelated and grounded on theoretical bases. In addition, the hypothesis is formulated in the problem approach, with this framework, as the policy to be followed to solve the problem. Holmes stresses the logical deduction of consequences for the hypothesis as solution and the necessary conditions for these to succeed. The problem approach, unlike other traditional approaches, tries to explain through prediction. Holmes says:

"The problem approach implies that understanding of social educational processes comes from successful prediction rather than, as in some epistemologies, through the discovery of antecedent causes."

(ii) Critical Dualism

Another element in the theoretical framework of the problem approach is the critical dualism of Popper. Critical dualism, in fact, assumes that some regularities operating within any social environment are similar to those found to apply to man's physical surroundings. Such sequences of social events can be stated as sociological laws. Commenting on the assumption of critical dualism, Holmes says:

"Within any society, there are casual relations whose operation can be understood through the establishment of sociological laws. These relationships are functional and constitute a deterministic element. It is the study of the relevant sociological laws that constitutes the science of education, or if preferred the scientific study of education."

However, critical dualism accepts a distinction between "normative laws" and "sociological laws".

- Norms and normative laws can be either accepted, rejected or changed by man. Neither God nor nature is responsible for them. They are statements about what ought to be. Secondly they find expression in a written constitution or a legal code, in addition to innumerable codes of values, beliefs and ideas accepted by members of society."
- Sociological laws bear to man's social environment the same kind of relationship that natural laws bear to physical environment. Sociological laws are outside man's ability to control. They help understanding certain institutions and prediction with reactions resulting from the interaction of institutions, and regularly repeated sequences of events. 26

(iii) Theory of Social Change

Social change is another basic element in the problem approach. The emphasis is not focused on the changes or transformations in the long run - what is called "evolution" - but mainly on observable and verifiable transformations in shorter periods. Holmes stresses the asynchronical features of some social change. In all social change theories, asynchronism implies:

- The existence of parts or constituent elements in the society, named differently according to the theories as structure and infrastructure, material and immaterial, culture, etc.
- An initial stage in which all the parts were well adjusted.
- Different speed - and even direction - in the transformations brought about by changes. 27

Asynchronous social change is a useful tool in the identification and intellectualisation of a problem in comparative studies as well as to frame the hypothesis, as Holmes says:

"Here social change is considered to be the sequence of events initiated by innovation in any one of the three social configurations." 28

Thus, some changes in society take place according to sociological laws and others do not. So, as Holmes argues, in the light of many theories of social change, "problems arise from asynchronous change in society". 29 Several theories of social change assert that change invariably occurs in one particular aspect of society, while other aspects inevitably lag behind, or when they change, do so only subsequently. Holmes' point of view on this matter is that

"for the purpose of analysis it may be assumed that a change (or innovation) occurs in any societal aspect and the task of intellectualisation involves identifying both the change and relevant (or perhaps relative) non change." 30
4.2 **Problem Concept**

The word "problem" needs clarification in this context. According to Holmes, problem is "a confused situation". If all the essential elements or parts of social order (norms, values, attitudes, etc.) on the one hand and social institutions on the other hand, plus the physical environment, change at the same time and the same pace, then no problem arises as a result of change. But, in actual fact, not all elements within a particular social order change at the same time or at the same pace. According to the sociological laws some changes in society take place and others do not. So, as Holmes argues, in the light of many theories of social changes, that "problems arise from asynchronous change in society".

Problems may arise because of inconsistencies in a nation's normative pattern. Or others may take place because of the lag between theory and practice (norms and institutions), one institution may have changed more radically than another which is functionally related to it, or the aims of education (norms) may change before institutions have revised to achieve the new aims. Or the natural environment may place obstacles in the path of achieving stated goals. For instance, when a new institution is set up, or different types of material wealth discovered, certain adjustments may be useful in normative patterns. Laws and regulations must be enforced to help new institutions to survive and function, or, in order to use a newly discovered material wealth, a suitable range of skilled manpower will be necessary.

4.3 **Processes**

Accepting the possibility of reconciliation of Dewey's problem-solving approach with Popper's hypothetico-deductive method of scientific enquiry, Holmes' approach and its methodological implication make it necessary to apply, all or some of, the reflective thinking. The main four aspects of the problem are:

"(a) problem analysis,
(b) policy formulation,
(c) the identification, description and weighting of relevant factors within a given context, and
(d) the anticipation of prediction of the outcomes of the policies."

Types of study within the problem approach are directly related to the phases of reflective thinking. Comparative study, according to the problem approach, may require at each stage high skill in using materials drawn from many social sciences. Holmes argues that

"Every comparative study is to some degree based upon interdisciplinary cooperation or on literature and investigations in various fields of specialised enquiry."

The selection of the problem depends very much on the researcher who, as Holmes suggests, may reasonably assume, for investigating purposes, that problems are common to a number of countries. One could identify problems in a number of ways. But perhaps the most frequently used identification stems from the explosion of knowledge, population and aspirations. The analysis of the problem should be to exercise, to identify the asynchronous changes within normative, institutional and environmental patterns. The attempt to formulate policy proposals is a difficult task. The main difficulty here would seem to be that what may work in one kind of society may not work in another. Thus it is highly necessary, given policy proposals or alternatives, to make a rational kind of decision and this can only be done for a specific situation. The identification and description of relevant data should be directed towards the infrastructure of the educational problem and situation under study. However, a description of a social context would involve a statement of all the social institutions, and an account of all the geographical and demographic features of the society. Prediction is the final step in the problem approach. However, the difficulties associated with this task give rise to two dangers. The first is that one may fail to predict all the outcomes of a policy in a particular context. The second is that of paying attention to the predicted short-term consequences, to the detriment of long-term results. For accurate prediction, it is important to establish carefully certain criteria of success. Two principles of classifying outcomes must be taken into account. First, there are measurable outcomes in terms of social returns or the benefits or losses sustained by individuals. Second, in either cases, returns can be categorised as economic,
social class, political, educational and so on. 37

4.4 The Implication of 'Problem Approach' to this Study

The investigator attempts in the present thesis to follow the problem approach. However, the starting point has been imposed by a certain policy proposal adopted by the Egyptian Ministry of Education concerning the problem of the inadequate response of the secondary education to the changes taken place in the Egyptian society. This problem has been vaguely stated in this introductory chapter. Then it will be intellectualised in the second part of this study by identifying the changes and the relative non-change in the normative, institutional and environmental pattern of the Egyptian society. Through this problem analysis we attempt to define the inconsistency between changes in political and economic aspects on the one hand and secondary education on the other.

Following this is an examination of the Egyptian policy proposal to overcome such a problem. This is attempted by an investigation of policies and practice concerning public education in general and secondary education in particular.

Assuming that the countries under study (the United States, England and Sweden) having passed similar circumstances which imposed certain policies and offered particular solutions suitable to their initial conditions, an analysis of the forces behind comprehensive education movement will be made. The models of comprehensive schools in these countries represent the context of the study. These models will be examined regarding structure, selection grouping, and curriculum organisation and processes.

Finally, in the light of the comparative analysis, a proposed model will be drawn and prediction of the probability of its workability will be made. However, let us first examine the basic characteristics of a typical comprehensive school and then apply the four steps of the problem approach to the study.

5. Characteristics of Comprehensive School

A comprehensive school is a mode of organising secondary education in a given area under unitary control and preferably in a single institution. It is meant to help overriding the barriers between types of
secondary school and offering the possible variety of courses within the unity of an educational institution. Three basic characteristics of an ideal typical comprehensive school can be identified: it is non-selective, co-educational and a neighbourhood school. Here is a brief discussion of these characteristics.

First, education should not be a matter of competition. It is a matter of individual progress and raising of standard. Hence, each pupil should be given the opportunity to make the best of himself. The comprehensive school could provide the key to the difficulty of the competitive selection. Just as all pupils go to the same primary school, they can go on to the same secondary school. Within a comprehensive system, there is no need for any element of competition for entry. No pupil would feel any sense of having failed to gain entry to any particular school. No irrevocable decision is made at this particular stage in the child's life. In a comprehensive school the progress could be made smoothly and would be simply a matter of providing the facilities needed by this particular pupil. Bearing in mind that selective measures of all kinds are, to a varying degree, correlated with social background variables such as parental education and socio-economic status, a comprehensive school system would help to avoid the tendency of selection, as such, to give precedence to pupils with more favourable home backgrounds.

Second, an ideal comprehensive school is a mixed one because it should take both boys and girls of secondary school age in a given area. However, co-education is currently seen as a natural and obvious arrangement. It is desirable and advantageous for boys and girls - and men and women - to be educated side by side, and to learn to know and respect each other's point of view. It seems that few of those who have experienced its working, either as pupils or teachers would like to change to segregated schools. Co-education is now rarely challenged in the primary school, and is increasingly accepted in higher education, but in secondary schools is debatable. Reasons for preferring co-education are primarily in the areas of social and emotional development, especially that the two sexes train each other for entry into adult bisexual world. This is neatly summed up in this quotation:

"The best type of school is that which is a microcosm incorporating within it the essential features of
life in the world outside. Segregation of sexes is purely artificial. Education cannot claim to be a training for life unless it prepares the child to take his place naturally in the community of men and women."

It is agreed that the presence of girls improves the behaviour of boys, and it appears likely that girls behave better when they are with boys because they do not wish to do anything which might lower them in the eyes of the opposite sex. Dale argues that:

"There is evidence that the presence of girls in a class has the effect of reducing the use of physical force by masters and the pupil-teacher relationship becomes friendlier. The two sexes of pupils have a strong influence on each other, the boys becoming less boisterous and more polite and the girls less inclined to be catty and more sturdy. There is a sense of completeness instead of the deprivation which seems to be felt, consciously or unconsciously, in the one sex school."

However, not every comprehensive school is a mixed school. A minority of comprehensive schools are at present segregating pupils in some larger urban areas, where there are some separate schools for boys and girls.

Third, a genuine comprehensive school is a neighbourhood school. It tends to accommodate all the pupils in a given area. It is meant to serve its own community. The interaction between the comprehensive school and its neighbourhood is very dynamic. This is evident from the involvement of the community in the planning of the curriculum and from the active role of the school in developing the social aspects of the community. The examples of school/community co-operation are many, and stand upon the assumption that the school is the centre of life in its neighbourhood. The co-operation between comprehensive schools and homes, many community agencies, officers and institutions is essential. Such schools, through developing pupils' potential co-operation can also help their own communities. Thus neighbourhood connotes a wider task rather than an administrative procedure of accepting the population of secondary education in a given area.

So wide and controversial are the aims and functions of the comprehensive school that it is not our intention to argue or to examine them. However, in spite of lack of unanimity concerning these issues, one can
specify two fundamental principles gaining increased acceptance. First, it is generally agreed that the comprehensive school is regarded as an economic and practicable way of organising secondary education in sparsely settled areas. Second, it is not only regarded as a democratic means of ordering the post-primary schooling, but also as an essential provision for developing a democratic society. Since there is no unique model of the comprehensive school, we are going to examine comparatively in Part Four of this study three models of the United States, England and Sweden.
REFERENCES


7. The Charter, op.cit., p.17


24. Ibid., p.53
25. Ibid., p.51
26. Ibid., p.52


28. Holmes, B., Problems in Education, op.cit., p.74

29. Ibid., p.73

30. Holmes, B., Some Considerations of Method in Comparative Education: Student seminar papers, prepared under a Social Science Research Council personal research grant 1974/75, University of London, Institute of Education, Department of Comparative Education, 1978, p.89

31. Holmes, B., Problems in Education, op.cit., p.32
32. Ibid., p.73
33. Ibid., pp.74-5
34. Ibid., p.34
35. Ibid., p.92
36. Ibid., pp.42-3
37. Ibid., pp.44-5
38. King, H.R., 'Comprehensive School, a Pattern of Achievement,' in Forum, Special Number on the Comprehensive School, vol.5, 1962, pp.15-6
42. Ibid., p.227
44. Simon, Lady, Three Schools or One? Secondary Education in England, Scotland and the USA, London, Muller, 1948, p.8
PART TWO
PROBLEM INTELLECTUALISATION

In this part an attempt is made to analyse Egypt's problem concerning the inadequacy of secondary education to respond to the requirements of the development stage that Egypt has undergone since the 23rd July 1952 Revolution. Therefore, in this part we try to identify change and relative non-change in terms of normative and institutional change regarding justice, industrialisation and education.

Following Holmes's problem approach it is necessary to intellectualise the problem in order to sharpen "the foci of investigation" by concentrating on the concepts involved. Problem intellectualisation will also help to identify the relevant data and narrow the field of investigation. It can be argued that Egypt's problem concerning secondary education was created as a result of the great economic and social changes which have taken place since the July 1952 Revolution and the several forms of inconsistencies between (and/or within) the Egyptian values system and social institutions.

Therefore, in dealing with problem analysis, it is important to identify the change in relation to relative non-change in certain aspects of the Egyptian society such as justice, industrialisation and education, which are influenced by the revolutionary actions. The problem analysis covers Chapter Two and Chapter Three. The former deals with the normative change, and the latter deals with the actual changes.
CHAPTER TWO

NORMATIVE CHANGE

1. Policy of Justice
   1.1 Political Justice
   1.2 Economic Justice
   1.3 Social Justice
2. Policy of Industrialisation
3. Policy of Education
4. Consistency of Policies
5. Relative Non-change
6. Conclusion
NORMATIVE CHANGE

This chapter is confined to the analysis of the changes in the Egyptian normative pattern. The investigator attempts to examine the revolutionary documents, as well as other, though sparse, available literature on Egyptian society, in order to specify statements which define policies and attitudes towards justice, industrialisation and education. The chapter also tries to investigate the consistency of such policies since 1952 until now. It finally attempts to identify the relative non-change in the attitudes of the people towards large family, early marriage and manual work.

The year 1952, it is argued, separates two distinct periods in the history of the development of the country: the first is a period of stagnation which existed before the 1952 Revolution, and the second is the period of reconstruction and development which took place after 1952.\(^1\) The 1952 Revolution had to face a number of tasks, such as national independence, social justice, the transformation from an agricultural to an agro-industrial society and the introduction of science, technology and modern means of communication.\(^2\) In brief, the Revolution had to transfer the country from one age to another, and to change the economic structure and the social map of Egypt. The attainment of the revolutionary aims required big changes in most aspects of the society.

Though the Revolution started without a complete theory for change, six major goals were announced, on the eve of the Revolution, as a guiding frame for reform and progress, these principles were listed in the National Charter as follows:

"(1) Facing the lurking British occupation troops in the Suez Canal Zone, the first principle was: Destruction of imperialism and its stooges among Egyptian traitors.

(2) Facing the despotism of feudalism which dominated the land and those on it, the second principle was: Ending feudalism.

(3) Facing the exploitation of wealth resources to serve the interests of a group of capitalists, the third aim was: Ending monopoly and the domination of capital over the government.

(4) Facing the exploitation and despotism which were an inevitable consequence to all that, the fourth principle was: Establishment of social justice."
(5) Facing conspiracies to weaken the army and use the remaining part of its strength to threaten the internal front eager for revolution, the fifth aim was: Building of a powerful national army.

(6) Facing political forgery which tried to veil the landmarks of true nationalism, the sixth aim was: Establishment of a sound democratic system.

These principles were only a banner for the Revolution rather than a technique for revolutionary action or a method to follow for a radical change. However, Lenczowski points out that the early statements of the Revolution made it clear that its leaderships "were animated by the unselfish desire to see Egypt emancipated from imperialism and feudalism, and served by an honest government that would ensure social justice, economic progress and dignity to all citizens of the country."

Ages of suffering and hope gave shape to the aims of the new society and helped the nation to define its features which were based on freedom, socialism and unity. Freedom is "to mean freedom of the country and freedom of the citizen," socialism is to be "both a means and an end, namely sufficiency and justice," and unity is "the restoration of the natural order of a nation torn apart by its enemies against its will and interests." These objectives were manifestly expressed in realising "the society of sufficiency and justice" and establishing "the state of science and faith."

Analysing the policy statements as cited in the revolutionary documentations regarding justice, industrialisation and education, one can identify the normative change as follows.

1. **Policy of Justice**

   Justice is the sacred right of every individual. According to the National Charter

   "Justice should be accessible to every individual without material obstacle or administrative complications."

   Here justice is dealt with in a broad sense to include political, economic and social justice.
1.1 Political Justice

The Egyptian people refused the dictatorship of any class and decided that the dissolution of differences among classes should be the means to a real democracy for the entire people. They insisted to exercise democracy in a way which ensures political freedom for the whole individual. The National Charter defines democracy as follows:

"Democracy means the assertion of the sovereignty of the people, the placing of all authority in their hands and the consecration of all powers to serve their ends."

The freedom of man is considered as the greatest stimulus for progress and the important value to be held in the Egyptian society. The National Charter affirms that:

"Free man is the basis of a free society which he alone can set up. The freedom of an individual to shape his destiny, to define his position in society, to express his opinion, and by means of this thought, experiences and hopes to take an active part in leading and directing the evolution of his society is an inalienable human right which must be protected by law."

The new revolutionary conceptions of democracy have imposed themselves on the factors influencing the formulation of a citizen - most salient of which are education, regulations and administrative laws. Hence, education and laws must be redrafted to serve the new social relations brought in by political and social democracy. The revolutionary consciousness has comprehended that the political liberation of man cannot be achieved unless an end is put to every shackle of exploitation limiting his freedom. It has also believed that freedom of voting without freedom of earnings would become a form of deception misleading the people. Therefore, the concept of democracy has been tied to the concept of socialism. The Charter states:

"Democracy is the political freedom, while socialism is the social freedom. The two cannot be separated since they are the wings of real democracy."

The depth of the revolutionary consciousness together with the genuineness of the revolutionary will of the Egyptian people disclosed
the appalling falsehood which ruled the country in the name of the alliance between feudalism and the exploiting capital, and resulted in the deprivation of the masses. This consciousness and that will have outlined the form of a real democracy for the entire people as follows:

First, political democracy cannot be isolated from social democracy. No citizen can be regarded as free to vote unless he is given the following guarantees:

" - He should be free from exploitation in all its forms.
- He should enjoy an equal opportunity to have a share of national wealth.
- His mind should be free from all the anxiety likely to undermine the security of his life in the future."

When a citizen possesses these guarantees he can be said to have political freedom and can take part, by means of his vote, in shaping the authority of the state he aspires to have.

Second, political democracy cannot exist under the domination of any one class. The inevitable and natural class struggles cannot be ignored or denied. But the dissolving of class distinctions should be peacefully achieved within the framework of the national unity. The revolutionary experiment has proved that it is indispensable that the Revolution should undertake to liquidate the force of reaction and prevent it from making any attempt to come back to power and direct the state machinery to serve its own interests. Because of their monopoly of wealth, reactionary interests are bound to clash with the interests of the whole people. Consequently, the peaceful resolution of class struggle cannot be attained unless the reactionaries are first and foremost deprived of all weapons. The revolutionary experiment has come to the conclusion that the collaboration between the force of reaction and exploitive capital must therefore collapse, and the road must be paved for democratic interaction between the various working powers of the people, namely, farmers, workers, soldiers, intellectuals, and national capital. The co-operation between the powers representing the working people is capable of replacing facade democracy by a true one.

Third, the national unity created by the co-operation of the representative powers of people has resulted in a need to establish a new
political organisation capable of defending the values of democracy and representing the entire people. It is believed that political organisation ought to fairly represent the power of the majority of the population, those who have, for long, been exploited. The Charter states

"It is only just and fair when the farmers and workers will get half the seats in political and popular organisations at all levels and have the right to shape and direct their future."

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Fourth, popular organisations, especially co-operatives and trade unions, can play an effective and influential role in promoting a sound democracy. These institutions should form a vanguard force in the various fields of national democratic action. It is believed that the development of such organisations provides an endless source to the conscious leadership that directly feels the reactions and responses of the masses.

Fifth, criticism, especially self-criticism, is the most important guarantee of freedom. The exercise of criticism always gives the national action an opportunity to correct and adjust itself to its great objectives. Hence, freedom of speech is considered the first premise of democracy, therefore, all guarantees should be provided for freedom of press, which is the most outstanding form of freedom of speech.

This frame of democracy, however, was fettered by the appearance of power centres, and these ideas of freedom lost their meaning by the existence of doubt, fear, hatred and grudges. Aiming at eliminating the centres of power and rectifying the path of the 1952 Revolution, the Corrective Measures of May 1971 were a fundamental necessity. The important objectives of these measures as stated in the October Working Paper are

"assertion of the sovereignty of law, respect for the judiciary, establishment of the state of institutions and the laying down of safeguards through which a citizen can know his rights and duties clearly and easily, and practice them fearlessly."

15

Thus, the important value of democracy is that everyone should feel secure in his day and his future, and should feel safe with regard to himself, his family, his opinion and his fortune. Democracy is not mere words but a practical daily experience. Democracy cannot be practised in a vacuum but has to have a framework that helps to define the attitudes
which involve the political, economic and social affairs of the homeland. The following quotation reveals the consistency of the ideas of freedom and the pattern of democracy that have been exercised since the 1952 Revolution. President Sadat says:

"I reject the call for the breaking up of the national unity in an artificial way through creating parties. But I also do not accept the theory of one party which imposes its tutelage on the people and takes away freedom of opinion, depriving the people of actually exercising their political freedom. Therefore, I am keen on maintaining the alliance of the working power of the people as the proper framework of national unity in which all the powers of the alliance express their legitimate interests and opinions ... The political organisation should be a crucible for dialogue in which conflicting ideas fuse, and attitudes which truly express the desires of the wider popular base crystallise."

1.2 Economic Justice

The Egyptian economy before 1952 was based on private enterprise. Distribution of both income and wealth was extremely unequal. Government policies were on the whole passive and mainly designed to promote the interests of the big landowners, merchants, and industrialists or the Royal Family. However, some modest measures introduced by the old regime shortly before its fall, proved insufficient to cope with the growing population and inadequate to realise an economic justice.

The economic policies since the revolutionary era have been strongly influenced by both domestic and international considerations. The revolutionary leaders made their early economic decisions in a pragmatic and largely conservative manner. Except for the land reform (the only drastic innovation initiated in 1952), the revolutionary government moved, in all other fields, slowly and carefully to restore economic stability created under the old regime. 17

Agrarian reform, as a device to bring about greater social equality and to promote dynamic agricultural policies, commonly refers to a variety of measures such as land redistribution, change in the status of tenancy and agricultural labour, creation of agricultural co-operative organisations and land reclamation. 18 The agrarian reform has directed the agricultural
policy towards achieving the following goals:

1. Imposing a maximum ceiling on landownership and correcting the lopsidedness of the agrarian structure.
2. Redistributing land in excess of the legal limit. Priority to be given to those farmers who actually cultivate the land, whether as full tenants, sharecroppers, or farm labourers; thereafter to the inhabitants of the village with the largest family and to the poor inhabitants; and finally to the farmers living in the vicinity.
3. Legislating the condition of tenure farmers and sharecroppers, and establishing agricultural labour unions.
4. Forming the co-operative organisations to prevent fragmentation of landownership.
5. Submitting land reclamation by private individuals or companies to the State supervision and control.19

The economic policy of the revolutionary government, until the nationalisation of the Suez Canal in 1956, was quite traditional. Though there was a certain modernisation of both monetary and fiscal policies and introduction of some direct regulations in the field of foreign trade, none of these were effective in accelerating the rate of development.20 Moreover, these measures could not guarantee equal rights of wealth or any further amelioration in the conditions of the masses. The gains were enjoyed only by a small minority of the people who squander them on various forms of wasteful luxury.21

Aiming at creating a form of economic equality among the citizens and removing the effects of a minority monopolising all the opportunities at the expense of the majority, the Revolution, since 1960, has adopted a socialist economic policy. A socialist solution to the problem of economic and social backwardness in Egypt - with a view of achieving progress in a revolutionary way - was considered inevitable. The National Charter states that:

"The socialist solution was a historical inevitability imposed by reality, the broad aspirations of the masses and the changing nature of the world in the second part of the twentieth century."

22

The nature of the age no longer allows repetition of either capitalist
experiments which achieved progress through imperialism nor other experiments of progress which realised their objectives at the expense of increasing the misery of the working people or sacrificing the whole living generation for the sake of the still unborn. The National Charter asserts that:

"Progress through looting or through the forced labour system is no longer tolerable under the new human values. These human values put an end to colonialism and an end to the forced labour system ... Scientific socialism is the suitable style for finding the right method leading to progress."

The 1952 Revolution has considered that the socialist solution provides the way leading to economic and social progress and the way to democracy in its social and political forms since it meant sufficiency and justice.

Therefore, economic policies have changed rapidly since the nationalisation of the Suez Canal. The government, after the sequestration and nationalisation of British and French property, found itself, more by chance than design, with the main part of the banking and insurance system in its hand. This, however, helped the government to change the economy of Egypt into a controlled capitalistic economy. By 1960, the government apparently gave up the idea that private capital could be attracted in sufficient quantities to finance the ambitious programmes of industrial development. Consequently, large scale nationalisation took place in 1960 and 1961 which brought the bulk of big industry and the wholesale trade under government ownership. This policy was considered as

"a nationalist measure designed to rid the country of foreign influence over the investment policies of Egypt's financial institutions."

It was argued that Egyptianisation and nationalisation gave back to the citizens the right to manage their own capital and placed the State in a strong position to control the main channels of finance. Wilber, for example, points out

"The government moved abruptly from government participating with private capital in industry to government control of most facets of the economy outside agriculture."
The socialist framework carefully set up the July Laws wiped out the vestiges of exploitation and left the door open to individual investment which would serve the general interest in the field of development. The July 1961 Laws aim at realising two basic goals: the dissolution of class distinctions, and the establishment of an efficient public sector owned by the people to shoulder the responsibility of development. These aims, it was argued, were not to limit individual initiative nor to put an end to the individual investment, but rather to prevent individual exploitation. The National Charter states:

"Those who claim that the July Laws restricted individual initiative are committing a grave error. Individual initiative must be based on work and risk ... Just like public capital, private capital, in its new role, must realise that it is subject to the directive of the popular authority according to its needs."

Nationalisation is the transfer of the means of production from the sphere of private ownership to that of public ownership. However, the people's control over the tools of production does not necessitate the nationalisation of all means of production neither does it incline to abolish private ownership. The non-exploiting form of private ownership was acknowledged and largely invited to participate in the national development plans.

Thus, since 1961, Egypt has had a mixed economy with public and private sectors. The views of the National Charter concerning the extent of the role of both the public and the private sectors can be summed up as follows:

1. The major skeleton of the production such as railways, roads, ports, airports, the potentialities of driving force, the dams, means of sea, land and air transportation and other public services should be within the framework of public ownership.

2. The majority of the heavy, medium and mining industries should be part of public sector. Though light industry is open to private ownership, the public sector must have a role to guide their policies to the people's interests.

3. Foreign trade should be under the people's full control. Here all import trade lies within the framework of the public sector. Though
it is incumbent upon private capital to participate in the export trade, the public sector should be in charge of three quarters of the exports. The private sector shoulders the responsibility of the remaining shares.

4. The public sector should be in charge of at least one quarter of the internal trade to prevent monopoly and expand the range of internal trade before private and co-operative activities.

5. Banks should be within the framework of the public ownership. The role of capital is considered a nationalist part and should not be left to speculation and adventure.

6. Insurance companies should be within the framework of public ownership for the proper mobilisation and investment of a major part of national savings.

7. Land and building ownership are mostly in private hands. Yet, the agrarian reform and the laws of progressive taxation together with reducing rents place the ownership of building and rural land beyond exploitation.

Previous experiences, however, have proved that although the public sector has, in many cases, undertaken the initiatives, the private sector has, to some extent, played an active role in the economic development.

The revolutionary consciousness has believed that the citizens are, in the final analysis, the main guarantee for the achievement of the ambitious revolutionary goals. The workers are no longer commodities in production processes, but have become masters of the production process. They were given shares in the administration and profits under the best terms of wages and working hours. The right for work in itself is seen as the right for life. It is the actual confirmation of the existence and the value of human beings. The citizens have been secured the jobs which accord with their abilities, interests and the type of education they received. Besides being of economic importance in a man's life, work is an assertion of human existence. In this respect, it is indispensable that there should be a legally sanctioned minimum wage, similarly, there should be a maximum of income fixed by taxation system. Affirming this the National Charter says:

"Labour is honour, Labour is power, Labour is duty. Labour is life, Human Labour is the only key to progress."

31
The Egyptian policy regarding the development of manpower aims at increasing its capacity to work and improving its human potential through culture, education and training. It is acknowledged that economic development cannot proceed effectively unless accompanied by social development at comparable rates.

To sum up, two principles have directed the economic policies and decisions since the 1952 Revolution: improving living standards for the present generation, and developing industry for the sake of the future generations. Socialist economic policy was seen as the best way to provide the deprived masses with a dignified means of life, security and justice.

No major change has taken place in this view. Thus the October Working Paper has reaffirmed socialism as the followed pattern of social and economic development in Egypt.

"Egypt as a socialist State fundamentally regards itself responsible for all its sons, the weak and the strong, responsible for giving them equal opportunities, securing their right to work, providing them with social services, insurance, and medical care."

Despite the severe attack directed to the public sector because of its shortcomings and deviations, recent economic policy has restored the leading role of the public sector in securing economic independence of the country. President Sadat says:

"We want further orientation for the public sector ... to rid itself of obstructions and procedures which reduce its efficiency. This is a basic task that we should undertake without delay."

The private sector has been given fundamental measures to enjoy security and stability. The basic change has been the adoption of the open-door economic policy. Thus a trend toward liberalisation of the Egyptian economy has developed. Different measures of encouraging foreign and Arab investments have been adopted. Many observers, however, have expressed their views concerning the negative consequences of such a policy on fostering economic and social justice. As Binder points out:

"Economically, Sadat has put his hopes on both politically induced foreign investment and the role that Egypt can play as broker between Europe and the Persian Gulf. A liberalised domestic economy is an important component of this policy and it is also justified by widespread disappointment with the results of Nasserist socialist policies."
1.3 Social Justice

With regard to social justice the immediate aim of the 1952 Revolution was to make possible the exercise of the natural right to have equal opportunity and to dissolve class distinctions. The revolutionary consciousness has believed that social freedom cannot be realised except through providing an equal opportunity for every citizen to obtain a fair share of the national wealth. The National Charter affirms that "Justice and efficiency are the way to social freedom." 35 The concept of social freedom has been defined as basic rights for every citizen. All efforts, according to the National Charter, must be devoted for the realisation of the following rights within the concept of equal opportunities. 36

First, the right of each citizen to medical care whether treatment or medicine would not become a commodity for sale and purchase. It would become a guaranteed right, independent of price. This care should be within the reach of every citizen, in every part of the country, and in all circumstances. Health insurance must be expanded to cover all citizens.

Second, the right for insurance against old age and sickness must be provided on a much larger scale so that protection is afforded to those who have taken their share in the national struggle.

Third, women must be regarded as equal to men and must, therefore, shed the remaining shackles that impede their free movement so that they might take a constructive and profound part in shaping life.

Fourth, the right to work.

The revolutionary government has noticed that all the experiments in the field of development go to prove that sheer material progress, though important, is insufficient by itself to improve man's condition or to effect any real change in his life. Therefore, it becomes essential to pay attention to other aspects that contribute to man's formation. The October Working Paper states that:

"It is our duty toward the Egyptian citizen to prevent his falling into illiteracy, disease or backwardness. We should offer him the full chances to develop so that he may give of his best to his country." 37

Achieving social justice requires in the first place an equal concern of both village and town. The village has been, for long, deprived of
social services. Accordingly, the social development policy has devoted due attention to the rural areas. The National Charter affirms

"The village should reach a civilised level is not only a necessity imposed by justice, it is one of the fundamental necessities of development. The town has a moral responsibility towards the village, it has to undertake and accomplish serious work in the village without any feeling of superiority."

There is, however, no major change in such policies of justice. The proposals for the purpose of Egypt's progress through the last quarter of the twentieth century takes into consideration both economic and social aspects of development. They aim at affording maximum employment opportunities, providing health care, and reasonable dwelling at rents corresponding to the standard of income. President Sadat expresses his point of view about social justice by stating

"My aim remains that the State should not be satisfied with only liberating the capacities of its sons by removing barriers and restrictions, but should proceed to offer them welfare and protection by providing a comprehensive social security umbrella ... until ... every individual is protected by its shelter."

Thus, social security; unity of family; right of work, education, worship and expression; supremacy of the sentiments of amity; and the rejection of grudges and hatred are the most salient values of the Egyptian society which can be achieved by social justice.

2. Policy of Industrialisation

In 1952 Egypt was a predominantly agricultural country with nearly three-quarters of its population (70%) living in rural areas; most of its exports (90%) and a large share of its national income (30%) were drawn from agriculture, which employed 63.2 per cent of its active population and absorbed 66 per cent of the national capital. Despite the efforts to industrialise the country, industry played only a minor role in the national economy, and the agricultural economy had miserably failed to keep pace with the ever-increasing demographic pressures that Egypt has faced since 1952.

The revolutionary government at first tried to rely as much as possible on agricultural development to foster Egyptian economic growth in the short
The agricultural policy which was adopted aimed at securing a horizontal expansion of production through an enlargement of the cultivated area and a vertical expansion through an intensification of agricultural production. But when a general appraisal of the economy was made in 1959, the agricultural sector proved to be unable to realise the required growth. Issawi points out that

"In seven years, the general index of agricultural production which had stood at 110 in 1952, had only risen to 136."

Moreover, official statements in 1959 disclosed that the rate of growth in the agricultural sector during the period 1952-1959 had only been 2.8 per cent per annum (compared with 4.5 per cent in all sectors during the same period). Acquiring new land for cultivation is quite difficult since the desert covers 96 per cent of the country's territory, and the possibilities of a horizontal agricultural expansion are limited by the available water resources and the exorbitant cost of land reclamation in certain areas. Hence, development of new land has been a slow process. The average development per year was 2.25 thousand feddans during 1932-1952, 9.8 thousand feddans during 1952-1960, and 30.9 thousand feddans during 1960-1970. With the rapid rate of population growth, the per capita cultivated land has declined by twenty times in the last sixty years. It dropped from 2 hectares in 1897 to 0.09 hectares in 1960. It became evident that the disparity between land and human resources was to be bridged by industrialisation. Hansen and Marzouk argue that "industrialisation is necessary to obtain a satisfactory rate of growth in Egypt."

Thus, the greatest hope is laid on industry to face the demands of the increasing millions of population in Egypt. The need for more intensive industrialisation was more serious because the rapid increase in population in relation to the very limited area of land available for cultivation made the prospects of satisfactory livelihood very poor. Warriner, commenting on the necessity of industrialisation, says:

"without a continued further expansion of the Egyptian industry ... it is impossible to look for any improvement in their (the peasants) conditions."

Industrialisation is not only necessary to meet over-population and occupational maladjustment, but also to raise the standard of living.
The revolutionary consciousness has recognised that industry is the strong support of the national build-up. It is capable of realising the greatest hopes in the fields of social and economic evaluation. The doubling of the national income every ten years, as a major objective of the revolutionary government requires a rate of economic development exceeding the rate of population increase. This aim is difficult to be attained without due effort in the whole field of production particularly industry. The National Congress of the Arab Socialist Union in July 1971 affirmed that

"Industry bears the major responsibility of realising the objective of doubling the national income in ten years."

Deep awareness of the necessity of industrialisation was comprehended by the revolutionary leaders and reflected in the government's economic policy. President Nasser, commenting on the importance of industrialisation, said:

"Industry and heavy industry in particular becomes the real source of hope for the achievement of comprehensive advance which is Egypt's goal."

President Sadat in the October Working Paper asserts Egypt's real need for industrialisation:

"Needless to say that Egypt's future depends on industrialisation .... Our main hope for providing our increasing millions of people with food lies in Egypt's ability to export enough of its industrial products in return for the needed food supplies."

The fields of industry in Egypt are unlimited. Egyptian industry could extend all over the country. The approach of the Egyptian industry is drawn in the National Charter as follows:

"Our approach to industry must be deliberate, and must take into consideration all social and economic issues in the great battle of evolution ... Special care should be devoted to consumer industries. Apart from offering numerous possibilities of work, those industries meet an important share of consumer demands and save important sources of foreign currency."

Industrial policy is drawn up to achieve the development targets. Such industrialisation would afford significant work opportunities. The
philosophy of the industrial policy in Egypt is based on realising the balance between heavy and consumer industries. Although the former provides the solid foundations to the industrial set-up, it must not hamper the progress of the latter. The policy of establishing free-trade zones, which has been adopted since the October War 1973, is hoped to introduce new industries, contribute to manpower employment, and provide Egypt with world storing and distribution centres on account of its outstanding geographical position. It may also serve to speed up, develop and modernise the national industries. The industrial policy takes into consideration several targets to guarantee good quality and low costs such as: vocational training for raising the productive capacity and efficiency of workers; standardisation of both quality and precision by means of standard specifications for raw materials, for products, and performance; and specialised centres for industrial research for promoting methods of production.

In brief, the aims of the Egyptian industry are to achieve rapid development, on a well-studied and planned basis, in order to ensure the continuous promotion of the standard of living, and to provide employment opportunities for the new abilities seeking work. These optimistic objectives are not an easy task to be attained. There are many difficulties, most salient of which are the acute shortage in investments, and the lack of skilled manpower.

3. Policy of Education

Social injustice which prevailed in Egypt in the pre-Revolution era was reflected in educational opportunities. Due to the fees imposed on modern education, the privileged classes could afford better educational chances for their children while the majority of the people - who suffered poverty - had only elementary schooling. The reactionary rulers had to make sure that educational concepts expressed their own interests.

Believing that education is the natural prelude to the success of any political, social or economic system, the 1952 Revolution has paid much attention to the process of education. Mansfield argues that

"Most newly independent countries regard education as the key to development and progress."
The revolutionary leaders were convinced that the British educational policy in Egypt, combined with the attitudes of the reactionary rulers towards education had deliberately stifled education and starved it of funds. Thereupon, the Revolution's educational policy has fundamentally been to make education free of charge in order to guarantee and supply education to every citizen regardless of poverty or richness. The revolutionary regime increased the educational opportunities until it was opening new schools at the rate of two every three days in the fifties. 58

Foreign schools, which produced a social and cultural elite in Egypt before 1952 were regarded as a reason of Egypt's worst social evils. Despite the standards of such schools often being the same as those of the best in Europe, Egyptian boys and girls who went there frequently prided themselves on not being able to read or write Arabic. In addition, they felt no sympathy for the great masses of their fellow countrymen. Since 1956, these schools have been either nationalised or put under close State control. They were forced to change their curricula to conform with the State system. 59

Usually educational policy stems from the State's general policy. Thus, it differs and changes according to the circumstances and requirements of this general policy. Formerly, educational policy in Egypt aimed at serving certain limited objectives which completely differed from the actual requirements of the country. The socio-economic changes that Egypt has undergone since 1952 naturally reflect on education. These changes have imposed fundamental amendments on the educational policy in order to achieve the stated objectives. The revolutionary regime claimed that the aim of education is no longer to turn out employees who work in government offices. Education should aim at enabling the individual human being to shape his life. It is the means of consolidating and honouring human freedom. 60

Thus the 1952 Revolution has identified the general aims of education as follows:

"The theme of education is that of creation of every citizen. It is also the theme of social behaviour of a group of citizens. It is innovation in art, creativity in learning and development and evolution in all fields of work and in all cultural phenomena. It is the training of the soul, mind, body, conscience and inculcating faith in every individual so as to build up a democratic society which believes in God, in the
nation and respects dignity, justice and equality."

The October Paper draws up the aims of general education and culture as follows:

"Education and general culture should acquire two targets. First, to create the enlightened, educated individual, more understanding of, and in harmony with, his society and age. Second, to provide him with precise and advanced skills, to enable him to carry out the role compatible with such skills in various work and production centres of his country."

The Revolution has recognised that science is the key for progress. The ability to master the various branches of science is considered the only open door before Egypt to compensate for underdevelopment. Accordingly awareness of the function of education of developing both the society and individuals has been expressed in the revolutionary documents. The October Paper asserts the importance of education in serving the society by stating:

"Education is no longer limited to rigid study curricula which the student must absorb. It has become organically linked to the action and requirements of the society."

The National Charter also defines the responsibility of the universities and scientific research in shaping the future of the society. It states

"Universities are not ivory towers, but rather forerunners discovering a mode of life for the people ... The scientific research centres are required to develop themselves so that science would be in the service of the society."

The National Charter has also affirmed the right of every citizen to acquire education in accord with his ability and aptitude. It says,

"Equal educational opportunities will be provided to all citizens regardless of class or sex."

Thus, educational policy in Egypt has been elaborated in a way so as to contribute to the realisation of development and modernity. Such a policy has been drawn up in the light of the principles of several official documents, such as the National Charter of 1962, the Programme of National Action of 1971, the October Paper of 1974, the Government's Statement made...
at the People's Assembly in 1975, and the Report of the National Council for Education, Scientific, and Technology on the session for the years 1974-75-76. The most salient of these principles can be briefly stated as follows:

1. Regardless of social status, sex, or religious creed, every citizen has a right to education as far as his or her mental abilities will allow.

2. In view of its social, economic, cultural, national and civilising features and effects, education is a functional controlling process in society.

3. Democracy of education is no longer conformed merely to compulsory schooling. It has extended to a wide comprehensive concept which functions to: provide equal opportunities to all children so as to alleviate differences stemming from income and cultural deprivation; ensuring balance and equity in education between rural and urban areas, regarding opportunities, material and human resources, and other facilities; and reconsidering the duality of types of education in order to eliminate class distinctions between academic and technical education.

4. Becoming a popular movement, education has to satisfy the requirements of producers, consumers and pressure groups. Thus, teachers, parents and students as well as personnel in economic, social and political institutions are entitled to co-operate in charting the educational policy. 66

Educational policy has also been formulated and adopted in a long term strategy for education aiming at:

1. Suppression of illiteracy and blocking its sources by spreading the full compulsory education and raising the standard of performance by every possible means.

2. Improving the quality of education by revising the curricula in terms of aims, content, teaching methods, educational aids, textbooks and methods of evaluation and examinations.

3. Increasing the capability of education to meet the needs of the community and the requirements of the overall development plans through the revision of the ramification system in secondary education and the extension of the obligatory education age to the post-primary stages.
4. Realising the financial and administrative autonomy of universities, higher institutions and research institutes, as well as consolidating these establishments with the required qualified academic staff, and revising their objectives and processes.

5. Promoting other types of informal education and ensuring the implementation of a self-education system by establishing corresponding education for all levels and fields.  

In the light of these principles, the Five Year Educational Plan (1978-82) outlined aiming at putting these policies into action. This plan which covers nearly all aspects of education at all levels can be summarised as follows:

1. Providing equal chances to all children in order to secure their right for education at all its stages, each according to his or her own potentialities, aptitudes and interests.

2. Inculcating the spiritual, behavioural, pedagogical and the scientific approach in the students' thinking.

3. Meeting the requirements of the comprehensive development plans for trained manpower, equipped with the essential values and skills.

4. Raising the standard of education by improving its quality, eliminating the wastage and introducing pedagogic innovations and by linking curricula with the environment and the objective of the community.

5. Giving talented students their due attention and the handicapped special care.

6. Eradicating illiteracy and attempting to efface its causes.

With regard to higher education, the adopted policy has aimed at securing equal opportunity of admission to the universities or higher institutions according to the marks obtained in the general secondary school examination, and increasing the chances of higher education through the establishment of the regional universities all over Egypt. Linking the higher educational policy with the socio-economic development, it has been necessary to increase the rate of admittance in the practical faculties in order to supply the necessary skilled persons for carrying out the projects of the development plan. The Government has stipulated that at least 60% should enrol in the scientific faculties and 10% in teacher training institutions. Eventually, in attempting to face the influx to
Due attention has been given to the scientific research centres. President Sadat, commenting on the importance of spending a great deal of money on scientific research and the connected direction of those researches to the society, said:

"I consider expenditure on technological and scientific research as investment in heavy industry, because not only does it help development, it also guarantees its continuation and raising rate in the long run. But like any investment it must be guided ... by tying their activities to the requirements of the society ... Scientific and technological research should adapt important technology to the Egyptian reality and find real solutions to our problems."

Educational policy does not neglect the provision of training. Training has been regarded as a means of providing labourers with the skills required for their work. Due attention has been paid to the industrial and vocational training centres. The Ministry of Education strongly co-operated with other ministries to carry out different cultural and vocational training programmes. The October Working Paper states that:

"Training should be the means of raising the efficiency of the worker, enabling him to acquire new skills and moving from one profession to another."

Recently, a continuous acquiring of knowledge and means of active production has become imperative. Otherwise, the educated person will find himself backward compared to the explosion of knowledge. To achieve this target, it has been proposed to modernise public libraries, as well as the libraries of the universities, institutions, and research centres. This task requires the import of modern and up-to-date books, magazines and periodicals. In addition, all means of modern science and technology should be collected, stored and distributed in order to raise the standard of knowledge, research and training in schools, universities and institutions.

4. **The Consistency of Policy**

The aforementioned policies regarding justice, industrialisation and
education have been consistent since 1952 until now. There is no radical change in such policies. Basic principles, it is argued, do not easily change, otherwise they would not have risen to the level of principles. Only the procedures of implementation which could be easily changed. Thus, the documents of the 1952 Revolution do not revoke, but supplement each other. The basic principles of the National Charter of 1962, for instance, have become an intrinsic part of the Permanent Constitution of 1971. As regards the political freedom and political justice the Constitution states:

"The Arab Republic of Egypt is a democratic socialist State based on the alliance of the working forces of the people.

The Arab Socialist Union is the political organisation which represents, with its formations based on the principles of democracy, the alliance of the people's working forces from the farmers, workers, soldiers, intellectuals and national capital.

Individual freedom is a natural right and shall not be touched. Except in cases of 'flagrante delicto' no person may be arrested, inspected, detained or his freedom restricted or prevented from free movement except by an order necessitated by investigations and preservation of the security of the society.

Freedom of opinion is guaranteed, every individual has the right to express his opinion and to publicise it verbally or in writing or by photography or by other means within the limits of the law.

Freedom of the press, printing, publication and mass media shall be guaranteed, censorship on newspapers is forbidden as well as notifying suspending or cancelling them by administrative methods ..."

As regards the economic system and economic justice the Constitution states:

"The economic foundation of the Arab Republic of Egypt is the socialist system based on sufficiency and justice, in a manner preventing exploitation and aiming at liquidating class differences.

Work is a right, a duty and an honour ensured by the State ... No work shall be imposed on the citizen, except by the virtue of the law, for the performance of public services and in return for a fair remuneration."
Every citizen shall have a share in the national revenue to be defined by the law in accordance with his work or his unexploiting ownership.  

The workers shall have a share in management and profits of the projects ...  

Ownership shall be under the supervision of the people and the protection of the State. There are three kinds: public ownership, co-operative ownership and private ownership.  

The law shall fix the maximum limit of land ownership with a view to protecting the farmer and agricultural labours from exploitation ..."  

As regards social justice the Constitution states that:  

"Social solidarity is the basis of the society.  

The State shall guarantee equality of opportunity to all citizens.  

The State shall guarantee cultural, social and health services and work to ensure them for the villages in particular in an easy and regular manner in order to raise their standard.  

The State shall guarantee social and health insurance services and all the citizens have the right to pensions in cases of incapacity, unemployment and old age, in accordance with the law."  

As regards education and scientific research the Constitution affirms that:  

"Education is a right guaranteed by the State. It is obligatory in the primary stage and the State shall work to extend obligation to other stages. The State shall supervise all the branches of education and guarantee the independence of universities and scientific research centres, with a view to linking all this with the requirements of society and production.  

Religious education shall be a principal subject in the course of general education.  

Education in the State educational institutions shall be free of charge in its various stages.
Combating illiteracy shall be a national duty for which all the people's energies should be mobilised. The State shall guarantee the freedom of scientific research and literary, artistic and cultural invention and provide the necessary means for its realisation."

With the October War 1973 Egypt has embarked on a new stage, namely the stage of construction and progress or the stage of work and prosperity. The national action in this stage is moving in two directions: first, clearing the national experiment of all negative aspects which impede its drive. Second, coordinating between the national action movement and the new circumstances in which Egypt and the world around are living. President Sadat sums up the main tasks of this stage, which expresses the same ideas with no radical change, as follows:

"(1) Economic development at rates that exceed all we have achieved up till now.

(2) Preparation of Egypt for the year 2000 so that means of continued progress may be secured for the coming generation.

(3) Outward looking economic policy at home and abroad to provide all guarantees for funds invested in development.

(4) Effective and comprehensive planning which guarantees the realisation of the great goals of society through science and knowledge.

(5) Consolidation and realisation of the public sector. Thus enabling it to take the lead in development.

(6) Social development and the building up of man.

(7) Entering the age of science and technology.

(8) Civilisational progress based upon science and faith.

(9) An open society which enjoys freedom.

(10) A secure society in which the citizen enjoys peace of mind as to his present day and his future."

However, in such a changing society as Egypt, one can predict a stable policy with no long-term certainty. The degree of consistency and stability in political, economic and social policies in Egypt is uncertain. The new policies which President Sadat has adopted after 1973 put Egypt at the crossroads. As Binder puts it:
"He (Sadat) has moved toward the right, restoring some political influence to the members of the urban middle and upper classes. He has opened Egypt to foreign private investment, especially encouraging the influx of Arab capital. He has restricted the influence of doctrinaire leftists, and he has tolerated some assertiveness on the part of traditionally religious groups. Students and workers have been carefully watched, but not yet suppressed in a consistent manner. Some land has been restored to its original owners after having been illegally sequestrated under the land reform decree."

There is no doubt, therefore, that some changes are taking place, but it is not clear that these changes have gone so far, or will ever go so far, as to affect significantly the socialist benefits. Although speculation of the political, economical and social future of Egypt is difficult, one may consider three alternative configurations which Binder has suggested in the conclusion of his study on political power in Egypt.

The first alternative emerges out of some of the policies already being pursued to "de-Nasserise" Egypt. This may take Egypt's history back to 1952 by establishing a bourgeois state. Policies to accomplish this programme would be directed, as Binder has predicted, to dismantle the ASU and institute a multi-party system. Many consequences would follow. In Binder's words,

"freedom of expression must be guaranteed to those who can pay for it - at least, corporativism is to be diminished, the public sector of the economy is to be denationalized, and agriculture is to become more highly capitalized and less labour intensive."

This alternative would require a coalition of the urban bourgeoisie and elements of the rural class. To this end, Binder argues,

"it would be necessary to combat the 'new class' of bureaucratic feudalists and apparatchikis, to separate the new class from the armed forces, and to press policies of stimulating economic development, the redistribution of land by means of market mechanisms and bringing about a 'green revolution'."

The second alternative that Egypt might choose in its future puts far less emphasis on class structure and much more on the development of representative institutions. This policy would be directed to strengthen
political democracy and political participation as a means of overcoming the alienating consequences of the existing social, economic and cultural gaps among Egyptians. To achieve this policy Binder suggests several necessary changes:

"to legalize a multiparty system, to restore legislative power to the parliament, to guarantee the independence of the judiciary and to end press censorship. It would also be necessary to decentralize the administration of economic matters and to diffuse development in regions more distant from Cairo and Alexandria."

The third alternative suggested by Binder to the future of Egypt is the already familiar Nasserist formula. It depends largely on mobilisation. Its goals are modernity and development with particular emphasis on enhancing the capacity of the State administrative and military organisations. Policies, accordingly, would be directed to

"increasing the size of public sector, integrating economic and bureaucratic structures, controlling political activity through a national rally or union, maintaining a government monopoly over the media, and organising the occupations and professions in corporativist structures."

However, one may conclude that although the proclaimed statements seem to advocate the second alternative, the observable evidence of the actual practice suggests that the Egyptian authority is going carefully and cautiously towards the first alternative.

5. Relative Non-Change

The attitudes of the people towards early marriage, large family and manual work did not witness any significant change. The custom of marriage at early age is still a dominant habit in Egypt, especially in rural areas. Though the minimum legal age for marriage in Egypt is 16 for females and 18 for males, many females get married before the age of 16 and approximately 30% of reported marriage is below the age of 20 for females. This is evident from the following table which shows the percentage distribution of females of marriageable age by age group and marital status.
TABLE 2.1: PERCENTAGE OF FEMALES OF MARRIAGEABLE AGE DISTRIBUTED BY AGE GROUPS AND MARITAL STATUS IN 1966

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Never Married</th>
<th>Married</th>
<th>Divorced</th>
<th>Widowed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20</td>
<td>69.7</td>
<td>29.3</td>
<td>0.8</td>
<td>0.2</td>
<td>100.0</td>
</tr>
<tr>
<td>20 -</td>
<td>15.9</td>
<td>80.9</td>
<td>1.9</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>30 -</td>
<td>3.1</td>
<td>89.9</td>
<td>1.9</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>40 -</td>
<td>2.1</td>
<td>80.1</td>
<td>1.8</td>
<td>16.0</td>
<td>100.0</td>
</tr>
<tr>
<td>50 -</td>
<td>2.1</td>
<td>58.2</td>
<td>1.8</td>
<td>37.9</td>
<td>100.0</td>
</tr>
<tr>
<td>60 or more</td>
<td>2.5</td>
<td>23.8</td>
<td>1.3</td>
<td>72.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Egypt, CAPMS, Population and Development: A study of the population increase and its challenge to development in Egypt, Cairo, Nasser City, CAPMS, 1973, p.77

This attitude may be attributed to the traditional disapproval of celibacy; the almost obligatory nature of marriage and the prestige and legal advantages enjoyed by married women.

Educational awareness may play a vital role in delaying marriage age. A study of the relation between the marital status and the education attainment, related to the 1966 population census, revealed that the percentage of never married persons among illiterates was 13.4%, against 61.5% among intermediately educated persons and 36.8% among persons who received higher education. The corresponding proportions of married persons were 72.5% among illiterate, 37.1% among intermediately educated persons, and 61.5% among highly educated persons.

The following table shows the relation between marital status and level of education:

TABLE 2.2: PERCENTAGE DISTRIBUTION OF THE POPULATION OF EGYPT BY MARITAL STATUS AND LEVEL OF EDUCATION IN 1966

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Illiterate</th>
<th>Read and Write</th>
<th>Intermediate Education</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never married</td>
<td>13.4</td>
<td>24.0</td>
<td>61.5</td>
<td>36.8</td>
</tr>
<tr>
<td>Married</td>
<td>72.5</td>
<td>72.2</td>
<td>37.1</td>
<td>61.5</td>
</tr>
<tr>
<td>Divorced</td>
<td>1.4</td>
<td>0.9</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Widowed</td>
<td>12.7</td>
<td>2.9</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

These rates, however, indicate the tendency of the individual to postpone marriage as the level of education gets higher.

A large family in Egypt is regarded as a means of power and prestige. Children are considered a prerequisite to a successful marriage, a safeguard to the wife against divorce and an investment against parents' old age. These attitudes were confirmed by an inquiry covering 200,000 workers in a number of industrial establishments concerning the favourable size of family. The inquiry showed that only 4% of the couples questioned would seem to voluntarily accept limiting their family to fewer than three children; 49% expressed the desire for three to five children, while 47% expressed the desire for more than five children. These attitudes are more widely spread in rural areas. This was revealed by a report of the Egyptian weekly magazine 'Akhir Sa'a' of 15 March 1967. The report indicated that "Village couples with an income of less that ££ 5 a month expressed that a large number of children is a blessing." 101

The attitude towards sizable families may be attributed to several reasons pertaining to economic structure, social background, religious and ethical values and to the cultural pattern.

The style of the Egyptian agriculture with labour-consuming cotton cultivation is always considered as a primary contributing source to large families. Cotton cultivation, which would provide employment for children, turns these children into a source of income to the agricultural family. For example, a survey carried out in 1964 in three villages, two in lower Egypt and one in upper Egypt, concluded that "Children's wages are sometimes equal to those of the men, during the busiest weeks, but more often equal to those of women." 103 The important social variables operating in the same direction are: poverty, illiteracy and the lack of means of pleasure particularly in rural areas. These variables make the production of children one of the few pleasures left to the majority of the masses. 104 Moreover, the religious and ethical values, it is argued, are also responsible for the large family size. The Islamic religion is usually blamed for such sizable family and high fertility rates prevailing among the Moslems in Egypt, as well as in other Arab countries. There is a strong convention among the Moslems that a large family is encouraged by the teaching of the Islamic religion. So the majority of population, as Moslems, do not favour birth control. They
feel that family planning is religiously forbidden, and that "whatever God provides must be good." Such attitudes are evident from a study of the total fertility rates among the Moslems and Christians in the metropolitan areas of Egypt. Total fertility rates were defined as the number of children born to a sample of 10,000 women passed through the child bearing age of 15-49. The study revealed that the rate of fertility among the Moslems was 6,675 as compared with 4,089 among the Christians. Some would argue that the Islamic religion is not opposed to birth control. This may be evident from the recent expressed opinion of the religious authorities. According to "Fatwa" on the subject issued in 1937 by the Grand Mofti of Egypt

"It is not prohibited to use the contraceptive and sanction abortion before the fourth month; that is before the child is gifted with a 'soul' or before movement is felt."

However, although the Islamic religion does not seem to oppose family planning, few wives practise birth control.

The cultural pattern is also responsible for the large family size in Egypt. The educated woman is more apt to believe in family planning and to realise its importance and its advantages to the family; consequently she shows a readiness to use contraceptives. There is a clear relation between educational attainment and the average number of children. For example, after 30 years of marriage it is found that an illiterate woman has an average of 7 children, while in the case of women with university education this average falls to under four children. A very interesting study of fertility in Egypt was carried out by the Committee of Population with the help of social workers in 1956-58. The Committee circulated a questionnaire to 6,067 women classified by the degree of urbanisation: an urban group (Cairo and Alexandria), a semi-urban group (the working class quarter of Mehalla-al Kubra) and a rural group (two villages in Upper Egypt and one in Lower Egypt). A further classification was made on the basis of the degree of education of husbands. The investigation shows that in urban areas, there was a high inverse correlation between the fertility of the wife and the husband's degree of education at the upper level. But there was no significant difference in fertility between wives of men with elementary education and those of
illiterate men. The percentage of families with two children or less was 35 among those with higher education, 22 among those with secondary education and 8 among illiterates. In the semi-urban and rural areas, where few husbands had obtained secondary or higher education, there was no significant difference between fertility among the wives of those with elementary education and those of illiterate men. The differences in fecundation were partly caused by later marriage. Thus in urban areas the age of marriage of women whose husbands had higher education was on average three years higher than wives of illiterate men. The differences were also partly caused by the use of birth control. This may mean that, eventually, as knowledge about birth-control methods spreads, family size may drop sharply. The following table shows the relation between educated husbands and the percentage of wives practising birth control.

**TABLE 2.3: PERCENTAGE OF WIVES PRACTISING BIRTH CONTROL ACCORDING TO LOCALITY AND DEGREE OF EDUCATION OF HUSBANDS 1956-1958**

<table>
<thead>
<tr>
<th>Education</th>
<th>Urban</th>
<th>Semi-urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>51-50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Secondary</td>
<td>28-46</td>
<td>28</td>
<td>3</td>
</tr>
<tr>
<td>Primary</td>
<td></td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Elementary</td>
<td>19-25</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Illiterate</td>
<td>9-11</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

**Source:** Issawi, C., Egypt in Revolution, op.cit., p.81

These attitudes towards early marriage and sizable family are reflected in a high rate of population growth which doubled Egyptian people in less than forty years. According to the 1937 census, the population was accounted at 16 million. It increased to 34 millions in 1971. If these attitudes continue to operate in the same direction, it is expected that the population will rise to 52 million in 1985.

The attitude of individuals towards manual work has not changed. Individuals still prefer white-collar jobs more than blue collar ones. By white-collar jobs are meant the clerical, secretarial and sale occupations, whereas the blue-collar jobs are the industrial occupations.
of the skilled and semi-skilled grades. It is obvious that secondary school graduates look down on blue-collar jobs and prefer white-collar jobs, despite the fact that these jobs are not so well paid and the chances of promotion to higher positions are scarce. In addition there is a general trend to prefer males in most jobs either explicitly or implicitly. This attitude may be attributed to a generally accepted conviction that females are occupied with their housework especially when they get married and have children. This trend of preferring males, however, does not exist in all cases. In certain jobs such as physicians, schoolteachers, social workers and public relations officers, both sexes have almost equal chances. In some other jobs such as nursing, home-visiting and teaching in nursery schools, the preference shifts to the female side. These attitudes may be evident from the following table.

TABLE 2.4: NUMBER AND PERCENTAGE OF LABOUR FORCE ACCORDING TO SEX, LOCALITY AND LEVEL OF EDUCATION

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Labour Force in 000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sex</td>
<td>Locality</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Higher educ.</td>
<td>94</td>
<td>10</td>
</tr>
<tr>
<td>Secondary educ.</td>
<td>196</td>
<td>34</td>
</tr>
<tr>
<td>Lower second.</td>
<td>5881</td>
<td>374</td>
</tr>
<tr>
<td>Total</td>
<td>6171</td>
<td>418</td>
</tr>
</tbody>
</table>

Source: Research Project, op.cit., pp.31-3

It may be noted that the majority of the labour force in Egypt (6.2 million out of a total of 6.5 million, or approximately 95%) had educational level lower than secondary education. This table also shows that only 1.6% of the labour force had higher education and 3.5% secondary education. The majority of the lower educated labour force was concentrated in rural areas while the majority of the intermediately and higher educated labour force was concentrated in urban areas. Also, that the proportion of women participating in the labour force is much lower than that of men. Females represented
only 6.3% of the whole labour force.

6. Conclusions

In this chapter we have discussed in some measure the analysis of the problem under study. Through an examination of the revolutionary documentations, we have identified the social, political, economic and educational norms prevailing in the Egyptian society and determining its policy towards justice, industrialisation and education.

We have demonstrated the great aspirations brought about by the 1952 Revolution. Community solidarity, social security, unity of family, and right of work, education, worship, and expression have been the most salient values of the Egyptian society. The Revolution has associated the concept of democracy with the concept of socialism. Believing that political democracy cannot exist under the domination of one class, the revolutionary leaders regarded mass representation a suitable formula of democracy for Egypt. A socialist economic policy was favoured for more than twenty years. This policy aimed at creating a form of economic justice for the majority and eliminating the injurious effects of a minority exploitation. Women have been regarded as equal to men. Rural development was considered as important as urban.

Industrialisation is considered an indispensable part in the development of the national economy. The insufficiency of the existing cultivated land to keep the labour force fully employed has left no other way to raise the standard of living without developing industrialisation. Thus the revolutionary economic policy has considered industrialisation a necessary means of achieving satisfactory rate of growth in Egypt.

Education has been considered the key to progress. It becomes a right guaranteed by the State. It is made free from the primary to the university level. Freedom of scientific research is also guaranteed within the autonomy of universities and research centres.

Since 1952, these higher evaluations have been consistent. No major change in these norms could be identified. However, we have clarified that in a changing society such as the Egyptian, no one is able to make an accurate prediction. Therefore, the degree of consistency is uncertain. Apart from these higher evaluations, the attitudes and behaviour of a large
fraction of the citizens operate in a discrepant manner. Labour, for example, is considered an honour and duty, but respect for manual work is neither expressed nor felt. White-collar jobs have always been favoured. Consequently, people's attitudes towards large families, early marriage and manual work on the one hand, and the need for family planning and the shortage in skilled workers on the other, have created a conflicting situation resulting from an asynchronous change in aspiration and behaviour. This, in turn, has led to a great pressure on academic schools, and among other reasons, has resulted in a low productivity of the Egyptian labour force and the slowing down of accelerating social and economic development.
REFERENCES


3. The Charter, op. cit., p. 9


5. The Charter, op. cit., p. 19

6. Ibid., p. 65

7. The October Paper, op. cit., p. 101

8. The Charter, op. cit., p. 62

9. Ibid., p. 48

10. Ibid., p. 94

11. Ibid., p. 75

12. Ibid., p. 59

13. Ibid., p. 60

14. Ibid., p. 95

15. The October Paper, op. cit., p. 16

16. Ibid., pp. 99-100


21. The Charter, op.cit., p.75
22. Ibid., p.76
23. Ibid., p.66
27. Wilber, D.N. et al., op.cit., p.287
28. The Charter, op.cit., p.89
29. Ibid., pp.70-1
30. Ibid., p.60
31. Ibid., p.105
32. The October Paper, op.cit., p.31
33. Ibid.
35. The Charter, op.cit., p.65
36. Ibid., pp.91-2
37. The October Paper, op.cit., p.68
38. The Charter, op.cit., p.83
39. The October Paper, op.cit., pp.75-6
40. Ibid., p.98
41. Saab, G.S., op.cit., p.1
42. Ibid., p.2
44. Saab, G.S., op.cit., p.171


47. Hansen, B. and Marzouk, G.A., *op.cit.*, p.113


52. The October Paper, *op.cit.*, pp.64-5

53. The Charter, *op.cit.*, pp.84-5

54. Ibid., p.86

55. The October Paper, *op.cit.*, p.65


58. Ibid., p.121

59. Ibid., pp.121-2

60. The Charter, *op.cit.*, p.92


62. The October Paper, *op.cit.*, p.70

63. Ibid., p.69

64. The Charter, *op.cit.*, p.109

65. Ibid., p.92

66. Ministry of Education (ARE), *The ARE Educational Policy in the Secondary Stage*, Cairo, December 1972, pp.1-5; (Arabic text)


69. The October Paper, op.cit., p.74

70. Ibid., p.76


72. Ibid., Article 5, p.9

73. Ibid., Article 41, pp.18-19

74. Ibid., Article 47, p.20

75. Ibid., Article 48, pp.20-1

76. Ibid., Article 4, p.9

77. Ibid., Article 13, p.12

78. Ibid., Article 25, pp.15-16

79. Ibid., Article 26, p.16

80. Ibid., Article 29, p.16

81. Ibid., Article 37, p.18

82. Ibid., Article 8, p.10

83. Ibid., Article 18, p.10

84. Ibid., Article 16, pp.12-13

85. Ibid., Article 17, p.13

86. Ibid., Article 18, p.13

87. Ibid., Article 19, p.13

88. Ibid., Article 20, p.13

89. Ibid., Article 21, p.14
90. Ibid., Article 49, p.21
91. The October Paper, op.cit., pp.36-8
92. Ibid., pp.100-1
94. Ibid., p.399
95. Ibid.
96. Ibid.
97. Ibid., p.400
98. Wilber, D.N., op.cit., p.43
102. Issawi, C., Egypt: An Economic and Social Analysis, London, OUP, 1947, p.44
103. Tomiche, N., op.cit., p.130
104. Issawi C., Egypt in Revolution, op.cit., p.78
106. Ibid., p.27
107. Ibid., p.16
108. C.A.P.M.S., Population and Development, op.cit., p.90
109. Issawi, C., Egypt in Revolution, op.cit., pp.79-80
112. Ibid.
CHAPTER THREE

ACTUAL CHANGES

1. Justice
   1.1 Political Justice  
   1.2 Economic Justice  
   1.3 Social Justice
2. Industrialisation
3. Education
4. Response of Education to Social Justice and Industrialisation  
   4.1 To Social Justice  
   4.2 To Industrialisation
5. Conclusion
ACTUAL CHANGES

In this chapter an attempt is made to examine some phases of the Egyptian society pre- and post- the 1952 Revolution in order to determine the magnitude and direction of whatever change that might have taken place after 1952. We try to investigate the major institutional changes with regard to the achievement of justice in its broad sense, the development of industrialisation to improve the standard of living, and the expansion of education. Finally, an appraisal is made to test whether or not the educational system has responded to the requirements of justice and industrialisation.

By definition, revolutionary movements, according to Dekmajian, are based upon a radical rejection of the pre-revolutionary forms of social and political thought and institutions. Such a rejection is necessary not only to justify the revolution, but also to enrich the ideological tenets of the movement on which the new society is to be built. Therefore, the abolition of an unpopular monarchy was a relatively simple task for the Revolution in Egypt. More difficult was its replacement by a new social order which is widely accepted. However, many members of the old political organisations found no difficulty, at the beginning, in switching their allegiance to the new rulers. The revolutionary leaders, on the other hand, were anxious to mobilise public support for the new regime, since the destruction of the old order was to be followed by reforming the social, economic and political institutions.

Looking for an approach to development within the immense social and economic constraints, the revolutionary government, with the approval of the majority of the Egyptians, rejected two methods which were tried in other countries: one is Liberal Capitalism and the other is Marxist. Instead, the revolutionary regime adopted a form of a socialist system that reflects the initial conditions of the Egyptian society, namely, Arab Socialism.

Many measures of changes have been taking place in order to carry out the practical procedures of achieving the people's wider aspirations. This task has required the creation of some new institutions or the development of the old ones. However, these changes may be dealt with under three main headings: justice, industrialisation and education.
1.1 Political Justice

Instability and unrest which characterised the pre-Revolution period were partly attributed to the previous Constitution promulgated on 19 April 1923, and partly because of the contradicting political parties. The previous Constitution accorded great power to the King. The executive power belonged to the King and his ministries, who were his appointees. The legislative power was to be exercised by the King jointly with the bicameral parliament (The Senate and the Chamber of Deputies). The King had a suspensory veto and the right to prorogue or adjourn the parliament. In addition, the King also had the right to appoint two-fifths of the senators. The Egyptian Constitution, since its promulgation, witnessed a prolonged history of endless battles between a small fraction of the autocrats, including the King, supported indirectly by the foreign power through its military forces, and a huge majority of nationalists, absolutely unarmed, supported by the public opinion. The parliamentary ups and downs which occurred from 1923 to 1952 were fundamentally due to the absence of political organisation of the masses, the majority of whom lacked any formal education.

In fact, until 1952, the 'Wafd' was the only efficiently organised party in the country. It included liberal intellectuals of the cities, besides some branches in the remotest villages. Despite its left-wing fringe, however, its heart was socially conservative and it was always dominated by wealthy landowners. For this reason the 'Wafd' never had the will or the power to push through any of the main structural changes that Egypt needed. It was revolutionary only in that it wanted to get rid of the British troops. Mansfield argues that

"the ending of the occupation was the only programme on which all members of the party could agree"

Besides, the 'Wafd' party, which enjoyed greater popularity, there were other parties of minorities. The 'Constitutional Liberal' party established at the end of 1922, for example, headed the opposition to the 'Wafd' with a progressive programme for social, educational and economic reforms. However, it lacked popularity, as Harris put it:

"Many of the constitutional liberals were men of integrity and ability, but their party never commanded anything like the popular backing of the rival Wafd party"
The 'Saa'dist' party was founded in 1937 as an offshoot of the Wafd. Its members were largely representatives of the few wealthy families, with no interest in the welfare of the masses.

Yet, outside parliament other parties and groups were gathering strength, such as: the Socialist party, the Communists and the Moslem Brotherhood. Of these extra-parliamentary groups, the strongest at that time was the Moslem Brotherhood which rejected all modernism in Egyptian thought and sought national renaissance in a revival of pure Islam. The small Egyptian Communist party has never been allowed to act in the open. It was hopelessly divided and included a high proportion of foreign nationals among its leaders, and therefore was unlikely to undertake any revolutionary role.

Thus, on the whole the political parties according to Issawi were "only groups differing on personal questions or those regarding the Anglo-Egyptian relations". The main political forces in Egypt were the King, the 'Wafd' and the British. Consequently to achieve what it considered political justice and sound democratic representation of the majority of the Egyptian people, the revolutionary regime put an end to these three major political forces.

The revolutionary leaders were convinced that before the country was ready to be governed by elected representative institutions, a political system had to be devised to ensure political justice, guarantee the masses would never be dominated by any exploiting class and reserve the achievements of the Revolution.

A socialist form of democracy was developed instead of the pre-revolutionary multi-party system. Such a form was represented by a political organisation whose name and format changed from 'Liberal Rally' to 'The National Union' and to 'The Arab Socialist Union'. The purpose behind the establishment of such organisations was to block the effective participation of the pre-revolutionary elite and to provide for mass participation. The three formats are, hereafter, dealt with in some detail.

(i) The Liberal Rally (1953-1957)

In January 1953, three weeks after the dissolution of the old political parties, the Revolutionary Command Council announced the
formation of the Liberal Rally as a new political institution organising
the entire nation. Its membership was opened to all citizens and its
slogan was "unity, discipline and work". The Rally was not organised
systematically, but branches were established in all major cities. The
Rally was allowed to die after the announcement of the 1956 Constitution.

(ii) The National Union (1957-1961)

The 1956 Constitution provided for a National Union to replace the
Liberal Rally. The National Union was formally organised in May 1957.
Its membership accounted to nearly 6 millions, mostly male. Following
the registration each basic unit elected a committee to run its affairs.
The size of such a committee varied with the size of the village. However,
none seemed to have had less than three, the average was around seven, and
the largest had thirty members. In addition to these, the structure
encompassed other governing committees elected at the district and
provincial levels, and a congress at the national level. At the district
level there was, in fact, a bureau comprised of four officers: a
president, a vice-president, a secretary and a treasurer. The election
of district officers was more important to the central government than
the election of village committees. However, the number of the former
was (820 members) surprisingly small when compared to the village committee
members (29,000) or the number of the ordinary membership (6 millions).
The National Union election of 1959 showed that despite the larger number
of rural ordinary membership (64%), the officers were predominantly urban
(72%). Such groups as students, teachers, workers and men of religion
were under-represented at the district level. About 32% of all district
officers were 'umad', a'yan (local council members or farmers). According
to Binder's analysis there was a close link between the National Union
elite and the parliamentary elite of Egypt. For example, about 35% of the
1957 parliament were professional, 20% were members of the rural middle
class, 15% were from the army and police and 17% were high official
government. Thus, as demonstrated by Table 3.1, the district officers
do not reflect the composition of the National Union Committees, or the
occupational distribution, but rather that of the parliamentary elite.
**TABLE 3.1:** COMPARISON OF OCCUPATIONAL DISTRIBUTION OF THE NATIONAL UNION MEMBERS AND OFFICERS, 1959

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Ordinary Members %</th>
<th>District officers %</th>
<th>Total Membership %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban/Modern</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High official</td>
<td>0.02</td>
<td>1.46</td>
<td>0.06</td>
</tr>
<tr>
<td>Cabinet Minister</td>
<td>0.07</td>
<td>0.85</td>
<td>0.09</td>
</tr>
<tr>
<td>Doctor</td>
<td>0.81</td>
<td>3.17</td>
<td>0.87</td>
</tr>
<tr>
<td>Lawyer</td>
<td>2.70</td>
<td>8.78</td>
<td>2.87</td>
</tr>
<tr>
<td>Businessman</td>
<td>1.10</td>
<td>4.51</td>
<td>1.21</td>
</tr>
<tr>
<td>Teacher</td>
<td>9.91</td>
<td>4.87</td>
<td>9.80</td>
</tr>
<tr>
<td>Former MP</td>
<td>0.41</td>
<td>20.85</td>
<td>0.98</td>
</tr>
<tr>
<td>Engineer</td>
<td>1.90</td>
<td>4.51</td>
<td>1.98</td>
</tr>
<tr>
<td>Merchant</td>
<td>8.37</td>
<td>8.17</td>
<td>8.38</td>
</tr>
<tr>
<td>Student</td>
<td>1.34</td>
<td>-</td>
<td>1.31</td>
</tr>
<tr>
<td>Journalist</td>
<td>0.16</td>
<td>0.61</td>
<td>0.18</td>
</tr>
<tr>
<td>Ex-army officer</td>
<td>0.14</td>
<td>0.85</td>
<td>0.16</td>
</tr>
<tr>
<td>Ex-police officer</td>
<td>0.10</td>
<td>1.22</td>
<td>0.14</td>
</tr>
<tr>
<td>Civil servant</td>
<td>7.35</td>
<td>8.90</td>
<td>7.40</td>
</tr>
<tr>
<td>Worker</td>
<td>1.35</td>
<td>0.85</td>
<td>1.33</td>
</tr>
<tr>
<td>Woman</td>
<td>0.15</td>
<td>1.22</td>
<td>0.18</td>
</tr>
<tr>
<td>Unknown urban</td>
<td>0.04</td>
<td>0.85</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Rural/Traditional</strong></td>
<td>64.03</td>
<td>28.29</td>
<td>63.00</td>
</tr>
<tr>
<td>Local Council member</td>
<td>1.03</td>
<td>3.54</td>
<td>1.10</td>
</tr>
<tr>
<td>Man of religion</td>
<td>1.59</td>
<td>0.61</td>
<td>1.56</td>
</tr>
<tr>
<td>Umdah or Shaykh</td>
<td>19.08</td>
<td>12.07</td>
<td>18.93</td>
</tr>
<tr>
<td>Farmer</td>
<td>37.06</td>
<td>9.39</td>
<td>36.30</td>
</tr>
<tr>
<td>Unknown rural</td>
<td>5.27</td>
<td>2.68</td>
<td>5.11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>99.95</td>
<td>99.96</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Source: Binder, L., op.cit., p.54*
During its existence as a single political institution, the National Union never gained the confidence or interest of the masses. One of the reasons was the continuous change in its structure. Another reason was that the relationships between its basic units and other formal organisations of local government and informal organisation of trade unions were not made clear. In general, the National Union was locked into its existing status and authority structure without precise functions. It was not really an instrument of political mobilisation, but rather an instrument to preclude political mobilisation by rural groups. The National Union, however, reflected the class basis of political forces. Its efficiency as a mass political organisation came under attack in Nasser's speech in October 1961, in which he said:

"Consequently, reaction managed to infiltrate into the National Union ... and to turn it into a mere organisational facade, unstirred by the forces of the masses ... Hence the most important task that faces us today is to reorganise so that the National Union may become a revolutionary instrument for the national masses. The National Union should be for the workers, peasants, educated people, professionals and proprietors whose property is not based on exploitation, for officers and soldiers ..."

12

(iii) The Arab Socialist Union (1962–1974)

There is no doubt that the Syrian secession was a grave political blow. However, it provided an opportunity to consider the shortcomings of the organisation of the previous political institutions. A preparatory committee was set up in November 1961 to perform two major tasks before the introduction of the new political organisation. The first was to isolate politically the forces of reaction, and the second was to identify the popular forces. In February 1962 the elections to the National Congress of Popular Forces were held in factories, schools, professional syndicates and agricultural co-operatives and 1750 members were elected. The Congress of Popular Forces met in May 1962 and debated the various aspects of the draft of the National Charter. 13 These discussions which were televised and taken up by the press all over the country, were seen as the most popular debate that Egypt had ever known.

The debate resulted in a significant change with regard to mass repre-
sentation. Farmers and labourers have been guaranteed the right of half
the seats in political, popular organisations at all levels. A farmer
was defined as any one who owns up to twenty-five feddans (feddan =
0.42 hectare = 1.04 acres), whilst a worker was defined as any one who
is a member of a trade union. Voting has become compulsory for all
males over 18 years of age with a penalty of one Egyptian pound for
failure to do so. But it was optional for women, who were given their
franchise rights in 1956.

The approved National Charter provided for the Arab Socialist Union
(ASU) to become the country's single political organisation embracing all
popular working forces: farmers, workers, intellectuals and national
capitalists. This political institution was recognised as an instrument
of deepening the values of democracy and nationalism.

Unlike the NU, no one was automatically a member of the ASU. The
intention was to make it start selectively with a small fraction of popular
forces. However, the first registration numbered 4.8 million candidate
members. Structurally the ASU was pyramidal. According to the 1968
organisational structure, the ASU was composed of four levels as demon-
strated by Figure 1.

Although the Egyptian mass mobilisation party was organised along
similar lines to socialist models, it was an artificial creation, differing
from them on several points. First, there was no revolutionary aura about
it. Second, the party did not create the State, but was its creation.
Third, loyalty to the State cannot be equated with loyalty to a party.
Therefore the mass party has been changed at will and at times significan-
tly, and its members have approached it pragmatically. Binder points out

"membership or even office holding ... did not convey
much political influence, but given the close control
over the distribution of political values in Egypt,
this is the only manner in which participation by
outsiders is possible. Redress of grievance, pro-
tection of existing rights, retention of social
prestige, and attainment of minimal qualifications
for cooperation into higher political echelons -
these are the benefits of membership in the mass
political party."

The ASU was regarded as a non-elitist party. This character is
evident from the proportion of total voting population (7 million). Thus
evidence is further reinforced when one compares the proportion of party
FIGURE 1


Controls all administrative & organisational affairs.

GENERAL SECRETARIAT

Investigates members' complaints & cases contrast with ASU organic Law.

Supreme Executive Committee, ASU, President & CCM

May dissolve any ASU organisation if it does not fulfill its duties.

Central Committee

Highest leadership authority between GNC seasons, chosen from and by GNC for 6 years, meets twice yearly & may dissolve any ASU organisation.

General National Congress

Highest authority in the ASU, elected for 6 years, meets once every 2 years & frequently during emergency or by invitation of SEC composed of all members of Gov. Congress.

Studies general political issues, engages in general planning & implementing SEC directions, controls all ASU work in Gov. & elects Gov. Committee

25 Governorate Congress

Elected for 4 years, meets once every 6 months.

210 Basic Unit Congress in each Kism, Ba Noor, Mark Committees

Elected every 4 years, meets every 6 months, consists of 2 representatives from each Basic Unit

750 Basic Unit Village & Mass Organisations

Elected for 2 years, meets once a year.

Governorate Committees

Elected every 4 years, meets every 6 months.

Basic Unit Committees

Elected every 2 years, meets once a year.

Elects the President who is also President of CC & SEC & the ASU.

members in the total population of Egypt to that of the Soviet Union which possesses an elitist party. While one out of six Egyptians is an ASU member, only one out of eighteen Soviet citizens is in the CPSU. The unwillingness to build a purely elitist party was, according to Dekmejian, because of a fear of the survival of an extreme right or left. On the other hand, some would argue that the ASU was selective. Dekmejian points out

"Despite the wide representation of nearly all classes at the lowest levels of the mass party, the upward recruitment procedure has been selective enough to provide for the predominance of the most supportive element of all, the rural middle class and its urban offshoots."

Moreover, elections to the basic unit committees within single villages would be affected by much gerrymandering. Fifteen years after the Revolution, Abd-al-Malik could lament that "between 1952 and 1957 the single party method put the men of the old order back into power in all areas."

The shortcomings of the ASU were not fully felt until the 1967 War. The Egyptian defeat in this war revealed many of the drawbacks of the system. The weaknesses of the ASU were publicly attacked. During its existence, the ASU was vigorously moving into an area of activity well beyond its formal responsibilities. Instead of fulfilling its political functions of policy-making and supervision, the ASU was rapidly encroaching upon the government's administrative functions. The practice of appointing ASU officials and the prevalence of political careerism opened a gap between the party and the masses, thereby harming the former's legitimacy and bringing about a lack of interest and commitment among large proportions of the membership.

The outcome of such criticism was the 'March 30 Programme' which permitted continuous public debate concerning all aspects of Egyptian life, during which the most sacrosanct institutions and practices were questioned and dissent openly expressed. The criticism was carried on more constructive and less emotional lines. As a result a basic reform was carried out in the ASU structure to man all its levels by free election from the bottom to the top. A new stricter definition of farmers and workers was generally applied during the 1968 ASU elections. According to this definition, a farmer is one whose personal and family holdings should not
exceed ten feddans; agriculture should be his main occupation and source of income and he should live in the countryside. 22 A worker is one who is not eligible for a membership in the professional unions and not a graduate of a university, higher institute, or military college. 23 These definitions contrast sharply with those employed after 1962. This widened the mass representation. According to official sources, over 50% of the National Congress was comprised of peasants and workers as defined above. The same source, however, admitted that this percentage included heads of general syndicates, their deputies and general secretaries, directors of cultural centres, heads of agricultural reform societies and co-operatives, and local clerical officials - in short, the local peasant and worker leadership. The other half of the National Congress included intellectuals, physicians, lawyers, professors, students, merchants, property owners and managerial class. 24 Table 3.2 shows the composition of the ASU Central Committee.

The electoral results of the 1969 National Assembly showed that the turnover of deputies between 1964 Assembly and the new one was very large, only 92 had been in the 1964 legislature. 25 This was due to the elimination from candidacy of those ex-deputies whose occupational financial status did not conform with the strict definition of farmers and workers.

However, the absence of an effective opposition and the strength of military role, helped to create what was called centres of power among the ruling class. A centre of power constituted the accumulation of illegitimate power in the absence of popular control. Significantly, the two main examples cited were the military and the police. 26 There was a general agreement that these centres were the result of the political organisational vacuum left unfilled by the ASU.

(iv) **Towards a Multi-party System (1974 - now)**

The Movement of May 1971, aiming at correcting the revolutionary path, introduced several measures to eliminate the harmful effects of centres of power and to assure the citizens more freedom and to liberalise the political system. At first political justice as a product of mass representation was considered possible through three 'manabir' (translated variously as forums or platforms) within the structure of the ASU to assure an effective opposition. Soon after the 1974 elections to the People's
**TABLE 3.2: THE ASU CENTRAL COMMITTEE COMPOSITION, 1968**

<table>
<thead>
<tr>
<th>Occupational Background</th>
<th>Full Members</th>
<th></th>
<th>Alternate Members</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>ASU Regulars (provincial)</td>
<td>21</td>
<td>14</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Secretaries</td>
<td>7</td>
<td>4.7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Deputies</td>
<td>24</td>
<td>16</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Ministers</td>
<td>2</td>
<td>1.3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Ex-Ministers</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Bureaucrats</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lawyers</td>
<td>7</td>
<td>4.7</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Academics</td>
<td>2</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Teachers</td>
<td>2</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Journalists</td>
<td>2</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chairmen of Boards and Board Members</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>National-level Professional Syndicalists</td>
<td>2</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Peasants</td>
<td>1</td>
<td>0.7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Agriculturalists</td>
<td>18</td>
<td>12</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Common Peasants</td>
<td>1</td>
<td>0.7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>National-level Agricultural Syndicalists</td>
<td>4</td>
<td>2.7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Local-level Agr. Syn.</td>
<td>5</td>
<td>3.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Directors of Agr. Reform</td>
<td>35</td>
<td>23.3</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Workers</td>
<td>7</td>
<td>4.7</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Common Workers</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>National-level Worker Synd.</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total** 105 100.0 50 100.0

**Source:** Dekmejian, R.H., op.cit., p.278
Assembly, the regime allowed such 'manabir' to perform as political parties within the framework of the ASU. However, the formulation of three parts - of the left, right and centre - failed to reflect accurately the main political trends in the country. Mansfield has predicted that

"the logical formula of having one for the Right, one for the Left, and one for the Centre (with the government giving its support to the Centre) was never likely to work so neatly."

Confusion is added because whereas the Rightist party used the word 'Socialist' in its title, the Leftists eschew the word in favour of 'Progressive Union'. Moreover, visible pressures have been put on the Left particularly since the riots of January 1977. The Financial Times in its report on Egypt has pointed out that

"sensitivities after the riots were such that shortsighted decisions were made which made Egypt appear somewhat less than a constitutional nation."

The regime's vision of pluralistic democracy was daring and imaginative. The problem is associated with the desire of superimposing democracy from above. The formula of democracy which is acceptable by the present regime is one that would be active but still controllable. Searching for the formula to create more democratic representation, President Sadat established in 1978 his own political party, namely the National Democratic Party. Consequently, all the members of the Egyptian Arab Socialist Party (Centre) left their party and joined the President's party. Moreover, the Right Party has dissolved itself and the Leftist has frozen its activity. However, one may conclude that the political scene in Egypt is unclear, and political justice is haphazard.

1.2 Economic Justice

Since 1952, the economic structure has undergone a profound transformation. It could no longer be described as a free market system. In theory, at least, Egypt's economic system, since the Revolution, may be described as a planned socialist economy. New institutions were established, for the first time, to develop the economy such as The Permanent Council for the Development of National Production in 1952; The Economic Organisation in 1957, and the Institute of National Planning in 1961.
These institutions played an active role in outlining the First Ten-Year socio-economic development plan (1960-1970). Moreover, the Public Sector which was established in 1956, directed all the financial institutions; the public utilities; transport (except taxis); all industrial establishments of significant size; the large construction firms, and the import-export trade.

Before 1952 the distribution of income in Egypt was distinguished by great inequality. A Trade Mission of the United Kingdom in 1955, which investigated the distribution of income in Egypt, found two extremes: at one end of the scale "1.1% of the population with family income over £E 1,500 per annum, 3% with income of £E 600-1,500" while at the other end of the scale "60% of the population with family income of £E 48-96 per annum, and 20% with income of £E 96-240". This means that 80% of the whole population shared a low family income, ranging from £E 48-240 per annum, while 4.1% enjoyed income ranging from £E 600 to over £E 1,500 per annum. An Egyptian economist asserts that

"Some 30% of the gross income was concentrated in the hands of 75 thousand families."

In other words, the richest minority obtained around 75% of the national income, whereas the poorest majority drew only 20%. Income disparity was felt as a result of the maldistribution of wealth. For example, in 1950 the landless family earned some £E 26 a year, while a big landlord (with 500 feddans) would have received from renting his land an annual gross income of £E 1,500. Another example is that an unskilled worker employed in construction or industry earned about £E 40-60 a year, while a capitalist (holding 10% of shares of a large textile company) would have received £E 20,000 from his shares. Hence, there is no doubt that the distribution of the national income was heavily lopsided when the Revolution took place in 1952. Mabro argues that:

"The polarisation of the Egyptian society between a small group of very rich families - many, including the Royal House, of non-Egyptian origin - and large masses of poor was the result of complex historical and socio-economic factors. The maldistribution of income and wealth ... was aggravated in Egypt by specific historical circumstances in the nineteenth century, and later by a laissez faire system."

30
The target of achieving economic justice and liquidating the class distinction was put into effect through some measures such as: the redistribution of landownership, nationalisation of both foreign firms and national exploiting capital, and steeper taxation. Each of these measures is examined as follows.

(i) The Redistribution of Landownership

The economic injustice felt in Egyptian society was caused by the maldistribution of landownership which existed for a long while. Historically, the Egyptian farmer did not gain the right of owning land property until the second half of the nineteenth century. This right was affirmed in 1858 by Said's famous statutes which declared those who utilise the land had the right to rent, mortgage or sell it; and the heirs had the right to inherit these propositions without distinction of sex. This marked a tremendous change in the land tenure system during the nineteenth century and affected the distribution of the landownership among Egyptian farmers. 33

Since 1939, there was a tendency towards further inequality of landownership. By 1950, 93.9% of landowners possessed only 33.5% of the total land, leaving the largest part (66.5%) in the hands of the minority which amounted to only 6.1% of owners. 34 In other words, in 1950 over one third of the land was owned by one half of one per cent of landlords.

After the application of the land reform, the tenure system has changed significantly. Actually, land reform is not the product of the Egyptian Revolution, it has been applied with some degree of success to several countries in Eastern Europe, Italy, Ceylon, Mexico and some Latin American countries. 35 However, in Egypt, all the previous attempts in this direction had failed. For example, in the last days of the Monarchy a bill, which would have limited the ownership of land to 100 feddans, was overwhelmingly defeated by a parliament dominated by rich merchants and industrialists most of whom had invested heavily in land. 36

The land reform of 1952 fixed the maximum landownership at 200 feddans per person. This figure was reduced in 1961 to 100 feddans with a maximum of 300 feddans per family. 37 The abolition of the custom of restricting ownership to specific purposes (Waqfs Ahli in 1952 and Waqfs Khairi in 1957) helped in correcting the agrarian structure.
The land distribution system was based on the expropriation - against long term compensation bonds with annual interest rate of 3%. The purchasing price of the land distributed to the beneficiaries was established on the basis as that for the valuation of the compensation. The beneficiaries were to pay the cost of the acquired property over 30 years in equal instalments with an annual interest of 3% calculated on the balance. The cost of the land was valued at 70 times the basic land tax. An additional sum of 15% was added to the price in order to cover the cost of requisition, administration and distribution. 38

As a result of the implementation of the agrarian reform a tremendous modification of the land tenure has taken place. A large amount of cultivated land was distributed among the landless farmers. During the period 1952-1964 approximately 13% of the six million feddans of cultivated land was distributed among 250,000 rural families (the total amount of land available for redistribution was 944,457 feddans or about 16% of the bulk of the cultivated land). 39 Table 3.3 shows the change that took place in the landownership between 1952 and 1965.

Tenancy laws were also revised. The land was leased for a minimum duration of three years at a rent not exceeding seven times the value of land-tax. In order to avoid recurring fragmentation, smallholdings cannot be subdivided in accordance with Muslim law after the owner's death, but must be inherited by the family. 40

The success or failure of the agrarian reform can, therefore, be evaluated with a certain degree of accuracy by determining how far it fulfilled its objectives. The first objective of satisfying the land hunger of the landless rural community was achieved with most success in the sparsely populated regions of the Delta, and this was realised the moment the allocation of ownership titles took place. Moreover, those who did not benefit from the distribution but continued to be tenants on the agrarian reform land felt more secure than under the old tenure system.

The fulfilment of the second objective of improving the living conditions of the peasants was more difficult to achieve since it depends, to a large extent, on increasing their annual net income through reducing costs of production and stabilising and increasing gross returns. In fact, costs were reduced because repayments for the acquired land were much lower than under the old system. In addition, the new measures of
<table>
<thead>
<tr>
<th>Size of Ownership</th>
<th>1952</th>
<th>1965</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owners</td>
<td>Land</td>
</tr>
<tr>
<td></td>
<td>No. in</td>
<td>% of</td>
</tr>
<tr>
<td></td>
<td>000</td>
<td>total</td>
</tr>
<tr>
<td>Less than 5 faddans</td>
<td>2642 94.3</td>
<td>2122 35.1</td>
</tr>
<tr>
<td>5 - 10</td>
<td>79 2.8</td>
<td>526 8.8</td>
</tr>
<tr>
<td>10 - 20</td>
<td>47 1.7</td>
<td>638 10.7</td>
</tr>
<tr>
<td>20 - 50</td>
<td>22 0.8</td>
<td>654 10.9</td>
</tr>
<tr>
<td>50 - 100</td>
<td>6 0.2</td>
<td>430 7.2</td>
</tr>
<tr>
<td>100 - 200</td>
<td>3 0.1</td>
<td>437 7.3</td>
</tr>
<tr>
<td>Over 200 faddans</td>
<td>2 0.1</td>
<td>1177 19.7</td>
</tr>
</tbody>
</table>

Source: Egypt, CAPMS, Statistical Handbook 1972, op.cit., p.57
security and status of the new owners have resulted, in many cases, in increasing efficiency and hence production.

(ii) The Nationalisation Movement

The nationalisation movement was another step in the liquidation of social class and the realisation of economic justice among the citizens. In July 1961, the Revolution passed a number of laws and regulations nationalising the great majority of the country's resources. 44 companies and establishments, a group of banks and insurance companies were taken over completely by the State. State partnership, to the extent of not less than 50% of the capital, was imposed on another 82 companies and establishments. Moreover, the Government bought a large number of shares (but less than 50% of the total) in some other group of companies. 41 In August 1963 there was a further series of nationalisation covering some firms which had already been partly nationalised or largely privately owned. At the same time, all leases for quarrying and mining were ended. In March 1964, an additional 119 contracting companies which were partly owned by the Government, were fully nationalised, six hundred of Egypt's wealthiest families were affected by the laws of nationalisation.

Compensation in all cases of nationalisation was paid to previous shareholders in the form of negotiable Government Bonds, maturing after 15 years and redeemable after 10 years, at a nominal interest rate of 4% to be paid by the companies. However, the amount of compensation received by any individual was limited to £E 15,000. 43 In this way compensation was in effect relatively small, and large shareholders were compensated for only part of their holdings. Furthermore, the arrangements of compensating nationalised foreign interests were long delayed by routine work. Yet, each affected person, according to the Provisional Constitution of 1964, was allowed to keep property or shares up to a value of £E 30,000 in addition to all personal belongings. 44

July 1961 may be considered the point in time when the Egyptian economy was decisively changed in a socialist direction. However, the events of 1961 were not a sudden break, but were the end result of earlier conditions and policies. It is usual to relate nationalisation to socialist ideology, and the public take-over in Egypt was considered part and parcel of the
'Arab Socialism'. Some writers, however, argued that "The first nationalisations were nationalistic rather than socialistic." Since then, an ideology of nationalisation has grown out of events.

(iii) Taxation System

In addition to the nationalisation measures, a highly progressive taxation system was introduced. Since the Socialist Laws of 1961, Egypt has had steeper progressive rates of taxation. Income tax rose from 25% on the LE 1,000-1,500 bracket to 90% on incomes over LE 10,000 with an exemption limit on income of LE 180 per annum. There are four categories of income tax: on dividends and interest; on profits of financial, commercial and industrial enterprises; on incomes of the liberal professions; and on wages and salaries. Yet, the Department of Taxation has not substantially improved the methods of collection, since evasion is widespread.

The measures of land reform, nationalisation and taxation have reduced the gap between the rich and the poor. The multi-millionaires 'Pashas' do not exist in Egypt today; their palaces and villas are closed or have been turned into flats or hotels. These measures have resulted in improving the relative distribution of income and wealth, and in substantial benefits to the masses. Due to the lack of statistics, it is difficult to make any precise estimate of the distribution of income in present-day Egypt or to examine to what extent it has changed since the Revolution. Nevertheless, there are some indications which may throw some light on the question.

The national income has shown a significant increase in the last few years. This increase was a direct consequence of the new socialist way of life which ensured a fair distribution of income, put an end to the apparent disparity among the different classes, and provided a decent living for those who suffered from the deprivation of their right and opportunity of employment and equitable pay. El-Kammash points out that

"The national income which amounted to only $380 million in 1938, grew to eight times this level by 1960 when it increased to $3052 million. In 1964, the national income, at current prices, became ten times its level in 1938; while the real national income was more than doubled at the end of the same period."

Table 3.4 shows the total national income and per capita income at constant
<table>
<thead>
<tr>
<th>Year</th>
<th>National Income EE Millions</th>
<th>Annual Increase %</th>
<th>Per Capita Income EE</th>
<th>Annual Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952/53</td>
<td>806.0</td>
<td>-</td>
<td>37.1</td>
<td>-</td>
</tr>
<tr>
<td>1953/54</td>
<td>871.0</td>
<td>8.1</td>
<td>39.1</td>
<td>5.4</td>
</tr>
<tr>
<td>1954/55</td>
<td>930.0</td>
<td>6.8</td>
<td>40.8</td>
<td>4.3</td>
</tr>
<tr>
<td>1955/56</td>
<td>881.0</td>
<td>- 5.6</td>
<td>37.7</td>
<td>- 7.6</td>
</tr>
<tr>
<td>1956/57</td>
<td>897.0</td>
<td>1.8</td>
<td>37.5</td>
<td>- 0.5</td>
</tr>
<tr>
<td>1957/58</td>
<td>959.0</td>
<td>6.9</td>
<td>39.9</td>
<td>6.4</td>
</tr>
<tr>
<td>1958/59</td>
<td>985.0</td>
<td>2.7</td>
<td>39.4</td>
<td>- 1.3</td>
</tr>
<tr>
<td>1959/60</td>
<td>1091.0</td>
<td>10.8</td>
<td>42.6</td>
<td>8.1</td>
</tr>
<tr>
<td>1960/61</td>
<td>1139.0</td>
<td>4.4</td>
<td>43.3</td>
<td>1.6</td>
</tr>
<tr>
<td>1961/62</td>
<td>1190.0</td>
<td>4.5</td>
<td>44.2</td>
<td>2.1</td>
</tr>
<tr>
<td>1962/63</td>
<td>1324.0</td>
<td>11.3</td>
<td>48.0</td>
<td>8.6</td>
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<tr>
<td>1963/64</td>
<td>1416.0</td>
<td>6.9</td>
<td>29.9</td>
<td>4.0</td>
</tr>
<tr>
<td>1964/65</td>
<td>1480.0</td>
<td>4.5</td>
<td>50.7</td>
<td>1.6</td>
</tr>
<tr>
<td>1965/66</td>
<td>1554.0</td>
<td>5.0</td>
<td>52.7</td>
<td>2.9</td>
</tr>
<tr>
<td>1966/67</td>
<td>1559.0</td>
<td>0.3</td>
<td>51.8</td>
<td>- 0.8</td>
</tr>
<tr>
<td>1967/68</td>
<td>1544.0</td>
<td>- 0.9</td>
<td>49.4</td>
<td>- 4.6</td>
</tr>
<tr>
<td>1968/69</td>
<td>1632.0</td>
<td>5.7</td>
<td>51.0</td>
<td>3.2</td>
</tr>
<tr>
<td>1969/70</td>
<td>1746.0</td>
<td>7.0</td>
<td>53.2</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Source: CAPMS, Population and Development, op.cit., p.243
prices of 1953 for the period of 1952-1970 and the percentage of the annual increase in both items.

It may be seen that the national income showed a steady increase with the exception of two years when it declined during the Suez crisis in 1956 and the 1967 War. It is also noteworthy that the increase in the real per capita income for the same period was not as significant, due to the increase in population. The increase in income may be attributed to the structural changes that took place in the economy and the development programme (particularly industrialisation) which the Government initiated during this period.

1.3 Social Justice

The Egyptian social background of the early days was well described as follows:

"Egypt presents a startling social paradox. On the one hand are the great metropolitan cities like Cairo and Alexandria, where every sign of civilisation, wealth and culture abounds. On the other, there is the huge illiterate peasant population living under the lowest standard ..." 50

The Egyptian society has, for long, considered wealth, especially the ownership of land, as the primary source of social status. Wilber asserts that

"this factor, rather than any principle of inherited class status has constituted the basic criterion for the order of the range of the social ladder." 51

Egypt was a highly stable society and people were seldom able to change their circumstances. The son of a poor man was born and remained poor and the son of an illiterate remained illiterate. Thus the membership of a social class was, in a sense, hereditary. People were very conscious of family as a criterion for placing an individual in his proper class, and they tended to marry within their own class.

The pre-Revolution Egyptian society was characterised by contrasts, antagonisms and archaic structure. It was made up of two social classes, varying greatly and very unequal in number. The first is a class of masses which drew its resources from farming by archaic methods and which had a
very low standard of living. The other is a ruling class, small in number, drawing its resources and authority from the ownership of the land.\textsuperscript{52}

It may be useful to utilise the conventional division of upper, middle and lower classes to analyse the social classes structure in Egypt before the Revolution. The upper class was very small in number, standing at the top of the social scale. This class is usually described as Turko-Egyptian. However, it rapidly became less Turkish and more Egyptian as a consequence of the emergence of a new group of prosperous landowners due to the high cotton prices, and the institution of private property in land.\textsuperscript{53} It consisted of wealthy landowners, large industrialists and cotton merchants. Connected with this class was a group of high government officials and some successful members of higher professions. This class was very influential politically. With the exception of a few reformers, its members were very conservative in outlook and apprehensive of a social upheaval, but less conservative with regard to Western culture. Issawi argues that

"This class was inclined to accept the British rule, which gave it prosperity and secured its privileges."

\textsuperscript{54}

The middle class in Egypt was also small compared to the lower class. Although the rise of a middle class in Egypt was a phenomenon of the early twentieth century, the industrial middle class was wholly negligible until the Second World War. The bourgeoisie of the pre-war period was primarily commercial and clerical. The commercial middle class, mainly of foreign origin, was a prosperous group. The white-collar middle class, on the other hand, formed a marginal economic group of educated Egyptians. This was composed of intellectual civil servants, chiefly clerical office holders, and professional men such as lawyers, doctors, journalists, teachers and the like.\textsuperscript{55} The educational system before the Revolution was an important element in restricting the size of this middle class. This educational system was designed merely to satisfy the interests of the upper class, while the interests of all other classes of society were virtually neglected.\textsuperscript{56}

The long-standing political ineffectiveness of this middle class was due to several forces. In the first place, it had never been numerically large. Secondly, it lacked cultural and social homogeneity and showed little solidarity in terms of common goals, because many of its members
belonged to foreign minorities which were socially self-contained and politically less effective than their Egyptian counterpart. Thirdly, the traditional values and ambitions of the upper level of the Egyptian middle class led them to emulate the upper class rather than to threaten its status. However, when education spread during the past few decades, the Egyptian middle class expanded in number to the extent that its political influence was felt by the upper class, and formed the national guardians of the nationalist movement.

The lower class constituted by far the largest section of the population, it was mainly composed of the peasants (fellaheen) and the town workers. Any slight acquaintance with the conditions of Egypt could show that the 'fellah' has been much neglected and left in poverty and misery.

In addition to these classes there is, however, an overall pattern of social ranking applied in both town and country, based on the criteria of status and prestige. The Westernisation of the Egyptian urban society combined with education served further to widen the gap between town and country. Wilber finds out that

"The Egyptians are less conscious of class distinctions, as such, than the more extreme and obvious manifestations of status. In fact, there have been two large class divisions: the rich of the cities and the predominantly rural poor."

The revolutionary measures of abolishing the privileges of the old elites, liquidating social differences, narrowing the existing gap between social classes and the implementation of sound social justice have significantly changed the structure of the social classes in Egyptian society. The direction of the change was quite clear. Today, although wealth remains a main criterion for social status, social acceptability seems to be established on a broader basis than wealth. Education is playing greater importance as a means of climbing the social scale since education and training open the way to top positions. For the majority of the people, the new possibilities for social advancement are still overshadowed by practical limitations.

Thus, Wilber asserts that

"The majority of the Egyptian population is still held by a kind of social inertia and the direct impact of modern forces making for social change has been felt most strongly by the middle and upper classes of the cities."
However, the recent Egyptian distribution of power has resulted in the transformation of the traditional passive Egyptian masses into a source of active political and economic strength able to achieve various degrees of social status.

The revolutionary government has shouldered the responsibility of deepening social solidarity among citizens, solving the problems facing them, and gratifying their needs so as to secure social justice. The State has started, in pursuance of this objective, a social service system all over the country whereby welfare services are provided in the domains of health, education, co-operatives and labour status. In brief, welfare has touched all the aspects of social affairs.

(i) Health Care

Health conditions in Egypt, outside a few large cities, were among the worst in the world. Poor health, perhaps more than any other single variable, was responsible for the wretchedness of the peasants. Issawi argues that

"the condition of the peasants does not seem to have changed appreciably ... no effort was made to improve their lot."

In 1950, it was estimated that 55% of the population suffered from Bilharzia, 30% from Ankylostoma, and 5% from Malaria. These diseases affected mainly the villagers. The urban population has its own diseases, namely: Pellagra, which affects 6% of the total population and Tuberculosis, which accounts for some 30,000 deaths each year. In addition, 90% of Egyptians, according to Wilber, suffered from eye diseases and 2% are blind. Describing the situation, Ammar states that

"responsible authorities in Egypt are not yet fully aware of the fact that the villager and his family are, at least, as important as the soil and its products."

Since 1952, a continuous effort has been made to improve the general health and to provide medical services for the rural population. In this respect, the government has introduced a system of combined units catering for schools, health social centres, and agricultural services. Each of these units covers an area with 15,000 inhabitants and is staffed by government-appointed technical personnel. The programme to be followed
in each locality is decided upon by each village council and implemented by an active participation of the rural population. The number of the combined units was estimated at 250 in 1960 and it rose to 324 in 1971. Due attention was paid to the other medical institutions which were concerned with health services in rural areas such as the rural health centres, the rural health units and the units of comprehensive treatment. The number of these units in 1972 reached 1867 with 8,500 beds. The treatment units in towns have also increased. The total number of general, district and specific hospitals rose from 1734 in 1965 to 2528 in 1972. The beddage capacity in these hospitals rose from a total of 65,864 beds in 1965 to 72,876 in 1972. The government has made a two-year compulsory service in the villages for doctors and physicians in order to fill the gap of shortage in their supply. Yet, the services in these institutions are not entirely satisfactory. The increase in number of the hospital and rural medical centres was not accompanied by a similar development in the methods and techniques of treatment.

Besides the health institutions, the revolutionary government has adopted a scheme for providing pure drinking water. This scheme was to benefit mainly the villages. In 1952 it was estimated that pure drinking water from government or municipal installations was available to 5 and 2 million people respectively. In 1957 these figures had risen to 9 and 6 millions, and by the end of the socio-economic development plan these figures have risen to 11 and 17 millions respectively.

Medical care, among other social services, has resulted in a decrease in the death rate; particularly the infant mortality rate. In the revolutionary era the death rate witnessed a rapid drop. The rate of 29 per thousand in 1945 declined to 15.1 per thousand in 1971. However, the death rate in Egypt is still high compared with countries of older standing in economic, social and medical progress, such as USA with a rate of 9.4, the UK with a rate of 11.8 or the USSR with a rate of 8 per thousand.

(ii) The Co-operative Organisations

Following the land reform, co-operative organisations were established to cater for the peasants in particular locations. Membership of these organisations was compulsory to all occupants of agrarian reform land. In 1959 a new law was issued extending the membership to independent owners or
tenants whenever they owned or operated holdings of less than 15 feddans within the boundaries of adjacent villages. The co-operatives were primarily created to meet the day-to-day requirements of the benefit members, and help them to operate their holdings successfully. The co-operatives supply their members with selected seeds, chemical fertilisers, insecticides, agricultural machinery, and storage facilities for crops. The co-operatives also provide credit, do the marketing of members' crops and providing other social services. Each co-operative is run by an appointed manager (Mushrif), an elected board by beneficiaries and tenants, and a supervisory committee. The board members were given no special training in co-operative matters prior to their election. Many of them were illiterate; sometimes as many as 50%. This was not astonishing since the vast majority of the smallholders who had elected them were also illiterate. Consequently, this has resulted in the dominance of the Mushrif in the managerial affairs of the co-operatives. Much criticism was voiced by the co-operatives' members concerning the inflexibility of the administrative machinery and the size of staff employed by the different administrative levels. Part of this criticism was due to the lack of understanding of the real nature and scope of the work of co-operatives' staff. The rigid financial control of the activities of the co-operatives, though advantageous during the first years, constituted a formidable obstacle to the efficient management of vast agricultural estates. However, it is expected that the increase in school attendance in rural areas will lead to providing a class of literate smallholders who would practice their democratic rights in order to make the co-operative service their actual interests.

(iii) Labour Welfare

As a result of the nationalisation, major changes in labour legislation were enacted. Egyptian workers, since 1961, have enjoyed a group of basic rights, or group of basic working conditions, as regards wages, daily working hours, protection against arbitrary dismissal, insurance, profit-sharing schemes, and the membership of the company board. Before 1952 fringe benefits, according to Hansen and Marsouk "were negligible". In that year, the government introduced paid holidays of 14 days per year after one year's work, and 21 days after 10 years' continuous work. In addition,
5 public holidays were enjoyed by workers who were employed in establishments
of not less than 100 workers.

In 1955 the Government introduced superannuation and provident funds. The employers' contribution to these funds was fixed at 7% of wage payments while the contribution of the employee was fixed at 5%. In 1958 a further act introduced accident insurance. Finally, in 1961, the pension scheme was extended. Contributions were raised to 7% from the employee and 17% from the employer. The paid holidays were increased to 7 days, and the days of sickness with pay were extended to 60 per year. 75

The daily working hours were limited by the Labour Code of 1959 to 48 hours per week as against 54 since 1937. In 1961, there was a further reduction to 42 hours per week in the field of industry and commerce. This reduction was set first for the State-owned establishments and by 1964 was extended to all workers. 76

The employer's right to dismiss workers was subject to new restrictions in order to protect labour against abuse. Mabro points out that

"Dismissals became impossible in law and in practice especially between 1963 and 1966 when the Arab Socialist Union was at its most active era, defending workers against their employers in the private as well as the public sector; but in 1966 the government made dismissal easier in instances of gross misconduct."

77

In 1961 a profit-sharing scheme compelled firms to distribute a certain percentage of their net profits to the benefit of their workers and employees. Employees of all companies, private or public, were given the right to 25% of the distributed profits. 78 Besides profit-sharing the workers were given the right to take part in the administration of their company. Membership of nationalised company boards was reorganised in 1963. The members of the company's Board of Directors increased to 9; four of whom are workers elected by secret ballot. 79

Due attention was given to Trade Unions. In fact, trade unions were formed in Egypt at the beginning of the 20th century and were legally recognised in 1942. Hansen and Marzouk argue that

"The number of Unions was big, but very few were organised. The individual Unions were weak and their effect was limited."

80
However, the trade unions gained the major part of their basic rights only after the July 1952 Revolution. The syndical movement completed its organisation with the establishment of the General Egyptian Trade Union. The personnel in trade unions played an effective role in improving industrial relations among workers by creating an atmosphere of stability and co-operation between the two partners in production. But, unions have had little freedom of action and were subject to financial, political and administrative controls. Generally speaking, there were no overt signs of labour unrest in Egypt until 1968. But on several occasions after the Arab-Israeli War 1967, strikes and demonstrations, though illegal, took place, expressing both political frustration and industrial grievances. However, the riots of January 1977 were the worst since 1952.

In addition to the trade unions, new institutions were established to shoulder the responsibility of maintaining labour's social welfare: the Central Department for Labour Services, for example, was established in 1968 to carry out a number of projects connected with adult education among workers, family planning, and camping holidays. Moreover, the Labour Culture Centres, which spread all over the country, were established to provide workers with cultural information. Furthermore, six institutions for specialised studies were established.

2. Industrialisation

The first attempt to create industry in Egypt was made by Mohammed Ali. This attempt, however, was greatly restricted by the interference of the European Powers in 1841. At the beginning of the twentieth century, a number of industrial enterprises were created, but they were extremely modest in terms of production and employment until World War I. When Egypt was cut off from its supplies of manufacturing imports during this war, local industry was enhanced and achieved certain expansion to face the demand created by the presence of the foreign troops and the rise in domestic incomes. With the peace and the return to the traditional free trade policy, the war-time industries did not survive to any large extent. Most of the early industrial ventures actually failed after the war, due to the renewed competition of foreign products. The desire to increase the country's independence through industrialisation was reflected in the establishment of two remarkable institutions. The first was Banque Misr,
which was established in 1920 by a group of Egyptian capitalists who
promoted the local industry as well as the commercial enterprises. The
second was the Egyptian Federation of Industry, which was established
in 1922 to push forward the industrialisation movement. The
depression of the early thirties, which seriously affected Egyptian trade, helped,
to some extent, the development of the Egyptian industry. Hansen and
Marzouk have pointed out that

"the large fall in cotton prices and other agri-
cultural products, gave a strong impetus towards
increased industrialisation."

However, the support of government for industry through loans, the Tariff
Reform of 1930 to protect the domestic industry from foreign competition,
and the establishment of a large number of big industrial enterprises
financed by Banque Misr were significant measures behind a large scale
industrialisation.

The Second World War impact on Egyptian industry was similar in
character to that of the First Great War. Anis has demonstrated

"During 1937-47 real industrial output rose by ap-
proximately 37%, per capita income, industrial
production grew at an annual rate of 4% and the
number of persons in industrial occupations, es-
pecially in food processing and textiles, increased
by 50%.

Nevertheless, the flourishing of the Egyptian industry during the war began
to decline in the post-war period. El-Kammash recounts two reasons which
contributed to such a decline. In the first place "prices were artificially
high during the war period, a fact which rendered most industries profit-
able." On the other hand, profits realised during the war were not rein-
vested in industry.

At mid-century, the Egyptian industry made only a small contribution
to the national income and employment. In 1952 Egypt's industrial sector
accounted for some 15% of GDP at factor cost. It employed slightly more
than 8% of the labour force and contributed only 9.6% of the foreign exchange
earning from merchandise exports. O'Brien points out that

"the rate of growth of industrial production has
not been sufficient to provide economic progress."

The pioneering Egyptian industry was typically infant. It was dominated
by agriculture products. The availability of raw material and domestic
demand for consumer goods made it natural that industrialisation should start with food and cotton industries, in addition to other industries using salt, soda and pottery as raw material. 92

Egypt, with population growth rate exceeding 2.5%, found itself forced to carry out an intensive programme of industrialisation to face the problem of unemployment and underemployment.

The revolutionary government has paid much attention to industrialisation. Since 1952, 800 new industrial projects have been established costing ££ 1,000 million. 93 A large percentage of total investment was directed towards industrial projects in the First Ten Year Development Plan (1960-1970). Table 3.5 shows the investment in economic activities during the period 1960 to 1975. It is clear that the greatest share of investment was in the industrial sector.

**TABLE 3.5:** DISTRIBUTION PERCENTAGE OF INVESTMENT IN ECONOMIC ACTIVITIES BY SECTORS 1960-1975

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<tr>
<td>Agriculture</td>
<td>20.7</td>
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<td>17.2</td>
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<tr>
<td>Industry</td>
<td>20.0</td>
<td>27.4</td>
<td>34.6</td>
<td>30.8</td>
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<tr>
<td>Electricity</td>
<td>2.5</td>
<td>19.3</td>
<td>7.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Construction</td>
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<tr>
<td>Transport</td>
<td>28.3</td>
<td>12.9</td>
<td>20.0</td>
<td>20.4</td>
</tr>
<tr>
<td>Trade</td>
<td>2.0</td>
<td>0.7</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Housing</td>
<td>15.1</td>
<td>11.8</td>
<td>10.3</td>
<td>13.8</td>
</tr>
<tr>
<td>Public Utilities</td>
<td>4.1</td>
<td>2.4</td>
<td>3.1</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>7.3</td>
<td>3.5</td>
<td>5.1</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source:** CAPMS, Population and Development, op.cit., pp.266-7
CAPMS, Annual Statistical Book for ARE, 1952-1976, op.cit., p.212

The Revolution has established a remarkable industrial sector which has grown faster than any other sector of the Egyptian economy. Such industrial development may offer an interesting illustration of the process of industrial growth since it has not followed the normal procedures of
industrial development. O'Brien argues that

"Egypt industrialisation did not proceed stage by stage from handicraft production to small factories and then on to the large-scale mechanised enterprises; it is rather a text-book example of development through import substitution."

The broad picture given by indices of industrial production published by CAPMS and Egyptian National Bank reveals that the average rate of real growth was close to 6% over the period 1952-1970. During this period the percentage of production value of the industrial and electricity sectors amounted to 59%, the total income from the sector accounted to 28.8%, and the number of workers in this sector increased by 47%. The contribution of industry to the increase in national income is evident from the fact that the share of industry to national income has risen from 8.4 in 1950 to 20.9 in 1975.

Egyptian industry has also become more complex and provided numerous products after the Revolution. Egypt now manufactures a great number of commodities. Some of these, of course, are merely assembled from imported parts. The process of assembly, however, becomes more complicated each year, with more Egyptian content. The direction of the changes in industrial structure is evident from Table 3.6 which compares the structure of gross value added in manufacturing in 1952 and 1975.

Despite the growth in the industrial sector, Egypt has not fully succeeded in developing its capital-goods industry. The pattern of structural change in Egyptian industry is thus typical of most developing countries. The stage reached at present does not compare to that of advanced industrial countries. At present, the share of producer-goods industries, though significantly higher than in 1952, is still relatively small compared to consumer-goods industries. Yet, the expansion in intermediate-goods industries has been remarkable. If Egypt is ever to become an industrial power, it has to export manufactured goods. Very few Egyptian industries are competitive, due to the almost completely protected home market. It is only through competition and export that Egyptian industry may introduce high quality production.

The contribution of industry to employment, though significant, is still small compared to the rate of population growth. Industry absorbs a small proportion of the increment to the labour force. This may be at-
**TABLE 3.6: COMPARATIVE STRUCTURE OF GROSS VALUE ADDED IN MANUFACTURING 1972-1975**

<table>
<thead>
<tr>
<th>Industry</th>
<th>1952</th>
<th></th>
<th>1975</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>GVA</td>
<td>%</td>
<td>GVA</td>
<td>%</td>
</tr>
<tr>
<td>Petroleum</td>
<td>34</td>
<td>11.3</td>
<td>386</td>
<td>15.2</td>
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<tr>
<td>Mining</td>
<td>4</td>
<td>1.2</td>
<td>18</td>
<td>0.7</td>
</tr>
<tr>
<td>Chemical and Pharmaceutical</td>
<td>21</td>
<td>6.7</td>
<td>269</td>
<td>10.6</td>
</tr>
<tr>
<td>Food</td>
<td>122</td>
<td>40.3</td>
<td>694</td>
<td>27.3</td>
</tr>
<tr>
<td>Engineering and Electrical</td>
<td>30</td>
<td>9.9</td>
<td>393</td>
<td>15.4</td>
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<tr>
<td>Building and Heating</td>
<td>8</td>
<td>2.8</td>
<td>94</td>
<td>3.7</td>
</tr>
<tr>
<td>Spinning and Weaving</td>
<td>85</td>
<td>27.8</td>
<td>689</td>
<td>27.1</td>
</tr>
<tr>
<td>Total</td>
<td>304</td>
<td>100.0</td>
<td>2543</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Egypt, CAPMS, Annual Statistical Book for ARE, 1977, op.cit., p.67*
tributed to the small initial size of industry, the capital-investment nature of modern techniques, and the absence of a significant traditional manufacturing sector in Egypt. Industrial growth, however, generated 71,665 new jobs between 1952 and 1960.\textsuperscript{98} The number of industrial labourers increased from 601,800 to 916,100 or approximately 53% during 1960-1970.\textsuperscript{99} Furthermore, the nationalisation of industry led the government to create an enormous administrative superstructure. However, Mabro legitimately hesitates to treat it entirely as a benefit.\textsuperscript{100} Indeed the Egyptian labour force in the industrial sector has expanded significantly. In 1937, the proportion of persons occupied in the agricultural field reached 69% of the total labour force against 10.6% in the field of industry. After the Revolution, with the expansion in industry, the workers in the agricultural sector declined to 58% in 1960, while the proportion occupied in manufacturing industry increased to 12.6%. This trend went on after 1960. With the establishment of a large number of factories, the agricultural workers declined to 48.9%, while the industrial workers increased to 18.6% of the labour force in 1970. Thus, industrial employment has grown in numbers from 363,500 in 1937 to 916,100 in 1970. The average annual growth rate was 1.9% between 1947 and 1960. It steadily increased to 7.1% during the first Five Year Plan 1960-1965. But this rate of growth declined to 2.2% between 1965 and 1970. On the whole, the average annual growth rate of industrial workers was 4.4% during the period 1960-1970.\textsuperscript{101}

The role played by women in the labour force in industry in the Egyptian society, compared to that of men is still negligible. More recently, however, women play an increasingly active role in factories. The participation of women in the labour force is expected to rise gradually due to the growing attention paid to education, and also particularly after the standard of industrialisation in the countryside reaches the appropriate level which allows women who are not suited to agricultural work to occupy their spare time.

A major problem of the labour force in Egypt is the lack of balance in Egyptian manpower resources. Unskilled agricultural and industrial labourers are plentiful, while there is a shortage of semi-skilled, skilled, technical personnel, and medium grade professional people. This imbalance stems partly from the historical composition of the Egyptian labour force.
and partly from the distinction, in terms of social status, between manual and clerical jobs. Another problem concerns productivity. It is very low in Egyptian industry compared to that of advanced industrialised countries. Two main considerations may be responsible for the low productivity of the Egyptian workers. First, there is their poor health, congested housing and inadequate diet. Second, there is the prevailing illiteracy and lack of training which makes the communication of instruction relating to their work and initial training very difficult. The system of education with its narrow base and non-scientific orientation has not provided industry with the technicians and skilled workers required.

3. Education

Education is definitely a potent force in shaping society. It is highly responsive to various social, economic and political considerations which exert their influence on the whole life of the community. Thus the educational development in a country at a given time cannot be fully understood or adequately evaluated without taking into account the socio-economic aspects, as well as the emerging needs of the citizens and society.

Before the 1952 Revolution, despite all attempts which produced some benefits for the compulsory education, the gap between elementary and primary education remained wide until the decisive events of the period from 1945 to 1949. These were: the abolition of tuition fees, the exemption from paying the cost of textbooks and school meals, and the unification of school curricula (except for the foreign language which was taught as from the third form in primary schools). These measures have tended to eliminate the social distinction between primary and elementary education.

In practice, however, both the elementary and the primary schools remained as they were before. The gap between them was as wide as ever in regard to premises, utilities and teachers. Parents were much more interested in primary than in elementary education.

Secondary education was commonly regarded as the 'royal road' to the university and subsequently to the government posts, high positions and prestige. Therefore, this type of education was subject to great pressure. Though secondary education was affected by many educational laws, it remained very close to what it had been in 1935. Very shortly before the Revolution two different laws to reform secondary education were passed. The first was
the 1949 Secondary Education Act, which aimed at the gradual spreading of sound education based on recognised pedagogical bases, taking the country's economic potentialities into account. The second was the 1951 Secondary Education Act, which sought to facilitate secondary education for all, irrespective of problems which are likely to limit its expansion.

Thus, the educational reform before 1952 became a subject of contention between two opinions, one, calling for the restriction of education to the elite (with a view of training leaders who would be able to undertake the reform of the country and enhance its progress in the various fields including that of education and instruction), the other, which looked upon education as one of the people's rights which the State has to provide for everybody.

In 1952 general dissatisfaction with the educational conditions was paramount. It was argued that the educational system had failed to achieve any of its cherished objectives. Despite all efforts to reform, there was a general complaint about all stages of education. Complaints were voiced by all parties: educationists, parents, businessmen, and administrators. There was awareness of the fact that no development would serve its purpose unless reforms occurred in all aspects of education. It was argued that foreign occupation, the monarchy and feudalism had led to the placing of artificial obstacles which often impeded the progress of education along proper lines. The 1952 Revolution paid due attention to the development of the different stages of education. Free education was provided at the different levels, even in the universities. At the same time, a series of educational laws were enacted to guarantee equal educational opportunities for all citizens, regardless of class or sex. The Education Act No.210 of 1953 provided for the establishment of unified primary schools and for the removal of the artificial gap between elementary (for masses) and primary (for elite) education. Pupils were exempted from all kinds of fees on the basis that no fees should be imposed on pupils in a compulsory stage of education. Also, the foreign language was deleted from the subjects of study taught in this stage, on the basis that two languages taught at this early stage of learning might impede each other.

The Education Act No.211 of 1953 organised the post-primary schooling. Under this Act secondary education is divided into two stages, the prepara-
tory stage, covering four years, and the secondary stage covering three years. In 1957 the preparatory stage became three years and since then, the education system has been (6 - 3 - 3). Other Acts were issued to organise technical education (industrial, agricultural and commercial). This type was first introduced in two stages: preparatory and secondary. Recently, the technical preparatory schools were abolished. Thus, the educational ladder in Egypt comprises four stages: primary, preparatory, secondary and higher education, as shown in Figure 2.

4. Response of Education to Social Justice and Industrialisation

Two questions need to be asked. The first: has the new system of education reached the stage of achieving social justice in this field? The second: is the new system of education capable of satisfying the requirements of the socio-economic development of Egypt?

It will be demonstrated that the educational system has reached the stage of achieving the aimed social justice in the field, but has not yet been perfectly adapted to the needs of the economic development of the country.

4.1 Response to Social Justice

The new system of education has reached the required standard of social justice in this field since remarkable efforts were made to provide education for all, and in securing equal educational opportunities. This may be clearly deduced from the following analysis.

The expansion in the enrolment in the various educational levels may be demonstrated from Table 3.7 which gives the number of students and classes in the different educational stages during 1953-1975.

It should be noticed that both the number of classes and pupils at all educational stages increased significantly during the revolutionary regime. This conclusion can be further driven home by examining such an increase in the light of a comparison of 1975 figures with those of 1953 assuming the latter equal to 100. This comparison is given by Table 3.8.
The Educational Ladder in the Arab Republic of Egypt

TABLE 3.7: NUMBER OF CLASSES AND STUDENTS ENROLLED IN THE DIFFERENT EDUCATIONAL STAGES IN SELECTED YEARS DURING 1953 - 1975

<table>
<thead>
<tr>
<th>Stage</th>
<th>1953</th>
<th>1961</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>35,223</td>
<td>63,893</td>
<td>97,619</td>
</tr>
<tr>
<td>Students</td>
<td>1,392,741</td>
<td>2,754,566</td>
<td>4,074,893</td>
</tr>
<tr>
<td>Preparatory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>9,719</td>
<td>10,097</td>
<td>29,870</td>
</tr>
<tr>
<td>Students</td>
<td>351,834</td>
<td>345,191</td>
<td>1,202,038</td>
</tr>
<tr>
<td>General Secondary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>2,667</td>
<td>4,222</td>
<td>8,803</td>
</tr>
<tr>
<td>Students</td>
<td>92,062</td>
<td>131,885</td>
<td>340,326</td>
</tr>
<tr>
<td>Technical Secondary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>763</td>
<td>2,461</td>
<td>10,263</td>
</tr>
<tr>
<td>Students</td>
<td>18,838</td>
<td>74,037</td>
<td>348,306</td>
</tr>
<tr>
<td>Teacher Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>738</td>
<td>791</td>
<td>976</td>
</tr>
<tr>
<td>Students</td>
<td>23,636</td>
<td>20,354</td>
<td>33,275</td>
</tr>
</tbody>
</table>

Source: CAPMS, Statistical Handbook, 1964, op.cit., p.112
TABLE 3.8: INDICES OF STUDENTS AND CLASSES IN DIFFERENT EDUCATIONAL STAGES IN 1975 COMPARED TO 1953 (1953 = 100)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Classes</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1953</td>
<td>1975</td>
</tr>
<tr>
<td>Primary</td>
<td>100</td>
<td>269</td>
</tr>
<tr>
<td>Preparatory</td>
<td>100</td>
<td>308</td>
</tr>
<tr>
<td>General Secondary</td>
<td>100</td>
<td>330</td>
</tr>
<tr>
<td>Technical Secondary</td>
<td>100</td>
<td>1274</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>100</td>
<td>129</td>
</tr>
</tbody>
</table>

Source: Counted from Table 3.7

Besides the considerable increase in all types of education, it may be noted that the most rapid growth was in technical secondary education because it expanded from a very small base. This category, however, is misleading as it comprises all types of non-classical secondary education. Commercial schools tend to dominate this type. In 1975 the enrolment in commercial secondary schools was 213,209 or 61% of all students enrolment in technical secondary education, as against 25% (98,811 students) in industrial secondary schools and 11% (38,429 students) in agricultural secondary schools.109

The expansion in education was at a much faster rate than that in population. To illustrate this, we calculated the ratio of schooling enrolment to schooling age population for the period 1947-1970. These ratios are given in Table 3.9.

TABLE 3.9: RATIOS OF SCHOOLING ENROLMENT TO SCHOOLING AGE POPULATION (1947-1970)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1947 %</th>
<th>1960 %</th>
<th>1970 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - 14</td>
<td>19.6</td>
<td>44.2</td>
<td>53.5</td>
</tr>
<tr>
<td>15 - 19</td>
<td>3.3</td>
<td>15.0</td>
<td>16.7</td>
</tr>
</tbody>
</table>

These efforts to increase educational opportunities for both boys and girls were reflected in decreasing the proportion of illiteracy. The rates of illiteracy were extremely high at the beginning of the twentieth century. Illiteracy was estimated in 1907 census at 92.7% of the Egyptian population, the percentage being 87.0% for males and 98.6% for females. In 1937, the percentage of illiteracy declined to 85.2% of all population, the percentage was 76.6% for men and 93.9% for women. In 1947, this percentage declined to 77.2% with 66.1% for males and 85.2% for females. Mead argues that

"The absolute number of illiterates (aged ten years and over) has increased from 7.3 million in 1907 to 12.6 million in 1960."

This rate, however, has gradually dropped to reach 71% in 1960 and 65% in 1966. Due attention was paid to adult education. Evening classes were opened to those who missed the opportunity of learning in their childhood. In addition, in 1953 UNESCO, in collaboration with other UN organisations, and the Egyptian Government, established the Arab States' Fundamental Educational Centre at Sirs-El-Layyan, near Cairo, to help in the field of adult education. This Centre has been of great benefit not only to Egypt, but also to the whole Arab nation.

The government had announced a ten-year plan to accommodate all the children aged 6-12 by 1968, but the unexpected increase in population combined with the socio-economic circumstances made it difficult to achieve this goal. A new plan was made for the same purpose covering the period 1973-1982. However, although primary education is not yet universal, the ratio of children enrolled in the primary stage to total compulsory school age population (6-12) increased between 1953/4 and 1965/6 from 46.0% to 69.7%. Recently this ratio reached about 80%, of which 65% were males and 35% were females. As a result of the lack of the absorption capacity of primary education to encompass all children of school age, the rate of illiteracy is still high. It was estimated as 67% in 1974.

The increase in school enrolment was not accompanied by a similar increase in the number of teachers. It was also unmatched by an increase in basic inputs and facilities, which has affected the quality of educational services in an adverse way.
4.2 Response to Industrialisation

Concerning the response of the Egyptian educational system to the requirements of the rapid industrialisation which is taking place in Egypt, one can argue that there is an acute shortage in skilled workers, technicians and 'middle' management, while surplus is felt mostly in non-skilled jobs. This is evident from Table 3.10 which shows the supply of and demand for labour force during the period 1970-1980.

This table reveals that in 1980 there will be a shortage of 373,000 technicians. Also, the shortage in skilled and semi-skilled workers is estimated at 759,000 and 656,000 respectively. A slight surplus will be expected in managerial and specialist levels, but more clearly in the unskilled workers and clerical jobs.

The shortage is expected to increase faster within the next ten years, due to the retirement of a portion of the labour force. Nugent argues that

"A little more than 20% of the members of the current work force is in the age bracket of about 50 years. New social security legislation encourages retirement at the age 60. Therefore, those who are concerned with manpower development must anticipate the training of nearly a million and a half workers over the period of the next ten years, merely to replace those who will be retiring."

Despite the economic growth rate, which Egypt has achieved during the period 1952-1970, there was not a correspondingly adequate growth rate in skilled labour. Harbison maintains that

"the notion that there is always a direct relation between the development of education and economic growth can be misleading, especially in the Egyptian case over the period 1952-1967."

He further contends that

"in most cases, the rate of increase in human capital will need to exceed the rate of economic growth. In newly developing countries, which are already faced with the critical shortages of highly skilled persons, the ratio of the annual increase in national income may need to be as high as three to one."

In the case of Egypt, the national income in 1960 was some $3,136 million which increased to £4,053 million in 1965. The number of technicians,
TABLE 3.10: SUPPLY AND DEMAND OF LABOUR POWER (1970-1980) (in 000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demand</td>
<td>Supply</td>
<td>+</td>
</tr>
<tr>
<td>Managers and Specialists</td>
<td>216</td>
<td>225</td>
<td>+9</td>
</tr>
<tr>
<td>Technicians</td>
<td>513</td>
<td>300</td>
<td>-213</td>
</tr>
<tr>
<td>Clerks</td>
<td>720</td>
<td>505</td>
<td>-215</td>
</tr>
<tr>
<td>Skilled Workers</td>
<td>1152</td>
<td>1013</td>
<td>-139</td>
</tr>
<tr>
<td>Semi-skilled Workers</td>
<td>2160</td>
<td>1727</td>
<td>-433</td>
</tr>
<tr>
<td>Unskilled Workers</td>
<td>4239</td>
<td>5230</td>
<td>+991</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Demand</th>
<th>Supply</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demand</td>
<td>Supply</td>
<td>+</td>
</tr>
<tr>
<td>Managers and Specialists</td>
<td>256</td>
<td>277</td>
<td>+21</td>
</tr>
<tr>
<td>Technicians</td>
<td>610</td>
<td>347</td>
<td>-263</td>
</tr>
<tr>
<td>Clerks</td>
<td>856</td>
<td>846</td>
<td>-10</td>
</tr>
<tr>
<td>Skilled Workers</td>
<td>1370</td>
<td>1103</td>
<td>-267</td>
</tr>
<tr>
<td>Semi-skilled Workers</td>
<td>2568</td>
<td>2068</td>
<td>-500</td>
</tr>
<tr>
<td>Unskilled Workers</td>
<td>5040</td>
<td>6059</td>
<td>+1019</td>
</tr>
</tbody>
</table>

administrative, executive and managerial workers in 1960 was 291,000, which increased to 293,000 in 1965. When the appropriate calculations were made, the ratio was hardly three to one.118

The percentage of enrolment in technical schools is another indicator which gives evidence of the response of the educational system to the needs of industrialisation. The Egyptian pupils are keen to go to general secondary schools because of their high prestige and because they are the only way to the university. This attitude is operating in a direction which has resulted in an imbalance of admission to the different kinds of secondary schools. It has, in turn, affected the number of graduates which is inadequate for the needs of the development plans. This is evident from Table 3.11.

It may be noted that the percentage of the general secondary school graduates in most years exceeded 60% of all graduates. This small number of graduates from technical secondary education, however, is partly responsible for the shortage in the skilled workers and technicians needed for national development plans. The estimation of the Ministry of Higher Education puts the annual requirements for industry at 59,300 graduates until 1980.119 When this is compared to the graduates from industrial secondary education, estimated at 25,000 yearly plus 3,500 graduates from the apprenticeship centres, one will consequently estimate the shortage at 31,800 annually.

Higher education has also been unable to cope with the requirements of national development plans. The policy adopted in higher education aimed at increasing the rate of admittance to practical and scientific faculties and higher institutions. In practice, however, this policy was not fully implemented, particularly after 1967. This is partly because the great demand for university education combined with limited financial resources made the admission to higher education a political rather than an educational decision. Moreover, since the cost of education in the humanities is less than that of sciences, the excess numbers were absorbed in the first branch of education.

An assessment carried out by the Ministry of Higher Education revealed that the requirements of specialists and technicians may exceed 8,100 graduates annually until 1985.120 When this is compared to the average number of graduates from the technical higher institutes, one will estimate a shortage of some 1,800 graduates yearly.
TABLE 3.11:  PERCENTAGE DISTRIBUTION OF EGYPTIAN SECONDARY SCHOOL
GRADUATES ACCORDING TO TYPE OF EDUCATION (1964-1975)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total secondary school graduates in thousands</th>
<th>General %</th>
<th>Industrial %</th>
<th>Commercial %</th>
<th>Agricultural %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>59</td>
<td>62.7</td>
<td>13.6</td>
<td>18.8</td>
<td>4.9</td>
</tr>
<tr>
<td>1965</td>
<td>71</td>
<td>66.2</td>
<td>12.7</td>
<td>15.5</td>
<td>5.6</td>
</tr>
<tr>
<td>1966</td>
<td>94</td>
<td>73.4</td>
<td>9.9</td>
<td>11.7</td>
<td>5.0</td>
</tr>
<tr>
<td>1967</td>
<td>103</td>
<td>72.8</td>
<td>9.9</td>
<td>11.7</td>
<td>5.6</td>
</tr>
<tr>
<td>1968</td>
<td>123</td>
<td>70.7</td>
<td>10.6</td>
<td>13.0</td>
<td>5.7</td>
</tr>
<tr>
<td>1969</td>
<td>142</td>
<td>65.5</td>
<td>11.3</td>
<td>17.0</td>
<td>6.2</td>
</tr>
<tr>
<td>1970</td>
<td>135</td>
<td>58.5</td>
<td>14.0</td>
<td>21.5</td>
<td>6.0</td>
</tr>
<tr>
<td>1971</td>
<td>163</td>
<td>57.6</td>
<td>14.1</td>
<td>23.3</td>
<td>5.0</td>
</tr>
<tr>
<td>1972</td>
<td>184</td>
<td>58.7</td>
<td>10.3</td>
<td>26.6</td>
<td>4.4</td>
</tr>
<tr>
<td>1973</td>
<td>206</td>
<td>60.3</td>
<td>12.1</td>
<td>23.3</td>
<td>4.3</td>
</tr>
<tr>
<td>1974</td>
<td>207</td>
<td>60.2</td>
<td>12.3</td>
<td>23.0</td>
<td>4.5</td>
</tr>
<tr>
<td>1975</td>
<td>211</td>
<td>57.6</td>
<td>12.0</td>
<td>25.4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

5. Conclusion

In this chapter we have examined the actual institutional changes which have taken place in the Egyptian society in the post-revolutionary era. We confined our analysis to justice, industrialisation and education to serve the intellectualisation of the problem under investigation.

We have demonstrated that Egypt has, for more than twenty years, moved away from the old political system. Attempts were made to block the effective participation of the pre-revolutionary elite and to achieve a sort of political justice through a sound democratic system giving the Egyptian masses real representation. Proving ineffective, the mass mobilisation party in Egypt disintegrated, giving place to a new, but limited, multi-party system. In practice, however, the political organisations seem to operate in a manner discrepant with democratic principles. As regards economic and social justice, successful measures were implemented to eliminate class conflict, abolish the privilege of the old elite, and to liquidate class distinction peacefully.

Industrialisation has significantly developed during the post-revolutionary era. Investment in the industrial sector was impressive. New manufacturing was introduced, such as chemical, pharmaceutical, engineering and electrical industries. In addition, the traditional food, spinning and weaving industries were developed. The public sector took the lead in heavy industries. However, the contribution of industry to employment, though significant, is still small compared to the rate of population growth, and the limited cultivated areas. Moreover, the Egyptian labour force in the industrial sector suffers from inadequate training which has resulted in a low productivity compared to that of advanced industrial society, as well as an acute shortage in technicians and skilled personnel.

Education has also enjoyed several changes in structure and content. The traditional discrimination between mass education in elementary schools and elitist education in modern primary schools came to an end. Expansion in education was significant. The curriculum content, syllabuses and textbooks were revised on several occasions to keep in concert with the aim of socialising schools, and to cope with the changing Egyptian society. However, the educational system still has its defects. Universal primary education which has not yet been completed, is reflected in a high rate of illiteracy. Articulation between the different stages still operates on
selective bases, which reflects a wastage of talent and hinders the practicability of the equality of educational opportunity. Duality in secondary education still exists, resulting, under the prevailing normative attitudes towards manual work, in great pressure on academic schools. These defects, among others, have produced an educational system inadequate to the great expectations defined by the revolutionary documentations as expressed by the government policies towards justice, industrialisation and education.

The conclusion we were able to draw, after examining the response of the educational system to the realisation of social justice and industrial development, suggests that the educational system in Egypt since 1952 may not have departed far from that needed to achieve the target level of social justice in this field. However, it is still far short of that needed to provide the required skilled manpower for accelerating the economic development. Thus, this asynchronous change in social and economic fields on the one hand, and in education on the other, creates the problem under investigation.
REFERENCES


10. Ibid., pp.52-3

11. Ibid., p.55


17. Dekmejian, R.H., *op.cit.*, p.146

18. Ibid.


21. Dekmejian, R.H., op.cit., p.253
23. Ibid.
24. Dekmejian, R.H., op.cit., p.271
25. Ibid., p.285
30. Saab, G.S., op.cit., p.159
32. Ibid., p.216
33. El-Kammash, M., op.cit., p.30
35. El-Kammash, M., op.cit., p.251
36. Wilber, D.N., et al., op.cit., p.314
38. Saab, G.S., op.cit., pp.41-3
40. Ibrahim, A., op.cit., p.117
42. Mansfield, P., op.cit., pp.138-9
44. Mansfield, P., op.cit., p.140
46. Mansfield, P., op.cit., p.151
47. Ibid.
48. Mabro, R., op.cit., p.223
49. El-Kammash, M., op.cit., p.150
50. Galt, R., The Effects of Centralisation on Education in Modern Egypt, Cairo, The American University Press, 1936, p.54
51. Wilber, D.N., et al., op.cit., p.80
52. Issawi, C., Egypt: An Economic and Social Analysis, op.cit., p.54
53. Ibid., p.17
54. Ibid., p.34
55. Harris, C., op.cit., pp.104-5
57. Wilber, D.N., et al., op.cit., p.92
58. For example, the rise of a strong Wafd Party in the early twenties was supported by the middle class. Also, the strong movement of the Moslem Brotherhood depends mainly on this class.
59. Wilber, D.N., et al., op.cit., p.81
60. Ibid., p.94
61. Issawi, C., Egypt: An Economic and Social Analysis, op.cit., p.17
63. Ibid., pp.92-3
64. Wilber, D.N., et al., op.cit., p.271
66. Ibrahim, A., op.cit., p.118
67. CAPMS, Statistical Handbook 1972, op.cit., p.138
68. Ibid., p.137
69. Issawi, C., Egypt in Revolution, op.cit., p.103
70. CAPMS, Population and Development, op.cit., pp.107-8
71. Saab, G.S., op.cit., pp.51-2
73. Saab, G.S., op.cit., p.54
75. Ibid.
76. Mabro, R., op.cit., p.154
77. Ibid., p.155
78. Ibid.
79. Ministry of Planning (ARE), Manpower, op.cit., p.12
81. Mabro, R., op.cit., p.156
82. These institutions were: the Labour Education Institute, the Working Economic Institute and the International Relations Institute.
84. Hansen, B. and Marzouk, G.A., op.cit., p.113
85. El-Kammash, M., op.cit., p.187
86. Hansen, B. and Marzouk, G.A., op.cit., p.150
89. El-Kammash, M., op.cit., p.188
90. Mabro, R., op.cit., p.141
91. O'Brien, P.K., op.cit., p.19
92. Hansen, B. and Marzouk, G.A., op.cit., p.113
94. O'Brien, P.K., op.cit., p.14
95. CAPMS, Statistical Handbook 1972, op.cit., p.62
96. Mansfield, P., op.cit., pp.146-7
97. Ibrahim, A., op.cit., p.120
98. Ibid.
99. CAPMS, Statistical Handbook 1972, op.cit., p.69
100. Mabro, R., op.cit., p.171
103. UAR, Ministry of Education, Documentation Centre for Education, Education in Egypt in the 20th Century, Cairo, General Organisation of Government Press, 1960, p.34
104. El-Koussi, A.A., Education in Egypt before 1952, op.cit., p.451
105. UAR, Ministry of Education, Education in Egypt in the 20th Century, op.cit., p.54
106. Ibid., p.61
110. Mead, D., op.cit., p.29
111. CAPMS, Population and Development, op.cit., p.217


115. Nugent, D.F., op.cit., p.3


117. Ibid., p.439


120. Ibid., p.61
PART THREE
POLICY FORMULATION

Following the problem analysis is the policy formulation. To adopt a certain policy means a solution to a particular problem. The task of a comparative educationalist, according to Holmes, is to provide clearly a range of policy choices, as well as to propose more realistic solutions through refinement in the comparative analysis. This part, therefore, is confined to the Egyptian educational policy which has been formulated and adopted to cope with the socio-economic changes taken place in the society.

There is no doubt that education is a product of many forces acting, at times independently, and at other times in concert, to evolve a more appropriate and effective education for the youth. Secondary education, in particular, is tempered by the social complexity and coloured by the dominant values in any community. Since Egyptian secondary education has been affected by that country's history and social values, useful understanding of its policies and practices is dependent upon the examination of these aspects within a historical context.

In this part a critical investigation is made of the emerging policies concerning the reform of secondary education in response to the requirements of the national development plans.
CHAPTER FOUR

EGYPTIAN POLICY CONCERNING THE REFORM
OF SECONDARY EDUCATION

1. Former Policies and Practices
2. Critical Analysis
3. Present System of Secondary Education
   3.1 Organisation
   3.2 Selection
   3.3 Grouping
   3.4 Curriculum Organisation
   3.5 Curriculum Processes
   3.6 Conclusion
4. Emerging Policies
5. Recent Experimentations
   5.1 The 8-Year Experimental School
   5.2 Basic Education
   5.3 The Comprehensive School
6. Conclusion
EGYPTIAN POLICY CONCERNING THE REFORM OF SECONDARY EDUCATION

This chapter aims at examining the educational policies and practices which imposed the necessity of reorganising secondary education. First, it deals historically with policies and practices in education relevant to the organisation of secondary schools. Second, it examines the status quo of secondary education in Egypt in terms of its structure, selection, grouping, and curriculum. Finally, it investigates the emerging policies for change and discusses the new trends and Egyptian experimentations.

1. Former Policies and Practices in Education

Secondary education today must be visualised through its passing history, which reflects the various attempts to preserve or promote certain values held to be important to society at the time.

Three distinguishable stages of the revolutionary regime have shaped the character of the educational policy throughout the revolutionary era. In the first stage, the consolidation of power 1952-1956, educational policy was not geared to any fundamental ideological change. The changes that were made in this period represented a continuation and elaboration of reforms that had been previously initiated. The remaining vestiges of dualism between elementary and primary schools were eliminated. Law No.210 of 1953 provided for unified primary schools for a period of six years. In many cases, however, children would proceed to the secondary stage after completing the fourth grade, if they passed a promotion examination. The fifth and sixth grades were reserved for pupils who either failed or did not sit for this examination, and the emphasis appeared to be upon reviewing and preparing for such a competitive examination. Also in 1953, Law 211 concerning the organisation of secondary education was promulgated. Under this Law, secondary education was divided into two stages: the preparatory, covering four years with a local competitive entrance examination at the ages of 10 to 12, and ending with a public examination held by the respective educational zones; and a secondary stage, covering three years for holders of the preparatory education certificate, with a general course in the first year and special courses in science or arts in the last two years. What is noteworthy is the similarity between Law No.10 of 1949 and...
Law No. 211 of 1953, due to the fact that both were influenced by the philosophy of Ismail El-Kabbani. The application of Act 211, however, revealed several drawbacks, notably the overlapping of courses between the 5th and 6th grades of primary schools and the 1st and 2nd forms of preparatory schools. This meant a loss of one or two years to the pupils, and undue expenditure of funds and effort by the State. Overstressed concern was still directed to secondary and higher education. The Ministry of Education, with the collaboration of the American University in Cairo, held a Conference on secondary education from the 20th to 27th July 1955, in which certain recommendations were suggested for the reform of secondary education. This concern for secondary and higher education was also demonstrated by an Egyptian educationalist, S.Samaan, who in 1956 analysed the official statistics of the Ministry of Education and pointed out the imbalance of the pyramidal structure of Egyptian education, as well as the poor articulation between the various stages of public education. He found that about 20% of the graduates of primary schools joined the academic preparatory schools, 55% of the graduates of such schools joined the general secondary schools, whereas 13% were admitted to teacher training schools and 21% attended technical secondary schools; and 73% of academic secondary school graduates joined universities and other higher institutes.

During the second stage, 1956-1960 (i.e. the stage of emergence of ideology, as well as of a growing concern for economic and social development), educational policy was directed towards the realisation of universal primary education, and the diversification of post-primary education. This period was also marked by an emphasis on the rationalisation and politicalisation of schools. Attempts were made to relate education to developmental requirements. Serious educational planning took place in accordance with the first national integrated comprehensive plan.

Apart from quantitative development at all educational levels, qualitative improvements in curricula, teacher training and educational administration were accomplished. The main features of the educational ladder were completed on the passing of the Education Act No. 55 of 1957. This Act put an end to the overlap between the preparatory and primary stages, and made the former an independent stage of a three-year course instead of four. A series of new laws governing technical education were issued. Education Acts Nos 22, 261 and 262 on the reorganisation of industrial, commercial and agricultural education respectively were intro-
duced in 1956, whereby technical education was divided into preparatory and secondary stages, each of three years. This experiment in early differentiation proved a failure. Attempts to train and place the graduates of technical preparatory schools demonstrated that these students had neither the educational background nor sufficient training to enable them to acquire vocational skills. This policy, however, was abandoned in favour of technical secondary education.

The third stage, 1960 onwards (the socialist phase), witnessed systematic and integrated efforts to bring about a radical change in the educational system. In spite of the problematic areas which slowed down the pace of development, sustained progress has been achieved. The Education Act 68 was promulgated in 1968. It has been in force since the school year 1969/1970. It had not brought about any serious structural change in the system. Except for some administrative procedures concerning public examinations and the selection of the curriculum content, the 68 Education Act retains the structure of the school system as 6-3-3. Educational policy has been guided by increasing the provision of technical education through various attractive means, including the chances of admission to universities as well as by achieving a sort of balance in the enrolment of students in both the humanities and the scientific higher education.

Expansion of education at all levels during this period has been impressive indeed. Table 4.1 shows the quantitative development of enrolment in the different educational stages.

2. Critical Analysis

A careful examination of the expansion of educational opportunities, however, would reveal that such an increase is, to some extent, a mixed blessing. The final analysis of policies and practices in Egyptian education would suggest that they have their pros and cons. However, it seems that a limited success has been achieved in some of the problematic issues of public education. The deficiencies have been widely recognised in certain aspects, such as the standard of education, universalisation of primary education, the existing dual system of general and technical education, and the inappropriate link between higher education and the development plans.
<table>
<thead>
<tr>
<th>Stage</th>
<th>1961</th>
<th>1965</th>
<th>1970</th>
<th>1975</th>
<th>% Increase since 1961</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>2,759,566</td>
<td>3,417,753</td>
<td>3,740,551</td>
<td>4,120,936</td>
<td>39.9</td>
</tr>
<tr>
<td>Preparatory</td>
<td>345,191</td>
<td>600,950</td>
<td>851,936</td>
<td>1,339,063</td>
<td>165.3</td>
</tr>
<tr>
<td>General Secondary</td>
<td>121,885</td>
<td>208,991</td>
<td>298,117</td>
<td>358,319</td>
<td>113.1</td>
</tr>
<tr>
<td>Technical Secondary</td>
<td>74,037</td>
<td>101,204</td>
<td>271,339</td>
<td>274,036</td>
<td>4052.0</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>20,354</td>
<td>49,448</td>
<td>25,526</td>
<td>33,014</td>
<td>62.1</td>
</tr>
<tr>
<td>Higher Education</td>
<td>111,698</td>
<td>172,426</td>
<td>214,369</td>
<td>471,367</td>
<td>322.1</td>
</tr>
</tbody>
</table>

As far as the standard of education is concerned, there are several indications that the standard obtaining in the primary and secondary education is not only low but poor in quality. Although various attempts have been made to achieve qualitative improvements in recent years, by producing new textbooks and teaching materials, revising curricula to conform with modern views and practices of different subjects, and developing more adequate methods of teacher training, the low standard of education at all levels is still reported not only by foreign but also by Egyptian experts, administrators and intellectuals. A study published in 1964, for instance, analysed each level of schooling and found that at the primary level the emphasis upon expansion has so lowered quality that:

"parents are often complaining that the primary school is not good in doing its job. Many pupils leave the school without being able to read correctly, to write a simple letter or to solve a simple arithmetic problem ... primary education has not contributed to community development, especially in rural areas."

On the preparatory and secondary academic schools, the study reported:

"our system ... has failed to adapt itself to the socio-economic forces of the time ... (it) is still the privilege of our strong middle class ... The majority of their pupils are the sons of government officials, people of the professions, industry or commerce ... secondary schools still follow a pre-university preparatory model."

The appraisal of technical education was equally harsh:

"Our system of technical education has gravely neglected the special requirements for the training of higher grade technicians ... The secondary technical school has failed to adapt itself to the changes in the structure of occupation ... The structure is ... rigid, its curricula neither diversified nor flexible, and the school itself is not aware of the actual requirements of the labour market."

Mohamed Fahmy has also concluded that it is

".... .... clear that our educational system at all its levels is not meeting the requirements of this society. Our educational system needs a radical overhauling both in structure and content."
Another official study severely criticised the educational policy which was adopted in the fifties and sixties on the following grounds:

1. The overriding concern of planners was directed to quantity rather than quality.
2. The incoherently integrated strategy for educational development resulted in examining each sector separately and led to an inadequate linkage among sectors of education.
3. The reluctant emphasis upon technical training, so that too many pupils received an academic education, and investments were allocated to theoretical rather than technical institutions.
4. The unsound criteria in recruiting students for a teaching career resulted in many incompetent persons entering the profession.
5. The lack of relationship between curricula and the problem of Egyptian society, so that the former at every level had been overcrowded with unnecessary subjects.

Appreciable results have not yet been obtained and quality remains very poor. In 1966, for example, more than 60% of the students at the secondary stage failed the English matriculation examination; 54% failed mathematics and 45% failed chemistry. The low standard that characterises secondary education is responsible for the poor preparation of students for colleges or work, so that a large number of students usually find difficulties in achieving admittance to higher education or securing an opportunity in the world of work. Even at present, one could apply the words of the Egyptian Minister of Public Instruction in 1935 concerning the standard of graduates:

"most of them lack the personality and the spirit of decision, they hesitate to think for themselves and do not dare to express their opinions; if they arise by chance to make one, they are careful to enunciate verbally or in writing in concise and correct phrases whether in Arabic or in a foreign language."

The universalisation of primary education is a target which has not been completely achieved. It was sought to be accomplished by 1965, but it had to be postponed, first to 1970, then to 1975, and subsequently to 1982. Despite the fact that extremely large resources have been devoted to primary schooling, such outlays have not led to the creation of a dynamic system of compulsory education. On the contrary, the emphasis
upon democratisation has resulted in an aggravation of the many qualitative problems which influence primary education for decades.\(^\text{19}\) Table 4.2 demonstrates the proportion of absorbing compulsory-age children during the last decades.

TABLE 4.2: NUMBERS AND PERCENTAGES OF RETENTION OF SCHOOL-AGED CHILDREN 1960/61-1975/76

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of School-aged children 000</th>
<th>No. of Primary Schools Intake 000</th>
<th>% of Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960/61</td>
<td>762</td>
<td>526</td>
<td>69.0</td>
</tr>
<tr>
<td>1965/66</td>
<td>861</td>
<td>678</td>
<td>78.7</td>
</tr>
<tr>
<td>1970/71</td>
<td>934</td>
<td>751</td>
<td>80.4</td>
</tr>
<tr>
<td>1975/76</td>
<td>931</td>
<td>765</td>
<td>82.0</td>
</tr>
</tbody>
</table>


The table shows the significant increase in such a proportion and demonstrates that the average rate of increase reached 9% annually. This proportion of retention, however, differs from rural to urban areas and between boys and girls.

Nevertheless, the proportion of stayers at school declined gradually due to the high rate of drop-out. Table 4.3 shows the decrease in the proportion of children between the ages of six and twelve actually enrolled in primary schools during the last decade.

TABLE 4.3: NUMBERS AND PERCENTAGES OF THE ENROLMENT OF EGYPTIAN PRIMARY SCHOOL POPULATION 1965-1975

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Primary Population</th>
<th>Total Enrolment in Primary Schools</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965/66</td>
<td>5,531</td>
<td>3,423</td>
<td>61.9</td>
</tr>
<tr>
<td>1969/70</td>
<td>6,115</td>
<td>3,659</td>
<td>59.8</td>
</tr>
<tr>
<td>1975/76</td>
<td>7,185</td>
<td>4,121</td>
<td>57.4</td>
</tr>
</tbody>
</table>

This table clearly shows that nearly 43% of the primary-age group are not enrolled at schools. It means that an extremely high proportion of children do not continue study for a very long period. This, in turn, is recognised as a high percentage of wastage in education as well as a remarkable evidence of failure in achieving universal primary education. Early in 1971, for example, the cultural editor of Al-Ahram, Louis Awad, published the first of a series of scathing analyses of the contemporary educational scene. He emphasised the need for further democratisation of the educational system and pointed to the dismal fact that even with all efforts and investments since 1952, the illiteracy rate, which had stood at 72% when the revolutionaries came to power, did not decline. He stressed that if the present enrolment trends continued, the same proportion, 75% of population would be illiterate in 1990.

As regards the dualism of secondary education no attempt had been made in the direction of a common integrated secondary system. On the contrary, Egyptian secondary education has long suffered from considerable imbalance between general and technical education. Despite all the encouraging policies to increase the enrolment in technical schools and to achieve such a balance between academic and technical education, not one of the educational estimates was realised. In actual practice, there has always been a greater demand for, and intensive pressure on, admission to general secondary schools as the royal road to university education, securing social prestige and mobilisation. The majority of preparatory school graduates, therefore, opt for such a type of secondary school. This is evident from Table 4.4 which shows the distribution of the preparatory certificate holders among the different types of secondary schools.

It is obvious that the candidate's first choice has always been the academic secondary school. This has been the case over the years. Therefore, to achieve a balance in enrolment some co-ordination is inevitable. In recent years, such a co-ordination has been partially successful in keeping the increase in enrolment in academic secondary schools to a modest level. As recently as 1975, the percentage of students enrolled in academic secondary schools has exceeded that of the technical, and a successful balance favouring technical education was achieved. However, the increase in enrolment was greater in commercial schools (i.e. 61% of all students enrolled in all types of technical secondary schools).
<table>
<thead>
<tr>
<th>Year</th>
<th>Total Graduates</th>
<th>General sec. School</th>
<th>Technical Secondary Schools</th>
<th>Teacher Training</th>
<th>Total Entrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No.</td>
<td>%</td>
<td>Indust.</td>
<td>No.</td>
</tr>
<tr>
<td>1964</td>
<td>104114</td>
<td>48552</td>
<td>59</td>
<td>9433</td>
<td>25963</td>
</tr>
<tr>
<td>1966</td>
<td>128175</td>
<td>66827</td>
<td>62</td>
<td>12317</td>
<td>34122</td>
</tr>
<tr>
<td>1969</td>
<td>214464</td>
<td>74084</td>
<td>49</td>
<td>22825</td>
<td>75831</td>
</tr>
<tr>
<td>1972</td>
<td>203493</td>
<td>90293</td>
<td>49</td>
<td>25429</td>
<td>36024</td>
</tr>
<tr>
<td>1975</td>
<td>309013</td>
<td>108661</td>
<td>47</td>
<td>29280</td>
<td>114444</td>
</tr>
</tbody>
</table>

Source: AREE, Ministry of Education, Education and Training in Egypt, Cairo, Minister of Education Bureau, 1976, pp.9-10
Thus the dual system of secondary education, with its acknowledged defects, represents an explicit inconsistency between policies and practices in Egyptian education. It is responsible for a serious unemployment problem owing to the fact that not all of general secondary school graduates are admitted to higher education.

This is evident from Table 4.5 which demonstrates the proportion of admission to higher institutions. It reveals that, in spite of the increase in acceptance from nearly 15,000 students in 1951/52 to 81,000 in 1973/74, the proportion declined from 89% to 38% of all secondary school graduates. This is due to the fact that pressure for admission was beyond the capacity of the universities and other higher institutions. The great majority of such graduates have only one concern - to gain admission to a university. This powerful trend, so deeply rooted in traditional status and prestige consideration, has been analysed in one official study as follows:

"Young people want to go to academic secondary schools in order to be able to go later to universities ... They go to the universities because they lead to the professions and to some of the highest posts in society, or because one is interested in following a certain line of study. But this is not all, for many ... go ... for the sake of having a university degree. ... Why all this? There is social imitation by which families look to each other and young men (and women) want to be not less than their somewhat better neighbours or relations. There is the social prestige and the status ... which can influence one's life and social relationships - even to the extent that a young man may find it difficult to marry a middle-class girl because he is not a university graduate."

Indeed, so powerful is the prestige attached to a university degree that thousands prefer to spend time, money, and effort and endure the subsequent deprivations of unemployment rather than settle for a free technical education offered by specialised schools situated throughout the country. The Institute of National Planning reached the conclusion that

"This 'dignity problem' constitutes a very important element in affecting attitudes of educated persons towards work in general and manual work in particular."

Responding to the greater demand on higher education, the government, motivated by political, ideological and financial considerations, provided
<table>
<thead>
<tr>
<th>Year</th>
<th>Secondary School Graduates</th>
<th>Admission to Universities and Higher Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
<td>Technical</td>
</tr>
<tr>
<td>1951/52</td>
<td>13,419</td>
<td>3,054</td>
</tr>
<tr>
<td>1957/58</td>
<td>29,631</td>
<td>5,854</td>
</tr>
<tr>
<td>1962/63</td>
<td>51,548</td>
<td>23,951</td>
</tr>
<tr>
<td>1968/69</td>
<td>86,937</td>
<td>35,981</td>
</tr>
<tr>
<td>1973/74</td>
<td>126,258</td>
<td>86,955</td>
</tr>
</tbody>
</table>

many more opportunities in the humanities than in scientific fields. This has resulted in another defect in educational policy, namely the divorce between education and the requirements of development plans.

Serious imbalance continues to characterise the relationships between educational provision and economic plans. This is evident from the study conducted in 1969 by the Central Agency of Public Mobilisation and Statistics which concluded that,

"in spite of the increase in the number of students in the practical faculties in general and faculties of engineering in particular, we still do not have sufficient numbers of specialised technicians who can carry out the programmes and projects of the plan. But the number of graduates from other faculties exceeds the needs of the plan. This makes it necessary to undergo some changes in the policy of education in order to realise the required balance in the labour market particularly with reference to the category of professionals on a university level."

More recently, such a problem has increased in intensity. Within a dichotomy of greater demand for higher education and the rise of students' cost in practical faculties together with a war-burdened economy, the enrolment in the humanities exceeded that of the scientific faculties. The figures in Table 4.6 show a clear decline in the percentage of enrolment in practical fields.

**TABLE 4.6: COMPARISON OF THE ENROLMENT OF EGYPTIAN UNIVERSITY STUDENTS IN HUMANITIES AND SCIENCE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Humanities No.</th>
<th>Humanities %</th>
<th>Science No.</th>
<th>Science %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953/54</td>
<td>36,367</td>
<td>67.2</td>
<td>17,722</td>
<td>32.8</td>
</tr>
<tr>
<td>1961/62</td>
<td>58,854</td>
<td>60.4</td>
<td>38,617</td>
<td>39.6</td>
</tr>
<tr>
<td>1965/66</td>
<td>71,629</td>
<td>52.3</td>
<td>65,215</td>
<td>47.7</td>
</tr>
<tr>
<td>1970/71</td>
<td>90,329</td>
<td>50.9</td>
<td>87,207</td>
<td>49.1</td>
</tr>
<tr>
<td>1975/76</td>
<td>247,656</td>
<td>58.8</td>
<td>173,648</td>
<td>41.2</td>
</tr>
</tbody>
</table>

It might appear fortunate that a developing nation, like Egypt, should possess such a large supply of educated manpower. But such an observation would be meaningless, bearing in mind that 70% of the university enrolment exists in the faculties of Arts, Law and Commerce, and there is little work opportunity for the majority of these graduates. The case of Law graduates is a characteristic example of this phenomenon. It was estimated that by 1978 Egypt would have 58000 Law degree holders, of whom only 600 would be needed in the country.

This imbalance in enrolment between the humanities and the sciences represents a further contradiction between policy and practice in Egyptian education. At a time when there is a pressing need for scientists, technicians, professional, and all middle-range technical manpower, educational provision produces a surplus of unrequired arts and law graduates. Consequently, this floods the labour market with a large number of unproductive and unstable unemployed graduates. In a series of articles on 'Crises of Higher Education' in Egypt, published in 1967, Anwar Abdel-Malek addressed himself to the causes of this "dangerous situation" and suggested possible remedies. He maintained that an underdeveloped economy, a rapid population growth, and the resulting "vicious circle of poverty", coupled with the urge to seek formal education in order to obtain a future job, have all led to a considerably distorted view of the role of higher education in Egypt. To solve this crisis, Abdel Malik suggested a basic change in approach to higher education through a combination of academic and vocational studies.

Thus, on the basis of existing policy and practice Egyptian education is characterised by certain defects. These are seen much more clearly in the public system and particularly in the secondary school system which is the concern of this study.

3. Present System of Secondary Education

3.1 Organisation

Until 1949 secondary education in Egypt had been organised in one stage of five years' duration. The first four years provided general courses for all pupils, whereas in the fifth grade students were to pursue either the literary, the scientific or the mathematic section, in accordance
with their aptitudes and inclinations.\textsuperscript{28}

The trend of dividing the secondary stage into two cycles each with distinguishable features appeared in 1949. Such a trend was implemented first by establishing a middle school of two years' duration annexed to the secondary stage,\textsuperscript{29} then later on, in 1957, by setting up a preparatory school of three years' duration as an independent stage of public education.\textsuperscript{30} The independence of the preparatory stage is thought to be significant for three reasons: to satisfy the needs of pupils in the critical adolescent period, to develop and enrich the abilities, aptitudes and propensities of this particular age group, and to increase the body of knowledge and skills already gained in the primary stage as necessary means for the preparation to the secondary stage.\textsuperscript{31}

There have been no significant structural changes in the general secondary stage since the issue of Act 211 of 1953. With the exception of some administrative and legislative aspects of the examination system in general secondary schools, the Education Act 68 of 1968 has introduced no radical changes in the organisation of general secondary education. But as recently as 1974, the Ministerial Decree No.139 has organised the third form of the scientific section at the general secondary school in two branches: scientific and mathematical. The decree has also provided for the students in third grade a chance to choose one or two subjects of intensive study and of specialised level in addition to the ordinary programme set for the whole class.\textsuperscript{32}

Thus, the general secondary schools comprise three years of study. The first year is of a general nature for all the students, whilst the second and the third years are of a specialised character. The student in the second grade can pursue either the scientific section or the literary section. In the third grade, the student of the scientific section can continue his specialisation either in scientific or in mathematical branches.\textsuperscript{33}

General secondary schools, like other types of schools at the second level of education in Egypt, are supposed to be separated according to the Law concerned. Yet, there are certain exceptional cases because of some regional needs. Therefore, co-education exists in remote border zones and in language schools. However, this system of mixed schools which is conditioned by the approval of the parents, is now more widespread.\textsuperscript{34}
Technical education in Egypt was subjected to several structural changes. In 1956, the Education Acts 22, 261 and 262 organised industrial, commercial and agricultural education respectively in two stages of three years each. The preparatory stage aimed at equipping pupils with a reasonable amount of technical culture and manual skill to help them undertake production processes in industrial firms, commercial houses and big farms with enough proficiency. The secondary stage aimed at supplying the market with technicians equipped with advanced general and technical education qualifying them to supervise the execution of industrial, commercial and agricultural projects in large firms, government departments and private concerns, and to steer production processes in the right direction. Proving a failure, however, the preparatory technical stage was abolished in 1968.

The Education Act No. 75 of 1970 concerning the organisation of technical education, provides for two levels of technical secondary education: one of a three-year course for the training of skilled workers, and the other of a five-year course for the preparation of technicians. Technical education on both levels includes industrial, commercial and agricultural secondary schools. These schools are separate for boys and for girls. Both schools for boys and for girls are at the same standard in aims, quality and requirements for admission and for examinations. For technical education, girls were at first only admitted to industrial and commercial schools, but as from 1975/76, they were given a chance to join agricultural secondary schools on equal footing with boys. The number of girls enrolled in the first form was 619, representing approximately 4.5% of the total number of freshers admitted to these schools. Similarly, owing to the increasing demand for joining the five-year technico-industrial schools, the Ministry of Education has tended to establish three joint experimental schools open for both sexes.

Given that the two levels of technical secondary schools have to accomplish various aims within different durations, they vary in their scope of study. So certain specialisations and branches are attached to each particular type of school.

At the level of preparing skilled workers, industrial schools for boys include the following branches:
- Tractors and agricultural machines
- Air conditioning and freezing equipment
- Ships-motors
- Fishing tackle and equipment
- General care and maintenance of equipment

Whereas industrial schools for girls include:
- Fur and leather industries
- Metal industries
- Electronic assembly
- Cosmetics and hairdressing
- Laboratory specialists
- Clothing mass production
- Decoration and arrangement

Commercial schools are organised in one main branch for boys and girls, whilst the agricultural schools include the following branches:
- General agriculture
- Production of sugar-cane and maintenance of agricultural machines and tractors
- Orchard Production
- Vegetable production
- Animal production
- Plant production

At the level of preparing technicians, the industrial five-year school has two branches: mechanical engineering, and electrical engineering. The agricultural school also has two branches: general agricultural studies with the purpose of preparing agricultural supervisors, and specialised agricultural studies in some fields with the aim of preparing specialised technicians in this field. The commercial school has one branch aiming at preparing qualified personnel required to fill the areas of business, management, finance and banking, accounting and secretarial work.

Such branches have been tied up with the organisations and firms, where the students receive their practical courses in these specialisations inside the workshops and sections of the factories belonging to these organisations and firms. Close connections between business circles and commercial schools were effected through the attachment of a large number of students during summer vacation to banks, large firms and business houses for the purpose of training.
Thus secondary education in Egypt is organised in a dual system after a general preparatory school. The general academic school is the most attractive type because of its social prestige and its open path to university education. Technical secondary schools are also of two levels. This leads to a clear discrimination among students, and creates greater difficulties in achieving the community solidarity and social justice which impedes the democratisation of secondary education.

3.2 Selection

The rules for admission to all types of schools at the various levels of public education in Egypt have been compiled by the Ministerial Decree No. 80 issued in May 1974. This decree has identified the legitimate requirements as well as the administrative procedures of admission in terms of chronological steps and necessary qualifications and documents. 44

Children at 11+ have to sit for a selective examination which creams off those who are thought to be suitable for a higher level of education. This examination consists of five papers, in religion, Arabic, arithmetic and practical geometry, general science and hygiene, and social studies including history and geography. It is held at an educational zone level by the educational authorities. This selective examination is of a traditional written character and the papers are subjectively marked by teachers in marking committees particularly appointed for this concern. This examination according to Szyliowics, represents

"a formidable hurdle limiting access to the higher levels at a time when the demand for education is considerably great." 45

Thus, to proceed from the primary to the first cycle of the secondary stage is no simple matter. Only a small fraction of pupils who successfully completed their primary schooling with the age of 11 at least and 15 at most is admitted to the preparatory stage. The first five-year plan (1960-1965) allowed for only 20% of the primary school graduates to continue their education, and by means of this competitive examination 80% of the children are screened out. 46 Statistical figures yield evidence of the highly selective nature of the 11+ examination in Egypt. In the mid-sixties about 70% of all pupils enrolled in the 6th grade of primary schools took this examination. The passing rate was 58%, thereby, a percentage of 38% of
those registered in the 6th grade were able to continue their education.\textsuperscript{47}

Responding to the greater demand for continuing education, the government has established more classes at the preparatory level to absorb greater proportions of primary school graduates. As a result of public pressure, caused partly by the explosion of the Egyptian public aspiration and partly by the free educational system, the proportion of admission to preparatory schools has significantly increased. As indicated by one official comment, enrolment at this level increased owing to

"the parents' keenness to enrol in the preparatory schools their sons and daughters who have passed the entrance competitive examination ... so that they may not miss the opportunity of completing their education."

Consequently, the proportion of pupils admitted to preparatory schools to those registered in the 6th grade of primary schools rose from 38\% in 1965 to 59\% in 1975 as demonstrated by Table 4.7.

It is striking that while the absorption capacity of the preparatory stage increased in terms of the proportion of intake to the total enrolment in the sixth grade of primary schools, it declined in terms of absorbing primary school graduates. The table shows that nearly one-quarter of these graduates were not admitted to preparatory schools. This proportion of children had lost their chance to continue their education as early as the age of eleven. This means a loss of talents and implies social injustice. The following figure compares the preparatory intake with the primary intake six years earlier. It clearly shows the proportion of wastage through drop-out (the difference between primary freshers and enrolment in the 6th grade), repetition (the difference between the 6th grade enrolment and the graduates), and the lack of absorption (the difference between primary graduates and preparatory intake).

Under the present admission system, the secondary stage enrolls pupils who have successfully passed the final preparatory examination. Possession of the preparatory education certificate by pupils less than 18 years of age who are healthy and fit are necessary conditions for the admission to the secondary stage.\textsuperscript{49}

The preparatory certificate examination represents a difficult challenge due to the fact that a significant percentage (i.e. an average of 40\% fails it). The development of access to the second cycle of secondary education
### TABLE 4.7: COMPARATIVE STATISTICS OF ADMISSION TO PREPARATORY STAGE IN EGYPT DURING 1970-1975

<table>
<thead>
<tr>
<th>Year</th>
<th>6th Grade Enrolment</th>
<th>Primary Graduates</th>
<th>Preparatory Schools Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>% of Enrolment</td>
<td>No.</td>
</tr>
<tr>
<td>1970</td>
<td>580,439</td>
<td>287,381</td>
<td>49.5</td>
</tr>
<tr>
<td>1971</td>
<td>534,185</td>
<td>308,652</td>
<td>57.7</td>
</tr>
<tr>
<td>1972</td>
<td>546,044</td>
<td>328,646</td>
<td>60.1</td>
</tr>
<tr>
<td>1973</td>
<td>577,146</td>
<td>368,155</td>
<td>63.7</td>
</tr>
<tr>
<td>1974</td>
<td>588,765</td>
<td>399,565</td>
<td>67.8</td>
</tr>
<tr>
<td>1975</td>
<td>641,585</td>
<td>495,575</td>
<td>77.2</td>
</tr>
</tbody>
</table>

**Source:** ARE, Ministry of Education, Education and Training in Egypt, op.cit., pp.10-11; ARE, CAPMS, The Annual Statistical Book, op.cit., p.115
Selection to the Preparatory Stage in Egypt

Figure 3

- Primary freshers 6 years earlier
- 6th grade enrolment
- Primary Certificate holders
- Preparatory schools intake

Data for the years 1971 to 1975.
is given in Table 4.8. This table illustrates that not all successful students can secure admission to the second cycle of the secondary stage.

The selective characteristic of Egyptian secondary education is clearly deduced from a comparison of the number of pupils admitted to all types of secondary schools with the freshers enrolled in primary schools nine years earlier, as shown by Figure 4. Selection either for the preparatory or for the secondary stage is based entirely on the marks obtained in the primary or the preparatory education certificate examination respectively. The co-ordinating admission offices in the educational directorates are the sole authority responsible for the identification of the minimum scores required for the acceptance in both cycles of the secondary stage. Generally this minimum score is determined in the light of the available places at preparatory and secondary schools taking into consideration the requirements of the educational plan. Candidates are ranked in a descending order according to the scores obtained in the final examination at the previous educational level, after making the necessary adaptation regarding age allowance. This age allowance is given to young students. A half mark is deducted from the total marks of students for every month above the age of 16, disregarding days of the month under 14, and counting 15 days or more a full month.50

Successful candidates are distributed according to their declared wishes and to the nearest school. At the preparatory level, children with the highest scores are given priority in admissions to schools teaching English as a foreign language, unless this does not represent their first choice. Those with lower scores are admitted to schools teaching French, German or Italian as a foreign language. In the case of admission to general secondary schools priority is given to pupils who are high in the ranking order. Normally general secondary schools admit the highest achieving pupils, leaving the remainder to go to the different types of technical secondary education.51

Selection procedures, however, are not completely restricted to the marking system. In practice, the system is far more flexible than first appears. For social and political considerations, as well, certain categories of candidates are given a particular bonus. Moreover, these candidates are often admitted to the preparatory or the secondary stages regardless of their age or scores. Salient features of these groups are: the
### TABLE 4.8: COMPARATIVE STATISTICS OF ADMISSION TO THE SECONDARY STAGE IN EGYPT DURING 1970-1975

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of Preparatory Graduates</th>
<th>Admission to secondary education</th>
<th>Distribution of secondary intake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. % Grad. % of Grads in General % of Grads in Technical</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>203,185</td>
<td>130,047 89</td>
<td>43.3</td>
</tr>
<tr>
<td>1971</td>
<td>203,142</td>
<td>182,765 90</td>
<td>42.6</td>
</tr>
<tr>
<td>1972</td>
<td>203,493</td>
<td>183,294 90</td>
<td>44.3</td>
</tr>
<tr>
<td>1973</td>
<td>247,312</td>
<td>179,662 73</td>
<td>36.8</td>
</tr>
<tr>
<td>1974</td>
<td>274,113</td>
<td>209,703 77</td>
<td>35.6</td>
</tr>
<tr>
<td>1975</td>
<td>308,013</td>
<td>229,133 74</td>
<td>35.2</td>
</tr>
</tbody>
</table>

Selection to the Secondary Stage in Egypt

Preparatory school graduates
Intake of all secondary schools
Intake of gen secondary schools

relations (sons, daughters, brothers and sisters) of the veterans who either died, were injured or reported missing in military operations; those relations (sons and daughters) of people who are associated with a teaching or administrative career in public or higher education, and handicapped pupils. This, of course, minimises the achievement of the principle of equal opportunity to access to different levels of education.

In fact, Egypt lacks research in the field of the social and scholastic effects of selection on pupils going on to different levels and types of schools. However, it is reasonable to assume that the injurious effects of the early selection which have been investigated in the United States, England and Sweden are applicable to the case in Egypt.

3.3 Grouping

The practice of grouping is adopted primarily to allow teachers for some individualisation of instruction, while at the same time providing for economy of teachers' effort and increased students' participation in learning situations. It is argued that it is more efficient for the teacher to instruct a group of children with similar needs, interests, purposes and aptitudes, than it would be to work with a total classroom of separate individuals. Other administrators and educators argue for heterogeneous grouping to avoid all the social and scholastic effects of homogeneous grouping based on ability. Both arguments are examined in detail in Chapter Eight. Nevertheless, grouping remains little more than a convenience for the teacher organising the subject matter.

In Egyptian secondary schools the grouping process is a somewhat simple task. Students are grouped in classes according to their age. Heterogeneous grouping whether intended or unintended is the only method of grouping students within the school for teaching purposes. This may be due to the fact that teachers use the same material, teaching methods, media, and textbooks for all students. It may also be because programmes of study do not allow students to choose optional subjects.

Heterogeneous grouping in Egyptian secondary schools is effected in two ways:
(a) The intended method of realising heterogeneous groups in classes is based on the pre-assessment of achievement in order to distribute students
between classes, ensuring, for example, if there are three classes at the second grade in a preparatory school and 120 students passed their promotion examination to the second grade, these students are grouped in the three classes using the following procedure: the pupils with the highest achievement are put in the first class, the pupils with second score in achievement are put in the second, and the pupils with the third and fourth rank are put in the third class, then the fifth pupils are assigned to the second class, the sixth and seventh pupils are assigned to the first class, and so on. This method is recognised in the Egyptian sense, as a 'zigzag method' of grouping.

(b) The unintended method is based on an alphabetical procedure, where students are grouped in classes according to their forenames. This arrangement takes into account the alphabetic order of the pupils' first name, then the father's name and finally their surnames. Consequently, all students whose names start with letter 'A' are assigned to the first class, whilst pupils named with letter 'Y' are put in the last class. In such a way it is assumed that all classes will have a similar average ability.

Dividing the students into the literary or the scientific sections in the second grade of the general secondary schools is based on student choice. The students' total marks of achievement, added to their scores on the literary subjects, or the scientific subjects, are taken into account when the number of applicants exceeds the places available in both sections.

3.4 Curriculum Organisation

If curricula in the Egyptian schools followed any of the curriculum theories, it would be the encyclopaedism, where knowledge is the sole criterion for choosing and organising the content of education. Stress is always placed on theoretical subjects of academic nature. Every discipline of knowledge is considered necessary for the development of mind and, in turn, for the development of personality. Therefore, one of the main characteristics of the Egyptian curriculum is the overcrowding of many subjects. As one official study has found, at every level curricula were crowded with unnecessary subjects. This study has pointed out that

"in primary school the child was expected to read ninety books or 1,500 pages a year for six years,
in preparatory school seventy-one books or 2,838 pages a year for three years, in the scientific stream at the secondary level seventy-nine books or 3,950 pages a year for three years, and in the literary stream at this level, sixty-six books or 3,300 pages a year."

The organisation of the curriculum content follows the subject-centred pattern in its restricted form. Preparatory and secondary school curricula are designed in the traditional manner of separate subject matter. Attempts have been made to adopt the integral approach in organising the curriculum content, particularly in social studies and in the natural sciences. This approach, however, has achieved little success due to the fact the textbooks still follow the subject matter approach. Even if there is one textbook for science, it is divided into three sections: physics, chemistry and biology. The Education Act 68 of 1968 stipulated the different subjects to be included in the course of study at every level of public education. According to this Act, the course of study in the preparatory level provides general education unified for all pupils. This course comprises: religion, Arabic language (including handwriting), a modern foreign language (either English, French, German, Italian, Russian, or Spanish), social studies (including history, geography and civics), mathematics (including arithmetic, algebra and geometry), general science and hygiene, art education, music, physical education, and practical studies (including manual work and agricultural education for boys and needlework and home economics for girls).

Curricula are differentiated at the secondary stage. This differentiation exists between academic and technical schools, as well as in the various sections and branches founded within each type of school. As regards general secondary schools, the course of study in the first year is general education for all students. In the second year, students are divided into two sections, scientific and literary. In the third year, students in the literary section continue their specialisation, while those in the scientific section can pursue either mathematics or scientific specialisation. Curriculum content in general secondary schools is designed to cover the following subjects. In the first year, the pupils study: religion, Arabic language, first foreign language, second foreign language, history, geography, Arab society, mathematics, physics, chemistry, biology, art, physical education, military preparation and practical studies. In the literary section,
students study: religion, Arabic language, first foreign language and second foreign language, history, geography, Arab society, sociology, economics, philosophy and psychology, art, physical education, military preparation, and practical studies. Besides this ordinary level, the student in the third year can choose one or two subjects from either Arabic language, first foreign language, geography or philosophy to study at the advanced level. In the scientific section, students study: religion, Arabic language, first foreign language and second foreign language, Arab society, mathematics, physics, chemistry, biology, physical education, military preparation and practical studies. The student in the third year can choose Arabic language or first foreign language to study at the advanced level besides the ordinary level.\textsuperscript{55}

Curricula differentiation are particularly phenomena of technical schools. The industrial school curriculum allows the pupils in the first year to study a group of related industries that are available and of value to their final specialisation which begins from the second grade.\textsuperscript{56} Curricula in the industrial secondary school for boys differ from those for girls. The agricultural school curriculum varies between guidance and general branches. The only unified curriculum for all students in technical schools is that of the commercial school.

As far as the organisation of the curriculum content in technical secondary schools is concerned, the course of study is designed to comprise four categories:

a. general culture, including religion, Arabic language, a foreign language, science and mathematics, labour legislation, vocational fitness, first aid, vocational psychology, national programme, and physical education;

b. scientific principles for vocational and technical subjects and their application;

c. practical vocational and technical subjects; and

d. workshop drill and field experience.\textsuperscript{57}

Thus it is clear that technical secondary education runs parallel to general secondary schools. The study plans in technical schools are overcrowded with theoretical and technical subjects in addition to the cultural subjects, owing to the emphasis from both sides.

Curriculum orientation in Egypt has not been subject to sequential de-
Development accurately in particular periods. It has developed rather as a result of socio-economic changes and as a response to modern pedagogical trends. For example, as a result of a political move aiming at unifying the curriculum in the 'Tripoli Charter States' new curricula were adopted and implemented in 1972/73, particularly in religious education and social studies. 58 Religious education has been introduced in the new study plan as one of the main school subjects in all types of secondary education. Moreover, as a response to the economic need for technicians and skilled workers, developed curricula have been applied in technical education to cope with the scientific and technological progress achieved in this field. The new curricula are characterised by broadening the scope of general education and improving the content of technical subjects and their application, in order to realise the training in production work and the development of skills required in this field. Therefore a plan was set up to relate the subjects of study to the practice and drill in factories and workshops, and to real production. 59

Furthermore, curriculum in Egypt is often sensitive to current trends and innovations in pedagogical fields. An example of the introduction of teaching modern mathematics which was experimented first at the secondary stage and then at length at the preparatory and the primary stages. These experimentations applied a new curriculum originally prepared by UNESCO and adapted by Egyptian experts to suit the needs of the Egyptian society. 60 In addition, a new curriculum for traditional mathematics for the general secondary stage was applied in 1974/75. 61 In the field of science education, a new curriculum for the preparatory stage has been adopted and implemented since 1970. Due consideration has been paid when preparing this curriculum to the teaching of science at a level matching the international standard. 62 At the secondary level, a new science curriculum has also been adopted. The physics, chemistry and natural science curricula were applied starting with the first grade in 1975/76. The implementation process gradually takes place year after year into the following grades. 63

In addition to these developments, there is another curriculum orientation adopted and implemented as a result of the structural change in the third grade of the scientific section and the introduction of the optional specialised subjects in the third grade of both the scientific and the literary sections. Modern and traditional mathematics curricula were
revised to keep in tune with these changes. Alteration of some topics in Arabic language and the improvement of English language curriculum were carried out. New ideas have been put into effect in connection with the social subjects, by specifying the first grade geography curriculum to environmental studies and by adding the cartography principle to the curriculum of the second grade in literary section. The geography curriculum for the third year was also amended. The philosophy, logic and psychology curriculum for the third year literary section were revised. All these alterations and orientations were effected to cope with the introduction of the optional specialised subjects.

As a result of curriculum orientation, the school textbooks for various stages were modified in the light of the new curricula. The revision of textbooks took place to free them from repetition and to accommodate them to the new issues introduced in the curricula. For example, new books for religious education and Arabic language (reading, grammar and inflexion) for the secondary stage were compiled. A new book was set for the specialised amended subject, appropriate to students' capabilities. Modifications were also made in the textbooks of physics, chemistry and natural sciences. A number of mathematics textbooks were revised in all branches. New books were written to cope with the orientation of the philosophy, logic and psychology curriculum. Some modifications were also made in technical school textbooks; some textbooks in the field are translations into Arabic whilst others are from Arabic sources.

Attempts have been made to modernise the teaching methods, and free them from the traditional memorising process. This new trend was first introduced into the field of teaching English and French and then mathematics. More attention was given to the use of television and radio in teaching some subjects especially history, and geography for the second and third years of the literary section.

In spite of such recent revisions and orientation, the curriculum content at the preparatory and secondary levels is still, to a great extent, theoretically oriented, subject-centred, and unsympathetic to the needs and interests of the learners.

3.5 Curriculum Processes

As far as the processes formulating and adopting curriculum policy are
concerned, it is argued that these processes have been affected, to a large extent, by the centralisation dominating the whole administrative procedures in Egyptian society. The Ministry of Education through its relevant departments appoints various committees for the purpose of the formulation and adoption of the curriculum policy. Accordingly, this policy is formulated and adopted on the national level and hence the producer group is the entire body responsible for curriculum policy.\textsuperscript{68}

In these national committees, however, various experts of the Ministry and subject advisers take part in collaboration with the National Centre for Educational Research, faculties of education, university staff and representatives of the teachers union to advise, revise and adopt the curriculum policy at all levels of education.\textsuperscript{69}

Consumer groups participate, to some extent, in the formulation and adoption of curriculum policy through their representatives in the central advisory educational councils which comprise of a 'university president' appointed by the Universities Supreme Council; the deputies of the Minister for primary preparatory, general and technical secondary education, central services and foreign relations; the Dean of the Faculty of Education, Ain Shams University; the President of the Teachers' Syndicate; a representative of the Arab Socialist Union; and a representative of the Students Union. The Education Committee of the People's Assembly also plays an influential role on curriculum policy, particularly in deciding which subjects are to be taught. Industrialists impose their influence, especially in the field of technical school curricula.\textsuperscript{70}

Outstanding among the pressure groups which have considerable bearing on the formulation and adoption of curriculum policy are the Supreme Council for Science which is concerned with science curriculum, the Teachers' Syndicate which introduces many studies concerning the development of curriculum in general and in the science curriculum - particularly in the mid-sixties - the Parent-Teacher Association, through its very limited participation in the technical issues, and the religious group, whose influence has succeeded in making religion a compulsory school subject at all levels.

3.6 Conclusion

All the changes in, and adaptation of, Egyptian secondary education have left remarkable traces on its development and opened many of its aspects
to greater debate showing that there is no wide agreement in opinions. All the reformers' views concerning the task of public education are too often narrowed either by a pre-scientific conception of what learning should be, or by a rejection of the egalitarian nature of public education. Thus, secondary education in Egypt is still a selective and dual system. The academic secondary school is distinctive among other types and is considered for the elite. It is also distinguished for its prestigious placement in the opinion of the State and the parents as well. The general secondary school has long been preferable in terms of allocating material and human resources. It predominates the adequate buildings, good equipment, qualified teachers, and much space in publicity. Such pre-eminence naturally leads to inequality of educational opportunity and as a sequence, the dual system of secondary education represents an inevitable impediment in achieving social justice and realising the democratisation of education.

Perhaps the major attack directed against the general secondary school in Egypt has been for its inadequacy in the needs of the modern age and its inability to achieve a consistency between the aspirations of the people and the requirements of the social and economic development plans. The general secondary school is still affected by its traditional features and mainly aims at preparing students for university or higher education.

4. Emerging Policies

Passing through rapid change, our contemporary age is characterised by a number of basic phenomena, outstanding among which are the scientific, technological and mass-communication revolutions. These revolutions have brought about an expansion of knowledge and significantly influenced education. The function of the school is no longer confined to providing students with instructions and skills. It has expanded to incorporate means of self-education enabling individuals to acquire knowledge as well as skills. This conception has, however, been developed as a result of a rivalry between, and a dissatisfaction with, the social and economic concepts of education. Taking these phenomena into consideration, the Ministry of Education has formulated and adopted its policy concerning the reform of public education. Emerging educational policy is directed at:

"Bringing about more democracy in education by providing equal chances through the educational process, and the realization of balance and recon-
sideration of the duplication existing between general and technical education with a view to removing the social distinction between the two types of education."

Related to the reform of secondary education of these emerging educational policies are: the universalisation of primary stage, the extension of the compulsory schooling and the unification of the secondary stage.

As far as the universalisation of primary education is concerned, the practical objective of educational policy is to achieve near-total assimilation of the compulsory age-group by 1981.

Combined with the achievement of universal primary education is the minimisation of the wastage percentage at the primary stage, by lessening the rate of repetition and drop-out. Progress has been achieved in this field by introducing the second session examination for the primary school certificate and by offering a daily light meal to 17 rural governorates using the assistance provided by the World Food programme and the US Relief Organisation.

As regards the extension of the compulsory schooling, it is planned that compulsory education should be extended to the age of fifteen. One study presented to the National Council for Education, Scientific Research and Technology asserts that:

"The logic, the accurate induction and the practical need for improving our education to cope with the contemporary revolutions ... (combined with) the necessity of keeping up-to-date with the advancement of science and (explosion) of knowledge ... make it necessary to revise radically the obligatory state."

If, for instance, six years of compulsory schooling were suitable to prepare individuals for appropriate citizenship half a century ago, such a duration would be unacceptable as an adequate period to educate citizens for active participation in the contemporary age. The six-year compulsory education has proved unsuitable due to the fact that the majority of primary school leavers, affected by prevailing acoustic mass media, forget a few years later what they have achieved.

As far as the unification of secondary education is concerned, educational policy has been directed towards achieving a link between education and community, combining theoretical and applied studies, improving the training of students for practical life, and providing the different pro-
duction and service sectors with the required manpower.76

The need to unify secondary schools has emerged as a result of the new trends in organising secondary education as well as the new concepts of general education, leaving the training in specific technical skills to be accomplished after the second level of education.

Several studies concerning the reform of secondary education conducted by both Egyptian educationalists and UNESCO experts have confirmed the need to establish a new structure at the secondary stage. Samaan and Morsi, for example, suggest the establishment of comprehensive secondary schools as a solution to the problems of differentiating secondary education and the privileges of academic secondary schools. Labeeb also advocates the comprehensive secondary school as a means of overcoming the problems of specialisation and discrimination between academic and technical education. Advocating a strong link between academic and technical education for achieving an appropriate relationship between science, work and behaviour, Metaweh calls for the removal of artificial barriers between the general and technical secondary education.77

The UNESCO Mission on the reform of education in Egypt had reported in 1972 that:

"Learning for all is likely to be the theme of Egypt's educational reform directed to the goal of fittingly educating the people for personal fulfilment and for social and economic development of the country." 78

The members of the mission suggested three major changes in the structure of Egyptian education:

1. Continuous provision of opportunities at all levels of education instead of the rigid divisions into levels;

2. Fusion of general and technical education up to level when specialisation is needed, instead of the rigid division into types; and

3. Individual and flexible-sized group arrangements instead of the class and cohort system.79

As a result of these studies, the trend of comprehensive secondary schools has appeared in official statements. In the same year, for example, the educational policy in the secondary stage pointed out that:

"A combining process is taking place to affect an interaction between the general and the technical
education. So, the educational authorities work to introduce some technical subjects in the general education curricula. On the other hand, there is an effort to elevate the standard of the cultural and theoretical subjects in the technical education. This is looked at as a step to found comprehensive secondary schools."

In 1975, the National Council for Education, Scientific Research and Technology reported that:

"Now is the time to liberate the secondary education from its traditional formula which divides the students between general and academic education and change it into comprehensive schools."

El Koussy, in his study 'The Need for Change,' (1977) suggested that "general technical education should be abolished and replaced by a secondary education in which the pupil chooses his own curriculum from among various fields like the scientific, the mathematical, the technological, the technical, the linguistic, .... etc."

He identified the desirable characteristics of the secondary stage as:

"general polytechnical stage, combining the two cultures: the general and the practical ... The second sequence in secondary education ... is a comprehensive school in which the student is taught a group of basic subjects in addition to some selected ones."

Thus the trend prevailing in educational policy concerning the reform of secondary education is growing towards the adoption and implementation of the comprehensive school. All studies have revealed the need for an educational formula liberating the traditional patterns of secondary schools from their defects. The formula that has gained world support and is being accepted in Egypt, is the comprehensive school.

The aims of the proposed comprehensive school in Egypt have been defined by Mostafa Kamal Helmi, the then Minister of Education in 1978, as follows:

"This type of school aims at the elimination of the differences between the traditional secondary and technical secondary schools by bringing them together in one place and correcting the current negative attitude towards technical education. In addition, it aims at catering for the individual differences between students in terms of abilities, inclinations and skills by varying the
5. Recent Experiments

5.1 Unified Experimental School

In cooperation with the German Democratic Republic, the Ministry of Education has established a unified 8-year experimental school in Nasr City, combining both primary and preparatory stages.

This experiment started in 1972/73 with six classes: three in the first grade and another three in the fifth grade. By 1975/76 the school completed its eight grades with a total of 24 classes enrolling 840 pupils. The density of the class has been restricted to a maximum of 35 pupils. The regulations prohibit any transfer to this school due to its specific nature, but they permit the transfer from the school to primary and preparatory schools.

The distinctive characteristics of this school can be identified as follows:

(1) It is a modern co-educational school.

(2) It is a free public school providing the programmes of the study of the primary and preparatory stages in eight years instead of nine.

(3) It is a unified school, realizing full articulation between the primary and the preparatory stages.

(4) It is a polytechnic school fusing technical and theoretical subjects in an applied and integral manner.

The experiment aims at achieving a wide range of objectives relating to the implementation of the adopted policy of the Ministry of Education and to the application of the new concept of learning and knowledge. Thus, the unified experimental school aims at:

(1) tackling the extension of the compulsory schooling to comprise both primary and preparatory stages and increasing the accommodation rate of the compulsory age group;

(2) realizing the integral preparation of the citizen in all physical, psychological, mental and spiritual aspects by providing cultural, scientific, and applied courses;
(3) ensuring the social function of the school in developing democratic values and awareness of social problems through practising a variety of activities including self-control, group-leadership, environmental studies and public service;

(4) modernising the curricula to cope with the advancement of knowledge and technology and ensure the importance of mathematical, scientific and technological subjects in preparing individuals for active participation in modern life.  

The unified experimental school, however, required many experiments in the field of school administration and relationship with environment, school curricula including the organisation of the content, teaching methods, evaluation procedures, textbooks and extra-curricular activities. It also necessitated the training of teachers for these novel experiments. The collaboration between the Egyptian and German Ministries of Education was complete in carrying out these related experiments. For example, the German Ministry of Education prepares proposed mathematics, science, polytechnic and physical education curricula while the Egyptian Ministry of Education prepares proposed curricula for the remaining subjects. Then both sides discuss these proposals in joint committees. Moreover, the German Ministry of Education supplies its Egyptian counterpart with three experts for three years to be consulted on pedagogical, technical and teaching matters. The German Ministry of Education also provides the schools with the polytechnic laboratory which costs D.M. 60,000.

The syllabus at the unified experimental school covers theoretical, practical and technological subjects. It provides the same curricula of both primary and preparatory schools in such subjects as religion, Arabic language, English language, social studies and civics, considering that the 8th grade curricula are unified with the 3rd grade curricula in the preparatory schools. The curricula of the unified school differ from those of primary and preparatory schools in such fields as mathematics, science, environmental culture, polytechnic subjects, physical education, music education and German, which is taught as an optional subject from the seventh grade. Consequently, the plan of study in the unified school varies with that of primary and preparatory schools. It is worth noting that the scientific and polytechnic subjects have special weight in the programme of study, they increase from 22% and 7% in the first grade to 36% and 13% in
the eighth grade respectively. Table 4.9, however, shows the plan of study in the unified experimental school.

The programme of studies can be grouped into four categories. The cultural subjects including religion, Arabic, English and German languages and the social studies; these represent 55.5% at most and 40% at least of the total periods of study. The scientific subjects including mathematics, physics, chemistry, biology and environmental studies; these represent 22% at least and 36% at most. The polytechnic subjects include woodwork, electricity, metalwork and plastics work, gardening, and home economics; these represent 6.7% at least and 16.2% at most. Finally, the physical and aesthetics group which includes art, music and physical education, and represents 10% at least and 14.8% at most. These percentages, however, vary from one grade to another as shown in Table 4.10.

<table>
<thead>
<tr>
<th>Categories</th>
<th>1</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
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<td>46.6</td>
<td>43.3</td>
<td>48.5</td>
<td>43.3</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Scientific &quot;</td>
<td>22.3</td>
<td>31.0</td>
<td>33.3</td>
<td>33.3</td>
<td>24.2</td>
<td>29.7</td>
<td>35.0</td>
<td>35.9</td>
</tr>
<tr>
<td>Polytechnics</td>
<td>7.4</td>
<td>6.9</td>
<td>6.7</td>
<td>10.0</td>
<td>15.1</td>
<td>16.2</td>
<td>15.0</td>
<td>12.8</td>
</tr>
<tr>
<td>Physical and Aesthetics</td>
<td>14.8</td>
<td>13.8</td>
<td>13.4</td>
<td>13.4</td>
<td>12.2</td>
<td>10.8</td>
<td>10.0</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Source: ARE, Ministry of Education, National Centre for Educational Research, Guide for the Unified Experimental School, op.cit., p.17

The textbooks for curricula proposed by the German side are prepared in the German Democratic Republic, taking into consideration the Egyptian environment. Then the primary and preparatory departments appoint special committees for the purpose of translating these books into Arabic. At the same time, the pupils in the unified experimental school use the same textbooks of primary and preparatory schools for the curricula prepared by the Egyptian side.

The unified school uses a new system of evaluation based on continuous assessments. Teachers are responsible for this assessment by using oral,
### TABLE 4.9: THE PLAN OF STUDY IN THE UNIFIED EXPERIMENTAL SCHOOL IN EGYPT

<table>
<thead>
<tr>
<th>Subjects</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Arabic Language</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>72</td>
</tr>
<tr>
<td>English Language</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>German</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3*</td>
<td>3*</td>
<td>-</td>
<td>6*</td>
</tr>
<tr>
<td>Geography, History and Civics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Physics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Chemistry</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Polytechnic</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Home Economics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2*</td>
<td>6 + 2*</td>
</tr>
<tr>
<td>Art Education</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Periods per week</strong></td>
<td>27</td>
<td>29</td>
<td>30</td>
<td>30</td>
<td>33</td>
<td>26</td>
<td>39+3</td>
<td>37+3</td>
<td>261+8</td>
</tr>
</tbody>
</table>

* Optional Subject

practical and written tests, in accordance with the nature of the subjects. The progress of every pupil is evaluated and registered monthly through marks indicating his progress. The pupil is promoted to a higher grade if he scores 40 marks or more out of 100 in each subject given an exception in any one subject, whilst he repeats the grade only once if he fails two or more subjects. A special examination is to be held for the 8th grade pupils at this school to be awarded the Certificate of Experimental School of Public Education, taking into consideration that all subjects taught in the school have equal weight, using different types of examinations, and regarding 50% of the total marks of each subject as a minimum requirement for success.\textsuperscript{92} Table 4.11 compares subjects of study and types of examination in the unified experimental school with the general preparatory school.

The teaching staff have been recruited from the primary school teachers, grade 1-4 and from the preparatory teachers, grades 5-8. The teachers for the higher grades should be trained and qualified. Those proficient in English and German are preferred. Teachers for polytechnics are recruited from the trained staff graduated from technical secondary schools. The school board comprises highly ranked experts in the Ministry of Education and is headed by the Deputy Minister - the Director of the National Centre for Educational Research.\textsuperscript{93}

The researcher, however, criticised such administration and suggests that the school board should be chaired by the Headmaster of the school and that representatives of the National Centre for Educational Research become members of the board together with interested educationalists, experts and teachers' representatives.

Evaluation of the unified experimental school started recently. The process involved various aspects of this school to appraise the extent to which the school has so far fulfilled its objectives and functions. The evaluation includes the assessment of the pupil in terms of his knowledge, skills and behaviour, the assessment of the teacher in connection with his performance, methods of his preparation and training and orientation; evaluating the school administration in respect of external and internal relations of the school, and evaluating the school in terms of its building and its financial resources. This evaluation, however, is being carried out by the National Centre for Educational Research with a view to expanding the experimental school to other areas if it proves successful. The evaluation process is still under way and its findings have yet to be published.\textsuperscript{94}
TABLE 4.11: COMPARISON OF PERIODS OF SUBJECTS TAUGHT AND TYPES OF EXAMINATION IN THE UNIFIED SCHOOL AND THE PREPARATORY SCHOOL

<table>
<thead>
<tr>
<th>Subjects</th>
<th>3rd Grade of G.P.S.</th>
<th>8th Grade of U.Ex.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Periods</td>
<td>Type of Examin.</td>
</tr>
<tr>
<td>Religion</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>Arabic Language</td>
<td>6</td>
<td>*</td>
</tr>
<tr>
<td>First Foreign Language</td>
<td>6</td>
<td>*</td>
</tr>
<tr>
<td>Second Foreign Language</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Geography</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>Civic</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>Drawing</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Home Economics</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Polytechnics</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Written examination
+ Optional written examination in one subject of the group considering the continuous assessment for other subjects
X Practical examination
XX Optional practical examination

Source: ARE, (NCED), Projects and Achievements of the National Centre for Educational Research in the Year 1975/76, Cairo, DCE Publication, 1977, p.82 (Arabic text).
5.2 Basic Education

This experiment is regarded as an alternative project to deal with the extension of the compulsory schooling. Basic education is not a new pedagogical thought in the field of preparing children for good productive citizenship. But in its proposed form, it would become the most important stage in education, the bulwark against a backslide into illiteracy and the cornerstone of a solid base for educating all citizens. It is designed to be a complete stage in itself, providing knowledge and skills - both practical and theoretical - and enabling its graduates to contribute to the various economic and social activities of their environment or to continue to higher levels of education.

Two major characteristics can be identified as the backbone of basic education: the introduction of pre-vocational education and the orientation of science teaching towards applications aiming at equipping children with working knowledge and skills. The innovative nature of these measures results from the fact that pre-vocational and related applied science bring into the traditional curriculum an entirely novel domain of learning experiences. This innovation profoundly affects not only the organisation of the curriculum content, but also the attitude towards teaching and learning implications. Confirming this view, Mostafa identifies the major characteristics of basic education as follows:

"Education in these schools should be multi-sided comprising scientific and cultural programmes, as well as the practical aspects and productive activities based on the environment, its natural resources and work opportunities.

- Education should be based on studies operations with regard to guidance and proper assessment of pupils' performances and capacities by providing them with the suitable education.

- Basing practical studies and productive activities on modern technological concepts while linking them to production in the local environment and taking into consideration the integration and interaction of theoretical and practical studies.

- Theoretical and practical culture should be considered as a practical preliminary preparation of a skilled pupil in the future.

- Achieving a balance among the various activities - academic, productive and social - so that none may encroach on the others."
Thus the task of basic education is to foster and to accomplish many objectives. These were defined by the Ministry of Education in its project presented to the World Bank in 1978 as follows:

"Basic education ... aims at providing children with the necessary amount of values, codes of behaviour, knowledge, skills and vocational experiences appropriate to different environments whether urban, rural, desert or industrial."

The basic education experiment, as an attempt to unify both primary and preparatory stages in one compulsory stage of nine years' duration, started as recently as the school year 1977/78. Therefore, little has been published concerning the actual operation of this experiment. Accordingly, the available data indicated that the experiment follows the feeder-school procedure. Each of the selected preparatory schools is geographically related to, and fed by, three or four primary schools. These schools were selected for the first phase of implementation from rural areas to serve deprived and poor communities.

The plan of study of basic education necessitates the orientation of all subjects of the curricula towards life situations and basing teaching on the solving problems approach. In the first five years the programme of study concentrates on teaching Arabic, mathematics, general sciences, religion, hygiene, and environmental activities. The last four years of basic education concentrates on diversifying school programmes and activities raising the level of basic knowledge and teaching a foreign language. The introduction of pre-vocational subjects starts from the 4th grade as a compulsory part of the curricula. Four periods per week are allocated to pre-vocational training in grades 4 through 6, and five periods in grades 7 through 9. Teaching of applied science starts from the 5th grade, for four periods per week in all grades. This plan is shown in Table 4.12.

Both boys and girls of the age group 10 to 12 follow simple pre-vocational subjects available in the community and appropriate to their capabilities. Each pupil receives training in at least two crafts, considering home economics as obligatory training for girls. The pupils of 13 to 15 years are trained in four groups of modern and advanced pre-vocational crafts selected by educational authorities in co-operation with parents. Each pupil practises two groups of crafts, with the girls' training including home economics as one choice.
TABLE 4.12:  THE PLAN OF STUDY IN THE NINE-YEAR BASIC SCHOOL

<table>
<thead>
<tr>
<th>Subjects</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
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<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>English Language</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>History</td>
<td>-</td>
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</tr>
<tr>
<td>Geography</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Civics</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Science and Hygiene</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Drawing</td>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>3</td>
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<td>3</td>
<td>2</td>
<td>2</td>
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<td>Practical Work</td>
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<td><strong>Total</strong></td>
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<td>31</td>
<td>32</td>
<td>34</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

The four groups of crafts can be categorised as follows:

1. **Agricultural crafts** include:
   - gardening and planting,
   - food industry,
   - milk products,
   - poultry raising,
   - agriculture and agricultural co-operation.

2. **Commercial skills** include:
   - secretarial work,
   - commercial relations and interactions,
   - typing (mainly Arabic).

3. **Industrial crafts** include:
   - woodwork and painting,
   - metalwork,
   - mechanics,
   - and electrical work.

4. **Home economics** includes:
   - food and nutrition,
   - household affairs,
   - family relationships,
   - child care,
   - and dressmaking.

Detailed syllabuses for pre-vocational education and applied teaching were prepared early in 1977 by specialised committees assigned by the Ministry of Education. These syllabuses were revised and approved in summer 1977, by a national one-week expert group meeting held in Cairo by the Minister of Education with the participation of educators, economists and community developers.

The experiment also necessitated the preparation of the required number of pre-vocational teachers. Skilled personnel already existing in primary and preparatory schools such as agronomists, technicians, home economists and typists were given pedagogical training to provide them with suitable educational knowledge and skills related to child learning. The Ministry also organised a two-year course of training for the graduates of industrial, commercial and agricultural secondary schools. Graduates are taught and practise pre-vocational crafts for 12 hours per week and pedagogical and cultural subjects for 24 hours per week at the new establishment section of vocational education in primary teacher training schools.

The experiment, however, is too young to be yet evaluated. Given that the conceptual framework of the experiment has been considered carefully and all other necessary modifications of curricula as well as the preparation of teachers are taking place, it is expected that this experiment will achieve some success. Then the debated issue will be whether the basic education of 9-year school or the 8-year unified experimental school becomes the future structural organisation for unifying primary and preparatory stages.
5.3 Comprehensive Secondary Schools

Till now, no secondary school has been established along comprehensive lines in Egypt. All trials in this field are carried out in a theoretical rather than a practical manner. The conceptual framework of establishing secondary comprehensive schools in Egypt has been examined and reviewed through several meetings held by the experts at the Ministry of Education in co-operation with educationalists at the faculties of education and interested experts in the field of reforming secondary education and representatives of public interest. 100

These committees have reached the view of establishing experimental comprehensive collective units where geographically adjacently located secondary schools of technical and academic nature are grouped and organised in one school with various departments and under one administration. This trend is thought to benefit from the material and human potentialities available at these schools of different categories, and also to help students enjoy a common atmosphere. These comprehensive collective units would bridge the gap resulting in segregating students into rigid forms of education and at the same time students could use the educational facilities in the adjacent schools.

The committees suggest that it is preferable to plan for these comprehensive collective units carefully and to implement them slowly within the coming five or seven years. They also suggest a rate of one of such units to be established in each governorate on an experimental basis during this period.

It is suggested that these comprehensive collective units admit all boys and girls of the catchment area, on condition that they hold the preparatory education certificate. Students are not distributed among the different types of education until the end of the first year. Then according to their studies and their timetables, they move from one part of the unit to another; thus the comprehensive collective units are departmentalised in different branches between which students can move easily vertically and horizontally. 101

The committees affirm that these comprehensive collective units must be financially independent. Each unit must have a school board headed by the director of the school and consisting of heads of the departments within the unit, representatives of the environmental organisations, parents, students, supervisors, and counsellors for educational and vocational
guidance. It is suggested that directors of the units, heads of the departments, teaching and administrative staff should be sent abroad to experience the actual educational process in similar comprehensive schools in advanced countries. 102

The Ministry of Education has signed an agreement with the International Bank for Reconstruction and Development to establish a number of comprehensive schools. The Ministry, however, is content at the moment with restricting the project to two schools at Tanta, one preparatory and the other secondary, and another, a secondary school at Suhag. 103

In an attempt to obtain more detailed data on this experiment, the researcher sent a letter dated 3.4.1978 through the Egyptian Cultural Bureau in London to the educational authorities responsible for the secondary education at the Ministry of Education in the Arab Republic of Egypt. A reply received indicates, however, that there is a difference between those who theoretically plan for comprehensive education in Egypt and those who are actually responsible for implementation. The letter and the reply are translated and given in Appendix 1&2. The opinion of the plan and school organisation department - attached to the general administration for secondary education - did not go much beyond the opinion which was implemented in 1958 introducing various "hobbies" or practical studies in the curriculum of secondary education. Therefore, one must agree with the opinion of El Koussy, who states that:

"It appears that although the necessary policies, plans, goals and strategies are formulated on highly efficient levels, the execution and performance are not carried out with the same degree of efficiency, and in all cases an apparent gap between planning and performance is clear." 104

6. Conclusion

Egyptian secondary education still suffers from considerable differentiations. The first type of differentiation is between academic and technical education. This segregation has resulted in greater public demand for an academic type of education leading to the university. This, in turn, has resulted in an acute dilemma. The rate of admission to general secondary schools has increased to satisfy public demand but the rate of admission to technical schools needs to be increased to meet the requirements of the
economic and social development plans. Actual practice indicates that the number of general secondary school graduates is beyond the financial and administrative capacity of higher education. This has undesirable social and personal repercussions on students, parents and the State. It also represents an economic wastage in the productivity of education owing to the fact that those graduates cannot find white-collar jobs, and at the same time, they lack the skills to work in the practical fields. This differentiation which exemplifies the lack of real links between education and production, as well as between theoretical and practical subjects, is no longer acceptable in a world characterised by an explosion of knowledge and great progress in technology.

The other type of differentiation is between literature and science. This deprives the student in the former branch of the scientific and mathematical knowledge and the acquisition of the faculty of scientific thinking. It also deprives students in the scientific section of the social knowledge which is important in bringing about world understanding. This type of differentiation has resulted in greater demands for the scientific section due to the wide opportunities of securing admission to such prestigious faculties as medicine, engineering and military studies. This, in turn, has led to another dilemma of inability of the university to absorb the majority of the graduates of the scientific section, and admitting those students in the humanity faculties irrespective of their interests and aptitudes, and the shortage of work opportunities. The actual practice indicates that the enrolment in the humanities greatly exceeds that of scientific faculties. This again exemplifies an economic wastage in the productivity of Egyptian education.

The aforementioned analysis would suggest a pressing need for the reorganisation of the secondary education in Egypt as far as structure, procedure of selection, methods of grouping and curricula are concerned. This inevitable reorganisation is vitally necessary in order to eliminate the effects of the existing dualism; to realise full co-ordination between education and production to keep pace with the explosion of aspiration of both individuals and society in a changing world; and to cope with the emerging educational policy in Egypt prevailing in the mid-seventies.

Since the emerging policy and experimentation has been directed towards the reorganisation of secondary education along comprehensive lines, the following part is devoted to the examination of comprehensive models offered as a solution for the problem of developing secondary education in some advanced countries.
REFERENCES


5. Samaan, S.N., 'Some Aspects of Education in Egypt,' in Teachers College Record, vol.58, 1956-57, pp.175,176


7. U.A.R. (DCE), Education in Egypt in the 20th Century, op.cit., pp.60,75


10. Fahmy, M.S., op.cit., pp.20-1

11. Ibid., pp.22-3

12. Ibid., pp.24-5

13. Ibid., p.26


18. According to UNESCO estimates, primary education accounted for 15.4% of the total educational budget in 1920, 38.7% in 1945 and more than 60% in 1964/65. The 1960-1965 Educational Plan allocated 31.5% of the total expenditure for primary education and a detailed study published in the mid-sixties indicated that expenditures for primary education amounted to 43% of total outlays (*UNESCO Survey of Educational Progress Achieved in Arab States*, Paper prepared for the Conference of Ministers of Education and Ministers Responsible for Economic Planning in the Arab States, Tripoli, Libya, March 5-10, 1966, Paris, UNESCO, 1966, p.31).

19. Szyliowicz, J.S., op.cit., p.265


22. Research Project, op.cit., pp.110-11

23. Ibid., p.108


27. Abdel Malek, A., op.cit., pp.222-36


31. Ibid., p.37


33. Ibid., p.27

34. Report on Education 1974/76, op.cit., pp.5-6

35. UAR (DCE), Education in Egypt in the 20th Century, op.cit., pp.75-6

36. El Fiki, H., op.cit., p.253


40. Report on Education 1973/75, op.cit., p.31

41. Ibid., p.32

42. Ibid., pp.33-4


44. Ministry of Education, ARE, Ministerial Decree No.80 Dated 20.5.1974, Concerning the Rules for Admission to the Schools of the Ministry of Education, Cairo, Minister's Bureau, 1974 (Arabic text).

45. Szyliowicz, J.S., op.cit., p.266

46. Educational Planning in UAR, op.cit., p.16


50. Ministerial Decree No.80 of 1974.

51. Szyliowicz, J.S., op.cit., pp.266-8

53. Manpower Report, op.cit., pp.15-16


57. Ibid., p.34; Samaan, W. and Morsi, M.M., op.cit., p.423


64. Report on Education 1973/75, op.cit., p.28


66. Ibid., pp.43-4


70. Ismail, S.K., El Ghanaam, M.A. and Al Zaitari, M., 'Actual Planning and Administration of Developing the Curricula in the Arab Countries, A Survey Study,' New Education, Regional Office for Education in the Arab Countries, No.2, August 1975, p.91


79. Ibid., p. 11

80. Ministry of Education (ARE), Documentation Centre for Education, The ARE Educational Policy in the Secondary Stage, op. cit., p. 5


83. Ibid., p. 53


85. Helmi, M.K., Education in Egypt, op. cit., p. 19


88. Ibid., pp. 3-5

89. Ibid., pp. 5-6

90. NCER, Guide for the Unified Experimental School, op. cit., pp. 6-13

91. NCER, Report on the Unified Experimental School, op. cit., p. 8
In 1940, The Association of Modern Education in Egypt conducted a similar experiment at El Manayel village which embodied the philosophical thought of fundamental education to improve primary education in rural areas. The modern concept of basic education, however, is not far different from that of fundamental education which appeared in the 1940s, except in the length of schooling years. (For further details see: El Kabbani, I., 'Fundamental Education: Its Philosophy and Aims,' Educational Magazine, special issues, Nos 2 and 3, 1953).
PART FOUR
MODELS

The context of the study is confined to examining comparatively some solutions offered by certain countries which experienced a similar problem to the one under investigation.

The countries chosen in this study are the United States, England and Sweden. The first had experienced various adaptations of its educational system to the particular needs of the American society. It had for long departed from the selective European pattern of education, and enjoyed an outstanding system of comprehensive public schools. England is an interesting case of adopting controversial policies of organising its secondary school system. The reorganisation of secondary education along comprehensive lines, though a significant development during the last decade is still debatable and has become a political issue. The Swedish educational system has recently undergone many reforms which have attracted international attention. Such reforms were so radical that Sweden has completely disassembled the traditional educational institutions of the nineteenth century and developed new structures of egalitarian education.

Approaching the reorganisation of secondary education, we have confined ourselves to four major aspects of organisation. These are: structure, selection, grouping and curriculum. This part includes seven chapters. It begins with an analysis of the comprehensive education movement. Then it deals with the structural organisation of the comprehensive schools, selection and allocation for such schools in a tracked or a unified system, and grouping within the school for teaching purposes. Curriculum is dealt with in three chapters for curriculum theory, organisation and processes. All the four aspects are comparatively dealt with in the context of the three countries concerned.
CHAPTER FIVE

COMPREHENSIVE EDUCATION MOVEMENT

1. Position of Secondary Education in the Educational Systems
   1.1 The Bowles Typology
   1.2 The Le Gall Typology
   1.3 The Educational System of the USA
   1.4 The Educational System of England
   1.5 The Educational System of Sweden

2. Forces Behind Comprehensive Education
   2.1 Democratisation of Secondary Education
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3. Establishment and Development of Comprehensive Education
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4. Conclusion
COMPREHENSIVE EDUCATION MOVEMENT

Change and innovation are salient characteristics of current education. Perhaps one of the most striking of the structural changes is the development of the comprehensive system in secondary education. The trend towards comprehensive schooling is most outstanding of the changes which have taken place in the past thirty years. Though this trend exists, it is by no means universal. Parallel schooling is still found, particularly in upper secondary education.¹

In examining these changes, this chapter intends to employ the framework of structural organisation presented by F. Bowles and A. Le Gall in order to distinguish the types of organisation of secondary schooling in the four countries under investigation. This chapter also analyses the socio-economic forces behind the comprehensive education movement. This analysis is confined to three major elements: the democratisation of secondary education, the development of industrialisation and technology, and the increase in secondary population. Finally, the chapter deals with the establishment and development of comprehensive education in the United States, England and Sweden.

1. Position of Secondary Education in the Educational System

Since schools are particular forms of social order within a society, a basic function of educational systems is to purvey the social ideals of such a community.² Therefore, secondary education systems vary from one country to another because of the specific aims and ideals obtaining in different countries. However, there are some similar norms and objectives in the organisation of secondary education as an insurance of equal educational opportunity and the trend to render the access to educational facilities more democratic. One of the salient trends of recent years has been the attempt to liberate human development from the stunting influence of culturally impoverished environments.³ So far as secondary school systems are concerned, the first major efforts have been those intended to eliminate the consequences of social stratification and class differences by establishing a kind of universal secondary education. Kandel pointed out:
"Today ample evidence is accumulating that in all parts of the world a movement has been initiated to develop systems of universal secondary education which would open educational opportunities for all boys and girls ... and to abandon the century-old tradition of secondary education as the privilege of the few." 

Societies differ in the degree of implementing the notion and ideals of secondary school for all. The major constraints to develop non-selective forms of secondary schooling in both the advanced and developing countries are to be found in the prevailing traditional concept of secondary schooling, primarily based on the theories of liberal and practical education of Plato and Aristotle; and secondly, in the recognition of secondary education as a privilege enjoyed only by sons of wealthy parents. The United States of America and the Union of Soviet Socialist Republics made a radical break away from the class-stratified systems of Europe at a comparatively early stage in their educational history. In contrast, countries like France, Germany, Great Britain, Sweden, and most of the industrialised European countries, where class divisions and barriers between classes were more rigid than they are today, have adopted the new form of secondary education in relatively recent times and by different degrees. To identify the differences among the systems of second level of education, the Bowles and Le Gall typologies are used hereafter.

1.1 The Bowles Typology

Frank Bowles and his collaborators examined a survey of a large number of notably different systems in their study for UNESCO and the international Association of Universities. The Bowles typology identifies three major forms of organisation for secondary education. These patterns are as follows:

Structure A: This type separates secondary schooling into three parallel lines. The first track prepares for university education and generally requires an entrance examination for admission to university. The second is devoted to the training of teachers for various levels of primary education and for specialised teaching. The third track provides technical and vocational training through a practical type of education. There are some complexities in this type of structure, due to the overlapping process of admission to higher education from the second and the third tracks.
Structure B: This type represents a simplified form of structure A. It separates secondary schooling into two parallel lines: a long track which prepares students for university, and a short one which provides a first cycle of secondary education for other students, at the end of which those who pass a selective examination may either complete their secondary education in a teacher training or a technical school or leave school entirely.

Structure C: This type of organisation provides secondary education without examination for all primary graduates. Teacher training tends to disappear as a distinct line within secondary education and becomes a part of higher education, provided either by a university or colleges of education. At the same time, technical education is often included as part of the comprehensive school programme and retains a common core of subjects with other lines in general secondary education which provides, in turn, a wide range of various programmes permitting the students a good deal of freedom of choice.

Of the four countries under consideration, the USA is classified as structure C system, whereas Egypt is an example of structure A. Until recently, England and Wales, and Sweden have been identifiable as structure B systems. While changes towards structure C have completely occurred in Sweden, the movement in the direction of structure C in England and Wales is not completed in all areas due to the co-existence of structure B (the tripartite system) with structure C (the comprehensive system).

1.2 The Le Gall Typology

In distinguishing the structure of organisation of secondary schooling, Le Gall classifies four patterns ranging from the most selective type to the most open one. He considers the two types of structure at the opposite ends of the spectrum as basic types of organising lower secondary education. These four patterns are discussed as follows:

Type A 'Selective Lower Secondary Education': This type selects a minority (e.g. 15% to 30%) of primary school graduates to be admitted to secondary education. This selection is operated mainly along the division of social classes. With the exception of children with scholarships, those who join secondary education are children of the monied classes and civil-services families. The introduction of an entrance examination tends to
make the selection a fair procedure, but the existence of private education makes it possible for the well-to-do families to defeat the purpose of such an examination. Gifted children of limited ambition and socio-economic origin would attend other types of upper primary schools which do not provide access to higher education. This pattern of organisation dominated the European educational systems until 1930. It is still to be found in certain Southern European, Latin American, and developing countries.

**Type B 'General but Differentiated Lower Secondary Education':** This type of organisation provides secondary education for all primary school leavers of normal ability. It includes three kinds of secondary schools: classical, modern and technical. Children are differentiated in accordance with their abilities and their parents' wishes. This differentiation occurs "either immediately on entry, or after a few months, or after a year's observation". Having abolished Type A system and introduced free secondary schooling, most Western countries until 1950 adopted the Type B structure of secondary organisation.

**Type C 'Lower Secondary Education with Parallel Streams inside a Common Structure':** This type gathers all children of secondary school age into a "common structure in a single type of establishment". It has been implemented by countries which believed that "unacceptable differentiations should be effectively combated". This pattern of organisation facilitates access to higher education, due to the abandonment of the segregation resulting from the co-existence of two kinds of schools: one providing a lengthy general secondary education and another, of an upper primary kind, offering a short general education. In implementing this common structure, some countries have taken into consideration the "diversity of levels and forms of intelligence and offer the pupils a certain number of paths or streams" which could provide them with a more equitable form of education.

**Type D 'Lower Secondary Education with Completely Undifferentiated Established Curricula':** This type of organisation provides secondary education for all children of secondary school age. It offers for all pupils a common education until the end of the third year of secondary schooling. This pattern offers a standard education in all aspects. However, variations are obviously found due to the degrees of stricture or flexibility of the applied system respecting the awareness of pupils' interests and abilities.

Applying the Le Gall typology to the countries under study reveals
that there is a general swing from structure A to structure D. Egypt, for example, since 1961 has shifted from structure A to structure B. Nevertheless, lower secondary education (preparatory stage) in Egypt is by no means universal yet. Though education is free at all stages, compulsory schooling is exclusive to primary education. Since 1968 another change towards a strict unified general education has taken place in the Egyptian lower secondary education. The tripartite system which has been in force in England and Wales exemplifies structure B. Reforms have been introduced and a widespread movement towards structure C and D has occurred since the implementation of Circular 10/65. The USA has long experienced an undifferentiated lower secondary school system operated in accordance with structure D. Sweden is also an example of structure D. Its comprehensive schools have offered standardised general education for all children since 1962.

It would be useful to examine the state of secondary education within the educational systems in the countries under investigation. The case of Egypt has already been discussed. A discussion of the educational systems in the USA, England and Wales, and Sweden follows.

1.3 The Educational System of the USA

The educational system of the United States reflects the aspirations of democracy. Education in such a democratic society aims at developing individuals to their fullest capacity in order to contribute to the achievement of the ideals of that democratic society. The American creed, according to Myrdal, holds education as the "great hope for both the individual and society." The educational system of the United States is unitary in character, in a sense that pupils may progress uninterruptedly from kindergarten, or first grade of schooling, through the secondary school to collegiate or post-secondary schools and professional institutions of the university. Tanner argues that:

"The unitary system maintains open channels for continuous education. In contrast to the American unitary system, most European nations operate a dual system in which youngsters are differentiated, generally towards the end of their primary schooling, for either an academic program leading to college entrance or a terminal program in a
The present trend in the United States is to provide tax-supported and publicly directed schooling for all from the age of five to the age of twenty, that is, from kindergarten through two years of college. Compulsory schooling in two-thirds of the States is nine years, from the age of seven to sixteen. Other States require school attendance to seventeen or eighteen. The number of nursery schools is increasing each year, yet publicly-supported nursery schools are much fewer than privately-financed ones.

The educational system of the United States is divided into three stages: elementary, secondary and higher education. Each level is sequentially related to the others. Gradually in history the gap between the stages closed and eventually the system constituted a distinct educational ladder within which transfer from one stage to the other is no different from, or greater than, that of from any grade to the next in the same stage. Figure 5 illustrates the way in which the various levels of the educational ladder are interrelated.

The three stages of the American educational system are identified as follows:

(i) **Elementary Education**

The traditional elementary school embraces the first eight grades of schooling. But since the 7th and 8th grades have been included in the secondary stage, the elementary school consists of the first six grades. However, elementary stage may be defined as including the six or eight grades of public education. It enrolls the entire elementary school-age population, boys and girls, in both urban and rural areas.

(ii) **Secondary Education**

Secondary education in the United States may be defined as including the junior and senior high school, the regular high school and the junior college. It embraces grades 7 through 14. Secondary school may be either a 6-year or a 4-year programme. When it is six years, grades 7 and 8 are included in a middle, a junior or a junior-senior high school.
FIGURE 5

The Educational Ladder in the United States

The typical high school in the United States is a comprehensive one. It is not selective in the subject offered or the pupils enrolled. In contrast with the separated secondary schools in a parallel system, the American high school houses the general, cultural, classical and vocational subjects together, and makes transfer easy from one course to another. The World Survey of Education issued by UNESCO in 1962 stated:

"Americans, in general, believe that a high school should be a universal common school providing opportunities for all boys and girls in the area it serves to receive the kind of instruction that will best develop their individual potentialities."

Most of the district systems, however, have one type of secondary school available to all pupils who want to attend a free public school, namely, the comprehensive high school. For different reasons, exceptions to the typical high school are found in both urban centres and rural areas. Other types of secondary schools, such as the specialised and vocational high schools, are to be found in addition to the comprehensive high schools.

Specialised high schools exist in large cities. They provide for a programme adapted to the educational needs of a special group of students. They usually select their students from among those who demonstrate traits and abilities required for success in such special programmes. The most common forms of specialised schools are the vocational-technical, technical, trade, and academic schools.

Vocational high schools usually admit any type of student. Such schools offer extensive courses of vocational training for certain designated occupations. These schools also provide for courses of academic subjects, but not at the same level as those in comprehensive schools. Moreover, the level of occupational training is not as technical or advanced as in specialised schools. However, it is worth-while noting that vocational education is not usually conducted as a single subject, but as a part of a well-balanced programme within comprehensive schools.

Recently, community colleges and junior colleges have been included in the secondary stage. However, the same two years beyond high school are classified as higher education if they are operated in a university or in four-year colleges. The junior and the community colleges are neither wholly secondary - nor higher education, but contain elements of both.
1.4 The Educational System of England and Wales

The English educational system is remarkable for its diversity. Various governmental and non-governmental influences have combined to produce this pattern. The major features of the system can be seen through the public system of primary and secondary education, the great professional freedom of teachers, the mixed control of the system between the local and central authorities, the autonomy of universities, and the certain rights enjoyed by parents. The 1944 Education Act prescribes the responsibility of the State to provide every child with the opportunity to develop his capabilities and aptitudes to the full, spiritually, morally, mentally and physically, regardless of his parents' means or position in life. Though the system acknowledges the rights of parents regarding religious instruction and the interest of the churches in education as well as the varying needs of boys and girls, and the distinct ethnic and linguistic problems of the principality of Wales, it allows no discrimination on grounds of sex, race, colour or creed.

Education in England is compulsory between the age of five and sixteen. Compulsory schooling includes primary and part of the secondary stages. Three progressive educational stages are identifiable within the English system: primary, secondary and further education. Figure 6 demonstrates the interaction between these stages.

(i) Primary Education

This stage provides education for children of five years to eleven. It sometimes encompasses three age ranges: nursery for children under five years, infants from five to seven or eight, and junior from seven or eight to eleven or twelve years.

Middle schools, as a new trend, have been set up by a number of local education authorities. The term "middle school" refers to schools taking the age range eight or nine to twelve or thirteen. The Department of Education and Science classifies 8-12 schools as primary schools and 10-13 as secondary, whilst 9-13 schools can be categorised as either primary or secondary according to the decision of the local authority.
FIGURE 6

The Educational Ladder in England and Wales

UNIVERSITIES, POLYTECHNICS,
COLLEGES OF EDUCATION,
COLLEGES OF FURTHER EDUCATION,
SPECIALIST COLLEGES, &
AGRICULTURAL COLLEGES

(ii) Secondary Education

This stage provides public education for all children of eleven years to sixteen (minimum school leaving age since 1972) or up to eighteen or nineteen where appropriate. The most noticeable feature of the English secondary education is the wide variety of educational provision produced by the decentralised administrative structure. In addition to the variation between local educational authorities, there are many areas where the tripartite system still coexists with the comprehensive structure. Consequently, the English secondary school takes one form or another of the following types:

(a) Grammar School: This is the oldest form of secondary schooling. A typical grammar school would have about 500 pupils and admit ninety to one hundred new pupils annually. Yet, there are small schools in many rural areas and larger ones in some big cities. It mainly provides an academic course. Pupils are classified according to their general ability into three streams for literary, scientific, cultural and practical subjects. However, the nature of the grammar school has gradually changed to meet the needs of a changing society. New subjects such as engineering, technical drawing, architecture, economics, commercial studies, philosophy and many extra-curricular activities have been introduced. 25

(b) Technical School: This type has traditionally been considered a second best alternative to grammar school. It caters for "a minority of children who are likely to make their best response when the curriculum is strongly coloured by industrial or commercial interest." Technical schools are marked by a greater emphasis upon practical skills and commercial subjects, and by a certain bias of treatment of other subjects. However, technical schools are numerically few and exist only in certain areas of the country. 26

(c) Secondary Modern School: This came into existence as a result of the 1944 Education Act, by transforming the senior elementary school in 1945 into a secondary modern school. In aim it was distinguished by its freedom from the pressure of external examination and by a curriculum directed away from the traditional subjects. Though the dominant trend in secondary modern schools is to provide vocational or semi-vocational courses
under a variety of names, they have tended to become obsessive with providing academic courses leading to an external examination.  

(d) Comprehensive School: This school is intended to "provide secondary education for all children in a given area, through suitable courses for a wide range of ability, without an organisation in three sides." Comprehensive schools were introduced on a narrow scale in the early fifties by a number of local education authorities. Though this type of school is still debated, the trend towards comprehensive schools has been greater than at first seemed apparent. 

(e) Bilateral School: This provides secondary education of two distinct types through clearly defined sides: grammar-modern, grammar-technical, or technical-modern. However, this type is now falling into disuse and no longer appears in the official statistics of education.

1.5 The Educational System of Sweden

The Swedish system has faced a continuous reform which has affected all levels of education, revised the curricula, initiated new institutions and reorientated the system from dualism to unity and from elitism to egalitarianism. The educational system of Sweden is notable for its unitary character and its ready response to the socio-economic changes which the country has undergone. The ideology underlying the structure of the system is the principle that all children, irrespective of social position or geographical location, are to have the same opportunity of developing their personalities and acquiring knowledge and skills as far as their individual aptitudes and abilities will allow. Therefore the formation, adaptation and implementation of Swedish educational policy aim at safeguarding and strengthening the democratic system; contributing to socio-economic development; and at equalising the opportunity of public education regardless of social origin, sex, race, place of residence or differences of income.

Education at state and municipal schools is free of charge. In contrast, the private school fees are determined by the Board of Education in consultation with the school boards. Since 1962, compulsory education has been extended to nine years from seven to fifteen. Compulsory schooling is solely
embraced by a new type of institution, namely the comprehensive school which, since 1972, has completely superseded the former 7-year elementary school. 32

The Swedish educational system comprises three stages: compulsory, upper secondary and higher education. Pre-primary education is voluntary and exists in towns for children between one and six. However, the number of pre-primary schools is rapidly increasing. 33 Figure 7 illustrates the position of the Swedish educational ladder and the interaction of the three stages. These are described as follows:

(i) Compulsory Education

The compulsory education is provided in a nine-year comprehensive school. Children start school at the age of seven. A typical feature of the compulsory school is the undifferential nature. This means that pupils remain, to a large extent, in common heterogeneous classes throughout the whole of their compulsory education. The nine-year comprehensive school represents the basic school, 'Grundskola', of the school system. It is divided into three levels of three grades each: the junior, middle and senior level. 34

(ii) Upper Secondary Education

Most upper secondary schools in Sweden are state establishments. There are also municipal ones, but the existence of such schools is regarded mainly as a transitional stage leading to their full state administration. Moreover, there is a small number of private upper secondary schools. Though upper secondary education is voluntary, approximately 90% of comprehensive school graduates opt for them and about one-third attends the different types of schools at this level. 35

Until the end of June 1971, upper secondary education remained divided into three basic institutions: gymnasium, continuation and vocational school. 36

There were three types of gymnasia: general, technical and commercial. By 1966, they were fused into a single gymnasium. This gymnasium was organised into five lines: liberal arts, social services, economics, natural sciences and technology. The technological line had a one year additional course, which led to the certificate of a gymnasium engineer. 37

The continuation school, 'Fackskola', which had no selective admission
FIGURE 7

The Educational Ladder in SWEDEN

Post-Secondary Education

New Gymnasium

Senior level

Middle level

Junior level

Compulsory Schooling

Source: Council of Europe, School systems—a guide,
policy, was established in 1964/65. It was open to all who had completed the nine-year basic school as well as to adults who wanted to continue their formal education. It was organised in three lines: social studies, economics and technical. The continuation school offered a two-year course of combined theoretical and practical education. 38

The vocational school, 'Yrkesskolan', was the third alternative for those who had completed their compulsory education at the basic school. The vocational schools are state aided. There were three administrative categories of vocational schools: municipal, county council or private schools. They were open to all young people of gymnasium age. The vocational school provided for a two-year course, though both shorter and longer courses were organised. While some vocational schools offered either full-time or part-time courses, others provided both types of courses. In spite of the integration of the vocational school within the new gymnasium, there are still some vocational schools at places where there is no gymnasium unit. 39

Since July 1971, it has been decided that the three upper secondary institutions are to be merged into a single integrated upper secondary school, namely, the 'Gymnasieskolan' or the upper comprehensive school; this school provides upper secondary education in a variety of two-, three-, or four-year courses and more than twenty options or lines of study. 40

2. Forces Behind Comprehensive Education

The movement of education for all, which is inherent in the democratic ideal of equality of opportunity, has brought a new type of education at the secondary level. The democratic zeal of some educationists has led them to criticise the traditional form of secondary education, due to its being academic, divorced from life, and dominated by university admission requirements on the one hand, and its being aristocratic and directed to create an intellectual or social elite on the other. The new form, it is argued, is adapted to the needs and capacities of individuals and the demands of society. 41

Since secondary education for all young people was widely accepted, much educational effort was devoted to the implementation of such a norm more effectively. This has raised the question whether all pupils should attend the same school catering for courses most appropriate to aptitudes, or whether they should be assigned to separate schools with courses desig-
nated to meet their abilities. The first plan is identified by the comprehensive school which, it is argued, does not isolate pupils of different abilities from each other and is more democratic in the sense that it becomes a force to promote a certain solidarity. The second plan, of separate schools, provides for a specifically designed programme of instruction.

The view that a comprehensive school would best serve the varying needs of all boys and girls, no matter what their level of ability or their social backgrounds, was generally accepted. However, despite the comprehensive school being a comparatively young institution, its influence upon the world of education has been significant. Since the Second World War, several countries appear to have been moving towards comprehensivism as a solution to the problem of providing secondary education for all.

The forces which have motivated comprehensivism can be attributed partly to social and political changes and partly to economic and technological advancement. Husen argues that

"In the developing and the advanced countries alike, two major forces lie behind attempts to reform the school structure, particularly of secondary education. One is the democratisation of secondary and higher education in order to broaden opportunities for young people from all walks of life and especially for talented students from the lower social classes. The other is the need to provide an expanding economy with a sufficient supply of trained manpower at various qualification levels."

It is evident that in all countries, whether advanced or developing, a socio-economic and political upheaval has occurred in some different degrees. This upheaval has taken the form of changes in the traditional class structure, in the rise of nationalism with the assertion of democratic ideals, and in the greater demand for education due to the explosion of knowledge, aspirations and population.

Notwithstanding the importance of the socio-economic and political changes, the researcher confines the analysis here to three major factors which have directed the world trend towards comprehensive education, and defers till later the examination of other factors to be dealt with in the context of each country under investigation. The three major factors can be identified as: the awareness of democratising secondary education, the
development of industrialisation and technology, and the increase in secondary population.

(i) **Democratisation of Secondary Education**

A broad definition of the democratisation of education could be extracted from the Declaration of Human Rights. Access to education, in accordance with Human Rights, is regarded as one of the paramount rights of all human beings. Education should be provided for all young people without discrimination on any grounds of sex, colour, creed or intelligence. Democratisation of education is a philosophy of egalitarianism based on the principles of justice and fair treatment. According to the working document paper for the 33rd Session of the International Conference on Education held in Geneva in 1971, democratisation of education is identified with equality of educational opportunity. This implies three policies: at the level of access, "facilities should be available for all children to go to school." At the level of achievement, "within the educational system, everyone should find his way up and through a system of schools suited to his age, abilities and interests." At the level of utilisation, "everyone should, through his education, be prepared to take his place in the world of work." 45

A simple approach to democratisation in education would be one of treating all children equally. Objection to such an approach may be made on grounds that a confusion is shown between the concept of equality and justice. Though many advocates of equality in education wish it could promote a more equal society, serious doubts may be cast on the effectiveness of such policies. C. Jencks, for example, believes that inequality is most effectively reduced by narrowing the range of income through political measures and that schools play little or no part in effective social reform. 46

The post-war period, however, has witnessed much debate in favour of expansion and democratisation based on principles of equality and justice due to the consideration of education as one of the fundamental human rights. F. Bowles inclines to draw a distinction between educational expansion and democratisation of education by stating:

"Expansion may simply mean all parts of educational system must be enlarged to accommodate all possible pupils and to produce specific types of trained manpower. Democratisation is a larger idea ... a
new order of applied educational thought, just as democracy itself was a new order of applied political thought in the eighteenth century."

48 By the passage of the time, democratisation of education has moved from an abstract concept to an active approach dominating educational thought. It has been accepted as a major policy by most governments. It also has been implemented, either experimentally or operationally, at different levels of education in quite a large number of countries. At the beginning of the 1970s the goal of equality of educational opportunity seemed to be common to all countries, and various nations showed different degrees of dissatisfaction with the traditional policies based on inequality. However, countries which have achieved high industrial productivity, it is argued, are more aware of democratising their educational system than those which do not have a high level of industrialisation. Bowles points out that

"In areas where industrialisation has not yet arrived as a major force, the democratisation of education remains essentially a philosophical concept, discussed, praised, but not applied."

50 Democratisation of secondary education has meant providing such education to the greatest possible number of students of a given country regardless of race, sex, or social and economic status. The elitist system has proved to be inadequate with the explosion of educational aspiration. Secondary education has come to be changed from an elite privilege to a popular expectation and right.

(ii) Industrialisation and Advanced Technology

The scientific-technological revolution is exercising a constantly increasing influence upon all aspects of life. Technical and scientific advancement has affected, to a great extent, the development of industrialisation and made possible man's great progress in his control over his environment as well as the utilisation of national resources. Man's increasing mastery over nature, in turn, has made a secure, if modest, livelihood potentiality available to all mankind. Layton argues:

"In recent decades science has enjoyed the patronage of society largely because of its role as a source of technology which, in turn, has been seen as a means of satisfying social demand."

51
The explosion of scientific knowledge is too great to be encompassed by an expert in more than a particular field of knowledge. Holmes asserts:

"Before the war it was possible for a university-trained scientist to be familiar with most of the work in his own field, e.g. physics or chemistry. Increasingly since the war few, if any, men can have a detailed knowledge of more than a fraction of any major field in the natural sciences; even to keep up with the literature is an almost impossible task."

The explosion of knowledge has, however, been largely in the realm of the natural, mathematical and applied sciences. The development in these sciences, combined with the improvement of the mode of transportation and the media of communication has created an appropriate environment for the advance of industry.

The attitude of industry towards science has gradually changed since the beginning of this century. Evidence of this change can be deduced from the rapid expansion of expenditure on industrial research and the large contribution of the industrial firms to such research. The relationship between science and technology has become closer. Progress in science and technology exercises significant impact on the activity of the people involved in the different spheres of labour. Atutov and Zhidelev argue:

"Analysis demonstrates that, at different stages in the historical development of production, work changes its character in accordance with the level of science and technology, modes of processing, and the characteristics of organisation of the work process."

(iii) The Increase of Secondary Population

A surprising phenomenon of the post-war world has been the outstanding rate of increase in enrolment at all levels of education. General figures show that during the fifties the number of pupils enrolled in primary education increased by 57%. At the secondary stage, the rise was 81% and at higher levels 71%.

An increase in enrolment is attributable to a growth in the size of the relevant age-group as well as to an increase in the number of the participants. Two major aspects are responsible for the significant rise
in enrolment after the Second World War: demographic growth and the rise in enrolment ratios. From 1950 to 1965, the latter was clearly more influential than the demographic factor. However, the increase in enrolments at any level of education in a particular country is determined by its social order, its economic system and its political beliefs and practices. It also depends on the nature of the educational system, its structure, its policy and its tradition towards admission, promotion, and articulation to higher levels. Population growth influenced the proportion of children of school age. Table 5.1 illustrates the increase of the relevant age-groups of lower and upper secondary education. It shows that for the four countries the size of the secondary school age-group increased significantly between 1950 and 1965. The 1980 figures clarify the expected growth of the lower secondary age-group in all countries under study. At the age-group 15-19, it also shows an expected increase in all countries, except Sweden. The percentage of increase, however, differs from one country to another. For the period 1965-1980, the differences between the countries are much less striking, and the changes are much less impressive. For both age-groups, Egypt will experience the highest increase percentage over the same period.

The increase in the different age-groups has created difficulties in accommodating the rapidly growing number of school-age children. For example, the early fifties found the bulge moving into primary education; by the late fifties, it reached secondary level, and by the sixties, it affected higher institutions. In countries with already universal primary education, the demand for secondary education has been significant. In the remaining countries, the need has naturally been urgent for achieving universal primary education. Le Gall and his collaborators argue that:

"As more and more young children are enrolled in primary schools and stay on to complete the course, the problems of selection and organisation in second-level schools will become more acute."

The enrolment in secondary education has risen dramatically, due to the rising demand for more educational privileges and the belief that formal education ensures occupational and financial success. The decade 1955-1965 has been the period of greatest expansion in secondary enrolments in many countries. The Organisation for Economic Co-operation and Development states that:
<table>
<thead>
<tr>
<th>Country</th>
<th>Age-group 10-14 (000)</th>
<th>Age-group 15-19 (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>2225</td>
<td>3369</td>
</tr>
<tr>
<td>England and Wales</td>
<td>2835</td>
<td>3812</td>
</tr>
<tr>
<td>Sweden</td>
<td>451</td>
<td>542</td>
</tr>
<tr>
<td>USA</td>
<td>11351</td>
<td>18853</td>
</tr>
</tbody>
</table>

Source: OECD, Development of Secondary Education, Trends and Implications, op.cit., Table 3, p.27; Egypt, Central Agency for Public Mobilisation and Statistics, Population and Development, op.cit., pp.26,44,57. (Note: for Egypt, figures of 1947 and 1966 instead of 1950 and 1965 are given.)
"It is unlikely that the growth will continue as strongly as over the past decade, not only because of the ... demographic development and because the percentage that is not yet enrolled is getting progressively smaller, but also because the motivation for this 'residue' to stay in school is low and will remain so if no new incentives are developed."

Democratisation of education resulting in the explosion of aspiration, the explosion of knowledge affecting the advancement of industry and technology, and the explosion of population influencing the increase in the number of the school age-groups, have created a greater demand for secondary education. In many cases the opportunities of second level of education have been inadequate. This has resulted in a dilemma that has faced policy-making. The demand, in most countries, has been for a classless system of secondary education. Indicating the need for reorganisation of secondary education, OECD asserts that:

"It was the combined need to create a system adopted to mass participation, and conditions for full educational opportunity that called for a revision of secondary education structure."

Many countries have been concerned to obtain greater flexibility in secondary schools structure, which would make choices in regard to the type of school less definitive and make transfer of pupils between them easier. Most countries have come to believe that it is difficult to attain this flexibility within a parallel system. The radical solution has been the introduction of the comprehensive system. A century ago, the comprehensive education was in the process of creation in the USA. Sweden has moved successfully in the direction of a comprehensive system. In England, the Labour Government still advocates the comprehensive schools and has pressed for their establishment. Thus the development of comprehensive education in these countries will now be examined in detail.

3. Establishment and Development of Comprehensive Education

3.1 In the United States

American secondary education has become modified in accordance with the flow of American life. As American society passed through a significant
era, public attention turned to secondary education in order to adjust the
schools to the new needs. Consequently secondary education in America has
been transformed, not once, but many times. However, these changes were not
sudden or dramatic, but evolutionary due to the corresponding evolutionary
development in the broader society. Hence, perhaps the most characteristic
trait of the American secondary school has been its adaptability. Dumas
and Beckner argue that:

"Secondary education in the latter decades of the
twentieth century must be viewed as a synthesis of
2500 years of educational thought and practice; a
synthesis tempered by the social complexity and
unique values of America. Educational change over
centuries has been evolutionary, with every
succeeding idea being a reaction to or progression
from the previous one."

Three separate and distinguishable institutions, the Latin Grammar
School, the Academy, and the High School, have marked the development of
the American secondary education. The academy, and later, the high school
have been characteristically American, but all three schools have definitely
been the product of the social, economic and political conditions. Each was
established to meet the needs of the times, and each, after serving its
purpose, declined in favour of a more democratic institution.

Politically, the American Revolution diffused the ideals of liberty
and equality. It also accomplished the formulation of a creed of democratic
liberalism. Of great importance in the political measures were the acceptance
of the principles of democratic liberalism, the growth of a feeling of
national unity, the widespread extension of universal manhood, suffrage to
all classes of population, poor as well as rich, employer and labourer as
well, and the rise of the common man to the important political positions.
This raised the claims for a system of education publicly supported and
controlled, free, and open to all, to meet the needs of the emerging demo-
ocratic state. Jacobson indicates that:

"Democracy could not continue to limit its leadership
to those who could afford to pay for an education.
The success of democracy depends upon an educated
citizenry and this in turn required the upward
extension of the public school system."

Socially, some considerable measures of change may be indicated in
American life during the nineteenth century. Although class distinctions in
American colonies were less rigid and less sharp than in Europe, American society until the outbreak of the Revolution was dominated by an aristocracy. The American Revolution liquidated, to some extent, the old aristocracy and brought about a new arrangement of social classes. The shift in the focus of economic and social prestige was clear particularly in the frontier society whereas inherited notions such as arbitrary political power, religious establishments and class discriminations were cast off. 63 Indicating the ideas and attitudes of the West settlers, Craven noted:

"They believed in social mobility. They felt that the way to place and power, wealth and prestige, should be open to youth of ability and energy regardless of inheritance." 64

It was believed that social mobility was possible through education and personal adherence to hard work, and ambition. 65

Strong public demand for a tax-supported secondary education made itself felt. This demand was mainly required by two groups: the humanitarians on the one hand and the labouring classes on the other. The former were particularly concerned with many social and moral problems incident to the concentration of peoples of mixed moral and cultural backgrounds in the cities, whilst the latter were directly concerned with the task of education. They fought their battle through political action to break down the upper class monopoly system and to establish a system of tax-supported and non-sectarian schools. 66

Economically, the most remarkable change was the transition from an agrarian society to an industrial one. With the growth of industry and the relative decline of agriculture, the composition of the labour force as a whole changed. The change from a predominantly agricultural to an industrial society was also accomplished by another social change. This was the growth of urbanisation. The increasing industrialisation not only broke up the traditional self-sufficient farm with its tight family unit, but also resulted in a rearrangement of the values determining social and, to a lesser extent, political leadership in American life, coupled with a demand for more education to meet the needs of industry. 67

The above-mentioned economic, social and political changes combined with the progress of public elementary schools and the organisation of public authorities for the provision and control of education, were major factors for the decline of the academy and the rise of the public high school.
The public high school had a slow growth for the first fifty years of its existence, partly because of the rivalry with the academy, and partly due to the legal battle of taxation support. In a report to the public the National Commission on the Reform of Secondary Education stated:

"High schools were dragged through an unheard arena of legal battles in the 1860s over the issue of whether or not school boards had the right to levy taxes for the support of high schools."

This vital issue was finally settled when the Supreme Court of Michigan affirmed this right in the famous Kalamazoo case in 1874. This decision established a precedent for other states and led to the rapid growth of the public high school as a part of the state common school system.

However, it was near the end of the nineteenth century when the high school began to take its place as a normal continuation of education beyond the elementary school. In 1890 there were 2,526 high schools compared with 1,632 academies. By 1900, the number of high schools had increased to 6,000 while the academies had declined to approximately 1,200. Between 1890 and 1920, the development of the public high school was marked by a significant increase in enrolment. During this period, enrolment in the high schools increased twelve times as rapidly as the population. By 1920, the high schools enrolled nine-tenths of all pupils attending secondary schools. Thus, the trend towards universal secondary education was clearly indicated. Figure 8 shows the peak period of each secondary institution in the USA.

During the first two decades of the twentieth century, the debate was increasingly concerned with the need for a change in the character of secondary education to cope with new developments in science and technology and with the socio-economic and political reforms. Some educationists were advocating separate specialised vocational schools in accordance with the European pattern; but others, supported by parents, were against a two-track system with a terminal technical education for one group, and an academic, college preparatory, programme for the other. They advocated a multi-purpose high school. Conant points out that such a school provides

"a good general education for all citizens of a democratic society, the specialized programs necessary for vocational proficiency for youngsters preparing for the world of work, the specialized program of academic preparation for college, and exploratory courses to meet the individual interests of all students."
FIGURE 8

DEVELOPMENT OF SECONDARY SCHOOLS IN THE USA
FROM 1635 TO 1954

This multi-purpose institution came to be known as the comprehensive high school which is regarded as a particularly American innovation, conceived to advance the ideal of equality of educational opportunity. It has been influenced, to a considerable extent, by pragmatism. This philosophy attacked the traditional schooling and demanded the organisation of the content according to the immediate interests and needs of students. 72

Nevertheless, criticisms of the comprehensive high school were rampant in the 1950s. This school was to face its greatest test during the era of the Cold War and space race. The launching of Sputnik I on October 4, 1957 kindled such a bitter attack on the comprehensive school that some of the leading critics demanded an abolition of such schools in favour of the European-type system. 73 This attack blamed the progressivists for soft pedagogy, waste of talent, and for the failure of scientific, military and industrial institutions to match the Soviet space feats. This criticism demanded a return to essentialism and greater rigour in curriculum. 74 In his article in U.S. News and World Report, Bestor declared:

"We have wasted an appalling part of the time of our young people on trivialities. The Russians have had sense enough not to do so. That is why the first satellite bears the label 'Made in Russia'."
75

Criticising Dewey's ideas of experimental education, Rickover argues:

"Sputnik may well be the catalyst which brings about drastic and long-overdue reforms in utilizing the nation's intellectual resources."
76

His point of view was that European and Russian education was superior to the American, and he advocated that comprehensive high schools should be eliminated in favour of the dual secondary school system. 77

However, Conant's report in 1959 was a constructive criticism in favour of comprehensive high schools. He found that there were no significant differences in the achievement of students enrolled in specialised academic as against those in comprehensive high schools. His report asserts that the high school can meet its critics and the challenges of the time by an evolution. He is convinced that

"American education can be made satisfactory without any radical changes in the basic pattern."
78

The survival of the American comprehensive high school has required the adaptation of new schemes for ability grouping and massive standardised
testing programmes, the emergence of specific guidance offered to highly
gifted pupils and high-aptitude students as well, and the improvement of
many areas of the curriculum, particularly science and mathematics. The
great challenge that faces the comprehensive high school in the 1970s is
to reduce educational inequalities and improve educational opportunities
in order to become a mass terminal system.

The twentieth century, however, has seen a rapid and continuous surge
towards fulfilment of universal secondary education. The total secondary
enrolment in the United States, according to the latest available data is
estimated at 14,840,000 students, a figure which accounts for 93.8% of all
boys and girls between the ages of 14-17. Table 5.2 shows the development
of enrolment in secondary schools. Due to the various practices among school
systems and among the states in reporting enrolment data by type of schools,
the United States Office of Education has reported enrolments of secondary
education in the traditional grade level of the American high school from
9-12.

This table reveals that the number of pupils attending high schools
approximately doubled each decade from the school year 1899/1900 till
1929/1930. Thirty years later, by 1960, enrolments had doubled again. By
1970 nearly 15 million pupils enrolled in grades 9-12 at American secondary
high schools. It also shows that at the turn of the century high schools
enrolled only one out of every ten youngsters in the 14-17 year-old age
group. This percentage has rapidly increased. Half of this age group was
enrolled in 1940; more than three-quarters attended high schools in 1950
and over nine-tenths were enrolled in 1970. The decrease in enrolment in
1950 is explained by the low birth rate during the early depression years,
and the state of the Second World War as well. In 1980, it is expected that
16,327,000 students will enrol in high schools out of 16,400,000 of the
14-17 age group.

This is the average percentage of enrolment in secondary schools for
the United States as a whole. However, there are great variations in local
communities, states, and sections of the country. In some areas all boys
and girls of this age group are actually enrolled in schools, while in
others, especially in rural areas, the figure may be as low as only 50%.
TABLE 5.2: ENROLMENT IN GRADES 9-12 IN PUBLIC AND NON-PUBLIC SCHOOLS COMPARED WITH POPULATION OF 14-17 YEARS OF AGE IN THE USA DURING THE TWENTIETH CENTURY

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrolment in grades 9-12</th>
<th>Population 14-17 years</th>
<th>Total No. enrolled per 100 persons of 14-17 yrs of age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All schools</td>
<td>Public</td>
<td>Non-public</td>
</tr>
<tr>
<td>1900</td>
<td>699403</td>
<td>519251</td>
<td>180152</td>
</tr>
<tr>
<td>1910</td>
<td>1115398</td>
<td>915061</td>
<td>200337</td>
</tr>
<tr>
<td>1920</td>
<td>2500176</td>
<td>2200389</td>
<td>299787</td>
</tr>
<tr>
<td>1930</td>
<td>4804255</td>
<td>4399422</td>
<td>404833</td>
</tr>
<tr>
<td>1940</td>
<td>7123009</td>
<td>6635337</td>
<td>487672</td>
</tr>
<tr>
<td>1950</td>
<td>6453009</td>
<td>5757810</td>
<td>695199</td>
</tr>
<tr>
<td>1960</td>
<td>9599820</td>
<td>8531454</td>
<td>1068366</td>
</tr>
<tr>
<td>1970</td>
<td>14840000</td>
<td>13400000</td>
<td>1440000</td>
</tr>
</tbody>
</table>


3.2 In England

The comprehensive education movement in England has been influenced, to some extent, by some features of the Scottish neighbourhood schools and the American high schools. The ideas of comprehensive school were first expressed in terms of a common school or a multilateral school. Currie, in his thesis, points out that:

"The conception of the common school proceeded from the activity school movement in the U.S.A., l'école unique in France and the omnibus school in Scotland."

Two major obstacles existed in the way of adopting a common school in England. These difficulties were concerned with the theories of social equality and the religious freedom that spread in America, against the sharper lines of class distinction and the highly religious restriction that dominated in England. Yet, the trend towards common schools grew gradually and won some support. Though, the White Paper 'Educational Reconstruction', issued in 1943, described the future system of secondary education for all as
a tripartite system on the Spens model; it stated

"There should be ... perhaps, in certain circumstances, a combination of all on one site or in one building."

When the question was debated in the House of Commons, there was an acknowledgement of amalgamation of more than one type of secondary education, from time to time, under one roof. However, by the close of the Second World War, it was becoming quite clear that a new and radical conception in terms of eliminating selection and providing a wide variety of courses within a single school, was emerging in the English educational thought. This conception could be described by the phrase 'comprehensive school'.

Undoubtedly the 1944 Education Act produced great changes in the structure of English education. Secondary education for all children was established as an integral part of educational system. Though the Act made the reorganisation compulsory by demanding that primary and secondary education must be provided in separate schools, it did not specify or suggest any particular form of organising secondary schools. The door was left open for the emergence of the comprehensive school due to the introduction of free and compulsory education, and the possibility of administering various forms of secondary education under one code. However, there were two conflicting tendencies in the implementation of organising secondary education. One tendency has inclined towards differentiation, whilst the other has been confined to unification. Starting to work out their developing plans, the great majority of local education authorities organised their secondary education selectively along tripartite or bipartite lines (with the virtual non-development of technical secondary schools). Some other authorities established bilateral schools of various types (two of the three orthodox types organised under one roof). A few of the local authorities, who disliked the idea of educating children of secondary school age in separate schools, proposed the comprehensive secondary school.

In practice, the comprehensive school was introduced in different areas for different reasons. For example, Anglesey, an island off the coast of North Wales, with a homogeneous population, mainly engaged in agriculture, presented comprehensive schools for geographical and economical reasons. On the other hand, in London and Coventry comprehensive schools were introduced for the ideological reasons to promote social unity. Evans argues that:

"The Isle of Man, Anglesey, and certain parts of rural Wales embraced the common school for reasons
of practicality and economy, but only London and Coventry chose ... this alternative on grounds of principle."

Pedley likewise points out that:
"Where comprehensive schools were planned, it was either in rural areas like the Isle of Man and Anglesey, for simple reasons of economy and efficiency, or in socialist strongholds like London and Coventry, for social-educational reasons."

Most of the comprehensive schools in England have been established under the jurisdiction of the London County Council (L.C.C.), however, outside the capital, Coventry and Bristol are recognised as centres of development. Among the greater industrial cities come Birmingham, Leeds, Manchester, Nottingham and Sheffield with one or more comprehensive schools. But few of these urban schools are fully comprehensive since they are often single units within a predominantly selective system. In Wales, there is a distinctive form of comprehensive schools based on the bilateral type.

In a country where traditions die hard, where society is still stratified and where changes are brought about by evolution not revolution, secondary education has developed slowly along lines suggested many years ago. Thus, comprehensive education, which was an idea or an educational norm in the early 1920s, has become a paramount reality in the English institutions in the late 1960s. However, the spread of implementing such schools was, and still is, constrained by many factors. The most noticeable of these factors are: the financial stringency and the restrictions placed on building programmes, the potential political objection of the Conservatives, the gap between the real enthusiasm of the leadership and the clear policy of the Labour Party, the lack of control guidance in contrast with the wide freedom of the decentralised bodies and the conflict policy between the central and local authorities, the parental attitudes towards comprehensive schools on grounds of social class distinction, the long-standing prestige of grammar schools, and the reaction amongst the professional organisations, particularly the Association of Grammar School Teachers and the Assistant Masters Association.

However, in spite of the lack of resources allocated for new school buildings and of political policies, the number of comprehensive schools has shown a steady growth since 1965. The statistics of the Ministry of
Education reveals that there was a quite remarkable increase between 1950 and 1955 (10 comprehensive schools in England and Wales in 1950 rose to 16 in 1955). Three years later, the Minister of Education, Edward Boyle, reported that there were 32 comprehensive schools in being, with 8 more under construction and a further 13 approved. In 1962, the Ministry of Education gave the number of comprehensive schools as 152 schools, but if schools classified as bilateral and multilateral were added, the total of comprehensive or near comprehensive schools would be greater. A comparison between the figures of 1950 and 1965 reveals that there was a considerable increase in the number of comprehensive schools and in the proportion of secondary school pupils attending them. The figures show that 10 comprehensive schools in 1950, accounting for 0.47% of secondary school pupils, rose to 262 schools in 1965 accounting for 8.5% of secondary school age group.

The big change in 1965 in the policy of reorganisation of secondary education on comprehensive lines has resulted in a rapid rate of growth in the number of comprehensive schools and the proportion of their enrolment. The number of schools increased to just over four times, from 262 to 1,145 schools during the period 1965-1970, whilst the percentage of secondary age group enrolled in the comprehensive schools grew from 8.5% to 31% during the identical period (i.e. nearly a four-fold increase). Table 5.3 shows the growth of comprehensive education in England and Wales from 1950-1973.

It may be noted that a great decrease took place in technical education in terms of number of schools and pupils attending them. The figures reveal that while in 1950 this type represented 6.31% of all maintained secondary schools with 4.27% of all secondary population, it accounted for only 0.83% of schools and 0.75% of pupils in 1973. It may also be noted that the expansion of comprehensive schools during the period 1955-1965 occurred at the expense of secondary modern and technical schools, since the percentage of grammar schools has shown such a significant change. Generally, it is clear that the comprehensive schools are gradually increasing whilst their counterpart of other kinds of schools are decreasing. The decline is greater in modern and technical schools than in grammar schools.

Figure 9 clearly illustrates that the growth of the comprehensive structure took place during this period largely at the expense of secondary modern and technical schools. Grammar and independent schools experienced an insignificant change. Between 1961 and 1970 the proportion of secondary
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>10</td>
<td>16</td>
<td>130</td>
<td>262</td>
<td>1,145</td>
<td>1,835</td>
</tr>
<tr>
<td>%</td>
<td>0.20</td>
<td>0.31</td>
<td>2.24</td>
<td>4.46</td>
<td>21.26</td>
<td>35.56</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>7,988</td>
<td>15,891</td>
<td>128,835</td>
<td>239,619</td>
<td>937,152</td>
<td>1,580,406</td>
</tr>
<tr>
<td>%</td>
<td>0.47</td>
<td>0.83</td>
<td>4.73</td>
<td>8.49</td>
<td>30.76</td>
<td>47.00</td>
</tr>
<tr>
<td>Grammar</td>
<td>503,008</td>
<td>528,455</td>
<td>672,881</td>
<td>718,705</td>
<td>604,916</td>
<td>496,766</td>
</tr>
<tr>
<td>%</td>
<td>29.66</td>
<td>27.59</td>
<td>24.70</td>
<td>25.49</td>
<td>19.85</td>
<td>14.77</td>
</tr>
<tr>
<td>Modern</td>
<td>1,095,247</td>
<td>1,234,174</td>
<td>1,637,879</td>
<td>1,555,132</td>
<td>1,226,619</td>
<td>965,753</td>
</tr>
<tr>
<td>%</td>
<td>64.59</td>
<td>64.45</td>
<td>60.14</td>
<td>55.16</td>
<td>40.27</td>
<td>28.72</td>
</tr>
<tr>
<td>Technical</td>
<td>72,449</td>
<td>87,366</td>
<td>101,913</td>
<td>84,587</td>
<td>43,700</td>
<td>25,321</td>
</tr>
<tr>
<td>%</td>
<td>4.27</td>
<td>4.56</td>
<td>3.74</td>
<td>3.00</td>
<td>1.43</td>
<td>0.75</td>
</tr>
<tr>
<td>All maintained sec.sch.</td>
<td>4,765</td>
<td>5,144</td>
<td>5,801</td>
<td>5,863</td>
<td>5,385</td>
<td>5,159</td>
</tr>
<tr>
<td>All maintained sec.pup.</td>
<td>1,695,683</td>
<td>1,914,814</td>
<td>2,723,158</td>
<td>2,819,054</td>
<td>3,045,974</td>
<td>3,362,554</td>
</tr>
</tbody>
</table>

Development of the English Secondary Education Between 1961-1970

school pupils attending comprehensive schools increased by 25% of the secondary population. Yet the bulk of these pupils came from the modern schools whose share of secondary school pupils, over this period, declined by some 17%. The share of the grammar schools, on the other hand, witnessed a decrease of some 3%, whilst that of independent direct grant and assisted schools experienced a decline of only 2% over the same period.

However, these figures do not imply that comprehensive schools in England and Wales is fully genuine in the sense that they take in all the children from the locality without being creamed off by, or coexisted with, selective grammar schools. The surveys in the late sixties revealed that only a small proportion of schools - in this sense - comprised of genuine comprehensive schools. Moreover, only some of the 12% of the total secondary school population was enrolled in genuinely comprehensive schools in 1970.94

It seems that the path is far from easy and many obstacles still remain to be surmounted before a system of genuinely comprehensive schools covers England and Wales. Fundamentally the movement towards comprehensive education will continue its progress, but the growth depends, to a great extent, on the support of parents, the availability of resources, the determination of the central and local authorities, the policy of the political parties and the attitudes of teachers.

3.3 In Sweden

Sweden long shared the traditional Western European pattern of dual education which is mainly affected by the division in the social class structure. Educational dualism distinguishes two parallel branches: one of a practical schooling for the common folk, and another of an elite academic education for the middle and upper classes. Duality was considered a major problem facing the Swedish educational reforms. Many attempts to solve this problem have taken place along the development of the educational thought in Sweden. Indicating the movement towards a unified system, Paulston asserts that:

"Sweden has had a long tradition of agitation for comprehensive schooling that sought to give children from all social classes a common school experience with a curriculum that stressed social and political goals over mere academic attainment."

95

However, the problem of educational dualism was not entirely solved
until the Education Act of 1950 was enacted. This law called for abolishing all competing and parallel schools at the primary and lower secondary levels, and establishing a nine-year comprehensive school for children from all classes of society. Recommending the new school organisation, the Ministry of Education states:

"Reform which is intended to bridge the old gap between social classes must ... (be) a comprehensive construction, within which there are available and open ways for all young people and where each growing individual, independent of his social starting point in life, will have the opportunity to learn how for future tasks he can best make use of his talents."

The acceptance of this proposal has been influenced by the changes that have occurred in the socio-economic and political realms of the Swedish society. Due to the fact that the direction of, and the impetus for, the educational reform in Sweden have been mainly by such changes, an analysis of these aspects seems necessary in order to examine the establishment and development of the Swedish comprehensive education.

The political change can be identified by the gradual swing of the Swedish political structure from oligarchy to democracy under constitutional monarchy. Paulston argues that:

"The transition from oligarchy to democracy was accomplished peacefully, and the circle of politically active Swedish citizens extended only gradually."

A long struggle was necessary to secure universal franchise. Suffrage was restricted to males with high income or large ownership of property. For example, by 1904 only 17% of rural male adults and 25% in cities could vote in election. This later declined to 8.5% and 12% respectively. Universal franchise was finally achieved in 1918 when the King, anxious for the monarchy and fearful of revolution, supported the demands of the Liberals and Social Democrats for universal male and female suffrage for both Chambers.

Until 1932, however, none of the four major political parties (the Conservatives, Social Democrats, Liberals and Agrarians) could win the majority of the votes required to exercise undivided power, and all were faced with compromise and forced to accept a coalition government. The significant change took place in 1932 when the Social Democrats became the largest political party. It has been in office continuously since 1932,
and it is considered the dominant political party. This change is evident from the growing number of Social Democrat representatives in both Chambers. Table 5.4 illustrates the distribution of the seats of the two Chambers among the different political parties during the period from 1908 to 1952.

### Table 5.4: Percentage of Political Party Strengths in the First and Second Chambers of the Riksdag, 1908-1952

<table>
<thead>
<tr>
<th>Party</th>
<th>% of Seats at First Chamber</th>
<th>% of Seats at Second Chamber</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1908</td>
<td>1929</td>
</tr>
<tr>
<td>Conservative</td>
<td>86.6</td>
<td>32.7</td>
</tr>
<tr>
<td>Liberals</td>
<td>10.0</td>
<td>20.6</td>
</tr>
<tr>
<td>Social Dem.</td>
<td>1.4</td>
<td>34.7</td>
</tr>
<tr>
<td>Farmers</td>
<td>-</td>
<td>11.3</td>
</tr>
<tr>
<td>Communists</td>
<td>-</td>
<td>0.7</td>
</tr>
<tr>
<td>Other</td>
<td>2.0</td>
<td>-</td>
</tr>
</tbody>
</table>

**Source:** Calculated from Paulston, R.G., Educational Change in Sweden, op.cit., p.179

The table indicates the growing strength of the Social Democrat Party. The percentage of its representatives in the First Chamber increased from 1.4% in 1908 to 56.0% in 1949, and their percentage in the Second Chamber rose from 14.8% in 1908 to 47.4% in 1952. In contrast, with this increase other parties witnessed a significant decline in power.

The Swedish Social Democratic Party which initially sought a "new society" based on the Marxian concept of the classless millennium would by force overthrow the capitalist system, moderated its Marxian position in its first Congress in 1899. The majority of the delegates abandoned its classical ideology of violent revolution and co-operated with other political parties to accomplish a welfare social programme. The basic underlying motive in the formation of its policy has been the principle of "universality", and the party has heavily relied on planning to carry out its reforms. The party, it is argued, believes that the transfer of an educational structure from a capitalist character to a socialist one would create a socialist society. Nevertheless for many reasons, the party at first avoided the restructuring of the educational system. On taking office in 1932, the
Social Democrats accepted the status quo of the dualistic and class-oriented elementary and secondary system. The post-war period, however, has witnessed increasing attention being given to educational reform by the Social Democrats. Their claimed policy was for enlarging educational opportunities for working-class children as well as for reorganising the structure and content of schooling in order to meet the democratic requirements of equalised opportunity for all and the demand for well-trained manpower. The conditions of work and the style of life have been changed due to the transformation of the Swedish society from an agricultural to an industrial community. The effect of mechanisation on agriculture and industry combined with the growing economic enterprises and the central system of organisation require a standard of general education to produce individuals with a homogeneous background of knowledge, through a standard of literacy and attitude, to maintain the Swedish way of life. This has been interpreted to mean that all children in the formative years of compulsory schooling should attend the same public school and as far as possible take a common curriculum. The separate school system of a six-year 'Folkskola' for the masses and a nine-year 'Gymnasium' for the well-born was considered inadequate to the requirements of the new society. The urgent need was for a longer compulsory education including the lower level of secondary education. This imposed the establishment of a unitary school of nine years which put an end to the parallel system in Sweden.

Comprehensive education in Sweden is one of the most carefully prepared changes in the direction of a unified system. During the greater part of the nineteenth century there was no link between the elementary and higher schools. The two schools ran parallel to each other. Those who desired higher schools never enrolled in the elementary level, and those who attended elementary schooling never got the right to transfer to higher schools. The gymnasium was not only a selective secondary school, but a separated school without any intake from the folkskola. In 1894, however, three years of attendance at the folkskola became a prerequisite for going on to secondary education. This period was extended to four years in 1927 with the introduction of a new lower secondary school. In 1928 a double link was created between the primary and the junior secondary schools, and two types of structures were set up: a combination of 4 + 5 or 6 + 4. The latter type was applicable in rural areas due to the belief that rural children were of less
achievement than urban children. The 3- or 4-year 'Realskola' after the 6-year 'Folkskola' was operated until 1962 when this type integrated in a single and unified school of 9 years. \textsuperscript{105} The following figure illustrates the link between the primary and secondary schools.

**FIGURE 10:** THE CONNECTION BETWEEN PRIMARY AND SECONDARY SCHOOLS IN SWEDEN DURING THE 19th AND 20th CENTURIES

Source: OECD, Educational Policy and Planning, op.cit., p. 57

This unified school came into existence after controversial debate. The early seeds of this comprehensive school were sown by the Liberal educators and politicians through their proposals of transforming the folkskola to a compulsory comprehensive school. Fridtjuv Berg has been regarded as the father of the 1950 Comprehensive School Act because of his concrete programme for an eight-year comprehensive school as early as 1863. This early proposal was rejected by the Conservatives on grounds of educational inefficiency. The opposition believed that there should be no incorporation between the folkskola and the secondary schools due to their varied origin and aims; whilst the reformers supported the unified structure on grounds of social justice, democratic attitudes and social solidarity.
Ellen Key, one of the great advocates of a unified school for all children until the age of fifteen, acknowledged in 1914 the importance of establishing such a comprehensive school, and advised the young Socialists to continue their efforts to accomplish this aim.\textsuperscript{106}

Since then, waves of societal change had emerged demanding a more democratic education through a unified school structure. Such a demand was mostly expressed in the successive reports of the committees and the commissions set up to enquire into the question of reforming the Swedish educational system.

As early as 1918, the Royal Commission suggested a 6-year common school, largely based on the idea of Berg.\textsuperscript{107} The outstanding proposal in its report, issued in 1922, was that

"The national system of education should be unified by the conversion of the primary school into a foundation upon which was to be erected a system of secondary schools providing a liberal education for boys and girls under equal conditions whatever their future occupation in life might be."

This report, in fact, formed the basis of reforms adopted by the Riksdag in 1927 and 1928. Under these reforms attendance at elementary school until the age of 13 was compulsory; transfer to lower secondary schools was possible at the age of 11 or 13; and the principle of co-education was accepted in all public schools. These reforms were, however, gradually introduced over a period of time.

Despite continuous progressive opinion pressing to abolish the early transfer and to establish unlinked connection between primary and secondary education, the complexity of structure prevented the process of implementation until the 1950s. However, the extension of compulsory schooling to the age of 13 in 1936, combined with a growing desire of staying at school, put forward a clear dissatisfaction with the vertical separation and the parallel system.\textsuperscript{109} As a result a committee of experts, chaired by the then Minister of Education, was set up in 1940 to study the organisation of the school system. The 1940 Committee continued its work over a period of more than six years and produced a total of twenty reports concerned with six critical issues of Swedish education: elementary school curriculum and methods; goals and organisation of higher elementary schools; connections between the folkskola and the realskola; organisation of the gymnasium; the problem of examinations and regional variations in the supply of and demand for
various types of schooling.¹¹⁰ The radical proposal of the Committee was
the suggestion of a 8-year common school. Though this proposal did not come
into being, it laid the base of the establishment of the present comprehensive
school and its work was taken by a political commission in 1946.¹¹¹

The School Commission of 1946 differed from the 1940 School Committee
in almost every way. It worked under a widespread post-war enthusiasm for
social and educational change, and its members were by large politicians,
rather than educators, drawn from more progressive sections of all parties
in about the same proportion as the size of parties in the Riksdag. Sharply
criticising the traditional Swedish school system, the Commission proposed
the abolishment of the double-track system of schools below the gymnasium
level, and recommended a unified structure of a 9-year compulsory compre-
hensive school providing for all types of education from the age of 7 to 16.¹¹²
The Commission suggested that the 9-year school should be integrated and re-
place the previous types of folkskola (elementary); realskola (lower section
of academic secondary); girls' schools; and intermediary practical schools.
On the basis of evidence provided by John Elmgren, the Commission rejected
the prevailing division of studies into theoretical and practical types.
Therefore, the Commission designed the 9-year comprehensive school to be
undifferentiated organisation in the first eight years, whilst the ninth grade
was to be divided into three tracks: one preparing for the 3-year gymnasium,
another with a strong vocational bias and the third with general education
courses. The Commission proposed a period of "experimental tryout" before
the unitary school could be introduced all over the country.¹¹³

Copies of the 1946 Commission report were sent to a wide variety of
professional educational organisations, institutions, and different national
bodies. The Commission's report raised considerable public interest partly
due to its radical proposal and partly because of its publicity proceedings.
Consequently, much controversial debate was engendered between supporters
and opponents of the Commission's reform. The advocates of the 9-year
comprehensive school can be identified as the Central Federation of Trade
Unions; the Folkskola Teachers Association; the Folk Movement; and the
Social Democrats. On the other hand, the opposition can be classified as
the Conservatives; the Laroverket faculties; and the Post-Elementary
Teachers organisation.¹¹⁴ During the period 1948-1950 a bitter criticism
was voiced against the proposals. Critical essays were documented in
various publications of the Post-primary Teacher organisation and the
Conservative press as well. The debate was mostly dealing with the psychological, educational and social problems that will follow the implementation of such a reform. Quite significant arguments were concentrated on the matter of differentiation and the efficiency of homogeneous classes. The Board of Education, for example, stressed the injustice of providing gifted pupils and those with practical interest at an early stage with courses irrelevant to their aptitudes. Quoting Utlatande, Husen states:

"The Board, like many other evaluating bodies, finds it 'hazardous' to 'support such a radical action' as postponing differentiation into tracks until the age of 15 upon such 'inaccurate and, from the point of view of developmental psychology, insufficiently substantiated statements, as for example that practical ability cannot be assessed until rather late'."

Notwithstanding, those who regarded the proposals as trifling represented a minority proportion and their criticism was opposing a popular acceptance. Commenting on such critics, Paulston argues that

"Their attack was fragmentary and unfocused, without overt support from any political party or large national institution or organisation. Although criticism of the proposed reform in many instances was perceptive and, understandably, expressed well-founded doubts, the arguments of the opponents of the comprehensive school plan and their lack of their effect tended to confirm the commissions' claim that the time to replace educational dualism with unity had indeed arrived."

In 1950, the proposed reform was presented to Parliament. Due to the differences of opinion of the special committee appointed to prepare the draft Bill, the Riksdag approved the establishment of a nine-year comprehensive school, enthesskola, with a compromise that it will include all pre-gymnasium types of schools except girls' schools and the practical junior secondary school. This approval was a result of the pressure of the popular organisation on legislation in two ways. The first was through group identification with a political party (i.e. the close relationship between the Socialist Democrats and the trade union movement). The second was through the comments on the proposal submitted by various interest groups. The 1950 School Act clearly stated that

"The development of the 'enthesskola' should be clearly guided in the light of experimental into such problems as the best curriculum and methods to use in a comprehensive school, the differentiation of courses of study and methods according to the varying abilities of the children, and so on."
This statement was interpreted by both supporters and opponents in a satisfactory manner. Marklund finds that

"Those supporting the resolution held the view that nine-year compulsory attendance was a fact, and that the experimental work referred only to the structure of the nine-year school. The opponents claimed that the introduction of the nine-year school was dependent on the result of the experimental schools."

Experimental work was, however, started in 1949, in accordance with the proposal of the Commission, in fourteen municipalities. The experimental schools increased rapidly and enrolled a significant proportion of the 7-16 year-old age group. Table 5.5 shows the rapid growth of the number of pupils enrolled in the experimental comprehensive schools from 1952 to 1962.

**TABLE 5.5: ENROLMENT GROWTH IN THE EXPERIMENTAL COMPREHENSIVE SCHOOLS IN SWEDEN, 1950-1962**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Pupils</th>
<th>Annual increase</th>
<th>% of Annual increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2,483</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1951</td>
<td>7,529</td>
<td>5,046</td>
<td>203</td>
</tr>
<tr>
<td>1952</td>
<td>14,635</td>
<td>7,106</td>
<td>94</td>
</tr>
<tr>
<td>1953</td>
<td>22,725</td>
<td>8,090</td>
<td>54</td>
</tr>
<tr>
<td>1954</td>
<td>35,784</td>
<td>13,059</td>
<td>57</td>
</tr>
<tr>
<td>1955</td>
<td>61,498</td>
<td>25,714</td>
<td>72</td>
</tr>
<tr>
<td>1956</td>
<td>84,941</td>
<td>23,443</td>
<td>38</td>
</tr>
<tr>
<td>1957</td>
<td>109,694</td>
<td>24,753</td>
<td>29</td>
</tr>
<tr>
<td>1958</td>
<td>143,370</td>
<td>33,656</td>
<td>30</td>
</tr>
<tr>
<td>1959</td>
<td>196,343</td>
<td>52,973</td>
<td>37</td>
</tr>
<tr>
<td>1960</td>
<td>268,940</td>
<td>72,597</td>
<td>37</td>
</tr>
<tr>
<td>1961</td>
<td>333,094</td>
<td>64,154</td>
<td>24</td>
</tr>
<tr>
<td>1962</td>
<td>436,595</td>
<td>103,501</td>
<td>31</td>
</tr>
</tbody>
</table>


Following the experimental years, Parliament proposed in 1956 the appointment of a commission to design a detailed plan for the organisation of the comprehensive school and to suggest a solution to the unsolved problem
of the girls' schools, in the light of the experience gained in the experimental schools. The commission was set up the following year and called the 1957 School Commission. It produced its report in 1961. Its proposal was a more definitive design for the nine-year comprehensive school, namely grundskola. This proposal was accepted and confirmed by Parliament in 1962. According to the Riksdag decision, the experimental work was to cease at the end of the school year 1961/1962, and the full transition to comprehensive organisation was to be completed in 1973 throughout the country. Table 5.6 illustrates the development of the comprehensive schools compared with the decline of the pre-gymnasium schools in terms of enrolment during the period from 1960 to 1970.

The success of the implementation of the nine-year comprehensive school, combined with the increasing political consciousness and the development of educational research has led to another radical change in the Swedish educational system from elitism to egalitarianism. This reform has taken place at the upper secondary level. Sweden has found that it is impossible, with the successive waves of societal changes, to maintain the old selective and parallel system of upper secondary education. Therefore, the entire upper secondary education has been in the process of reform. The decision to undertake this reform was based on studies by the 'gymnasium' Committee of 1960 and, to some extent, on enquiries conducted by the comprehensive school Committee of 1957, and the specialised professional school Committee of 1962, as well as the vocational school Committee of 1963. However, the motivation for the reorganisation was expressed by various groups. The Organisation for Economic Co-operation and Development states:

"The impetus for these doses of change stemmed largely from the public dialogue on the need for educational change as recognised and articulated by a wide variety of public groups and by a political leadership, sensitive to the impact of the scientific, technological and organisational revolutions on the need for more and new kinds of skills, insights and knowledge and on the new ways of structuring and imparting education."

Three major forces imposing such a reform can be identified. First, the differences of aims, content and methods of teaching in the comprehensive school as compared with the older type of primary and lower secondary schools call for corresponding changes at the upper secondary stage to cope with such a new comprehensive organisation. Second, the comprehensive school has
### TABLE 5.6: DEVELOPMENT OF ENROLMENT IN THE COMPREHENSIVE SCHOOLS COMPARED WITH OTHER TYPES OF SCHOOLS BELOW GYMNASIUM LEVEL IN SWEDEN 1960-1970 (in 000)

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary School</th>
<th>Intermediary Academic (Real)</th>
<th>Intermediary Practical</th>
<th>Girls' Schools</th>
<th>Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>510</td>
<td>142</td>
<td>18</td>
<td>24</td>
<td>333</td>
</tr>
<tr>
<td>1961</td>
<td>405</td>
<td>132</td>
<td>17</td>
<td>24</td>
<td>437</td>
</tr>
<tr>
<td>1962</td>
<td>330</td>
<td>122</td>
<td>17</td>
<td>24</td>
<td>507</td>
</tr>
<tr>
<td>1963</td>
<td>253</td>
<td>102</td>
<td>14</td>
<td>21</td>
<td>603</td>
</tr>
<tr>
<td>1964</td>
<td>176</td>
<td>87</td>
<td>11</td>
<td>17</td>
<td>619</td>
</tr>
<tr>
<td>1965</td>
<td>119</td>
<td>69</td>
<td>7</td>
<td>13</td>
<td>759</td>
</tr>
<tr>
<td>1966</td>
<td>61</td>
<td>51</td>
<td>4</td>
<td>8</td>
<td>830</td>
</tr>
<tr>
<td>1967</td>
<td>34</td>
<td>38</td>
<td>2</td>
<td>5</td>
<td>873</td>
</tr>
<tr>
<td>1968</td>
<td>7</td>
<td>25</td>
<td>1</td>
<td>3</td>
<td>904</td>
</tr>
<tr>
<td>1969</td>
<td>3</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>933</td>
</tr>
<tr>
<td>1970</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>954</td>
</tr>
</tbody>
</table>

created a growing interest in continued education. This implies the reconsideration of the upper secondary school system in terms of the relationship between the different types of schools and the streams of education, as well as the quantitative capacity. Third, the implementation of the comprehensive school resulted in a significant expansion of the flow into gymnasium education. For example, in the 1920s, the percentage of the new admission to the gymnasium was about 2.5% of the sixteen-years age group. In the beginning of the 1950s, this figure rose to 10% and in the autumn of 1966 it reached 25% of the 16-year age group. However, due to the limited number of places available in the academic gymnasium and the difficulty of attending commercial or technical gymnasia, the reform of upper secondary schools was inevitable, and a pressure for a more unified senior secondary education was reflected in the educational policy.

Motivated by the purpose of establishing an integrated system of education, the Riksdag has enacted some resolutions to make it possible for the different types of upper secondary schools to assimilate in one single school. The process of reform has been the presence of progressive elements within the society concerned less with the specifically educative functions of the school than with their social functions. The first step in the integrated direction was provisionally taken during the experimental period of the comprehensive school. Some experimental senior secondary schools were organised in municipalities where experimental comprehensive schools were established. The 1960 Senior Secondary School Commission published its report in 1963 in which a new senior secondary school was proposed. Accordingly Parliament authorised a new gymnasium in 1964, which since 1966/1967 replaced the three separate, academic, technical and commercial gymnasia. This reformed gymnasium was designed to include five streams.

The radical step in the transition to an integrated upper school system was taken in 1968 when Parliament decided that the existing types of upper secondary schools: the reformed gymnasium; the continuation school; and the vocational schools, should be combined to form the integrated upper secondary school since 1973. Tomasson points out the aim of the integrated movements as

"A fundamental aim in the present restructuring of secondary education is to introduce organisational relations and co-operation between the three orders of post-grundskola education and to lessen the aloof isolation that has always characterized the gymnasium."
4. Conclusion

In this chapter we applied both the Bowles and the Le Gall typologies to examine the position of secondary education in the countries chosen for the comparative analysis. Then followed a description of the educational system, crystallising the secondary stage in these countries.

Identifying the forces behind the comprehensive education movement, we were able to define three major changes in the political, industrial and demographic realms which respectively represent normative, institutional and environmental forces. The normative force is associated with the explosion of aspiration and the increasing emphasis on the democratisation of secondary education. The institutional force is exemplified by the advancement of technology and industrialisation. The environmental force is reflected by the post-war baby boom which meant that in the late fifties most countries had to accommodate the growing number of secondary school age population. These changes made the reconstruction of the educational system imperative in most European countries. A trend towards a comprehensive system was very clearly visible.

We then examined the establishment and development of the comprehensive school in the countries concerned, within the changes in the political, economic and social aspects. The comparative evidence shows that the comprehensive school has been an American phenomenon. It was implemented and reached its peak in the second half of the nineteenth century. Although England started the implementation of the comprehensive school before Sweden, it has not been accepted as a nationwide policy due to the living tradition of the grammar school. In contrast, Sweden has swiftly and fully constructed its educational system on comprehensive lines.
REFERENCES

1. OECD, Development of Secondary Education: Trends and Implications, op.cit., p.116


5. Ibid., pp.157-9


20. Corbett, A., 'Education in England,' in Bell, R. and others (eds), Education in Great Britain and Ireland, pp.2-3


23. Corbett, A., op.cit., p.5


28. The Inner London Education Authority, together with the Crowther Report, indicated that it is not necessary for a comprehensive school to take all local children. (Pedley, R., The Comprehensive School, Harmondsworth, Penguin Book Ltd., 1969, p.215)

29. Ibid., pp.215-18


40. Stenholm, B., op.cit., pp.73-8

41. Kandel, I.L., op.cit., p.159


45. Ibid., p.6


47. Le Gall, A. et al., op.cit., pp.145-6

48. Bowles, F., op.cit., p.53


50. Bowles, F., op.cit., p.59


52. Holmes, B., *Problems in Education*, op.cit., p.117

53. Atutov, P.R. and Zhidelev, M.A., 'The scientific-technological Revolution and the Role of the School in Preparing Young People for Work,' *Soviet Education*, 

55. OECD, Development of Secondary Education; Trends and Implications, op.cit., pp.19-20

56. Le Gall, A. et al., op.cit., p.146

57. OECD, Development of Secondary Education: Trends and Implications, op.cit., p.30

58. Ibid., p.96


61. For example, the election of Andrew Jackson as President in 1828 is regarded as an evidence of the triumph of a movement that gave the farmers and the labourers an increasing influence in governmental affairs (Jacobson, P.B. (ed.), op.cit., p.150).

62. Ibid., p.151


64. Craven, A., Democracy in American Life: A Historical View, Chicago, University of Chicago Press, 1941, p.52

65. Alexander, W.M. et al., op.cit., p.38


69. Tanner, D., op.cit., p.137

70. Jacobson, P.B. (ed.), op.cit., p.156


72. Dumas, Y. and Beckner, W., op.cit., pp.64-5
73. Tanner, D., Secondary Education, op.cit., p.50

74. Grant, N., 'Comparative Education and the Comprehensive Schools,' Scottish Educational Studies, vol.1, No.2, May 1968, p.17


79. These schools, which were founded in the eighteenth century, provided a pattern of local and classless schools. They educated all kinds of children from all classes, and offered elementary and secondary education in the same building. (Newman; A.W., Post Primary Education in Primary Schools in Scotland 1827-1936, London, London University Press, 1939, p.65)


85. Evans, K., op.cit., p.109

86. Pedley, R., The Comprehensive School, op.cit., p.41


89. For example, the device of the Circular 10/65 was used to request, but not to require, local authorities to submit the reorganisation plans. It also commented on six schemes which had been tried despite the fact that some of them were not even comprehensive. (Bell, R. et al. (Eds), op.cit., pp.124-5)

90. Holmes, B., Problems in Education, op.cit., p.250


94. Ibid., p.110

95. Paulston, R.C., op.cit., p.10

96. As quoted in Dixon, W., op.cit., p.145


99. Paulston, R.G., op.cit., p.8; Dixon, W., Society, op.cit., p.49


104. Paulston, R.G., op.cit., p.93

105. OECD, *Educational Policy and Planning: Sweden*, op.cit., p.57

Marklund, S. and Soderberg, P., op.cit., p.8

106. Paulston, R.G., op.cit., pp.33-4


110. Paulston, R.G., op.cit., pp.79-87


115. Husen, T., School Reform in Sweden, op.cit., p.20

116. Paulston, R.G., op.cit., p.121

117. Stenholm, B., Education in Sweden, op.cit., pp.13-14; Paulston, R.G., op.cit., p.130


119. Marklund, S. and Soderberg, P., op.cit., p.31

120. Ibid., p.33

121. Ibid., pp.33-9


126. Tomasson, B., Sweden: Prototype of Modern Society, op.cit., p.103
CHAPTER SIX

COMPREHENSIVE SCHOOL MODELS

1. The American Comprehensive Model
   1.1 The Regular Type
   1.2 The Reorganised Type
   1.3 The Middle-School Type

2. The English Comprehensive School Model
   2.1 The All-Through School
   2.2 The Tiered Scheme
   2.3 Separate Sixth Forms

3. The Swedish Comprehensive School Model
   3.1 The Basic School
   3.2 The Integrated Upper Secondary School

4. Conclusion
Comprehensive education has been introduced in different schemes of organisation. However, there are common features and similar characteristics within these wide varieties of structure. Ideally, a comprehensive school is unselective, co-educational and a neighbourhood school. Though the American model of comprehensive school has been widely adopted by many countries, there is till no typical form of organising the comprehensive school. Thus there is no one organisational structure could be termed as predominant. The form of organisation not only differs from country to country, but often from one location to another within the same country. Therefore, a comparative investigation of such forms is imperative. Hence an attempt is made in this chapter to examine the structural organisation of the comprehensive school in the countries under study in order to draw a distinct configuration of the American, English and Swedish patterns to be used as a basis in considering a model structural solution for Egypt's problem.

1. The American Model

The American comprehensive high school is the pioneer not only in time but also in its programme. It has many democratic features, far more than secondary schools of other nations. It is open to both boys and girls regardless of socio-economic status, nationality, race, creed, or sex. Since its establishment as a new institution for a new nation, the comprehensive high school has not been dominated by traditionalism or conservatism, as is the case in other countries. Consequently, the American comprehensive school is independent of all religious groups and does not teach the doctrines of creed-religion, class, or political party. Chase and Anderson argue:

"By the time the high school made its appearance on the educational landscape, the pattern was pretty well fixed: pluralism or local rather than centralized control of education; secularism, or separation from religious control; a general or liberal rather than a vocational education, and an education of the general populace rather than the elite."

The majority of all American comprehensive schools are co-educational, though there are a few schools solely for boys or for girls mainly located
in various cities of the country.\(^2\)

Because of varying policies and practices of the states in operating their educational systems, socio-economic conditions, and educational philosophies, different types of school systems were established and various methods of organisation were effected in the different states. There is, therefore, no uniform type of organisation in the comprehensive school system. Despite this variety of organisation, three schemes of high school organisation can be distinguished: the regular, the reorganised and the middle school schemes. Figure 11 demonstrates the different forms of comprehensive high schools in the United States.

1.1 The Regular Type

The old pattern of high school is commonly referred to as the regular high school or the 8-4 type. In this pattern, pupils pursue grades 1 to 8 in an elementary school, and grades 9 to 12 in a secondary school. Dumas and Beckner argue that

"From the beginning most high schools were organised around a four-year program. This was placed on top of the eight-year elementary school program. In some New England districts, the elementary program was nine years in length, while many Southern districts were content with a seven-year elementary school"\(^3\)

For many years the regular high school was the most common type, but since 1950, this pattern is no longer dominant. The year 1952 witnessed the great decline in the number of the traditional type of 4-year high schools. For the first time in American history this number dropped to below half of the total number of public schools in the United States. In 1952, the national enrolment statistics show that only 25% of the pupils attending secondary schools were enrolled in regular four-year high schools.\(^4\) The following table gives the distribution of different types of secondary schools in the United States in selected years. (Table 6.1)

This table shows that the regular 8-4 pattern has dramatically declined from 93.7% in 1920 to 24.9% in 1959. It subsequently achieved a slight increase to reach to 31.3% in 1966. In contrast, the reorganised pattern significantly increased in the same period.
FIGURE 11

Types of Comprehensive Schools Organisation in the United States

Regular

<table>
<thead>
<tr>
<th>High school</th>
<th>Senior high</th>
<th>Middle school</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-12</td>
<td>10-12</td>
<td>9-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior high</th>
<th>Middle school</th>
<th>Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-9</td>
<td>6-8</td>
<td>K-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elementary</th>
<th>K-4</th>
<th>6-6 Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-6</td>
<td>4-4-4 Type</td>
<td>5-3-4 Type</td>
</tr>
</tbody>
</table>

Re-O rganised

<table>
<thead>
<tr>
<th>High school</th>
<th>High school</th>
<th>High school</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-12</td>
<td>7-12</td>
<td>9-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle school</th>
<th>Middle school</th>
<th>Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-8</td>
<td>6-8</td>
<td>K-5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elementary</th>
<th>K-6</th>
<th>6-6 Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-6</td>
<td>4-4-4 Type</td>
<td>5-3-4 Type</td>
</tr>
</tbody>
</table>

8-4 Type | 6-3-3 Type | 6-6 Type | 4-4-4 Type | 5-3-4 Type
TABLE 6.1: NUMBER AND PERCENTAGE OF PUBLIC SECONDARY SCHOOLS BY TYPE IN THE UNITED STATES 1920-1966

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Regular Type</th>
<th>Reorganised Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>1919/20</td>
<td>14 326</td>
<td>13 421</td>
<td>93.7</td>
</tr>
<tr>
<td>1929/30</td>
<td>22 237</td>
<td>16 460</td>
<td>74.0</td>
</tr>
<tr>
<td>1937/38</td>
<td>25 057</td>
<td>15 523</td>
<td>61.9</td>
</tr>
<tr>
<td>1945/46</td>
<td>24 122</td>
<td>13 797</td>
<td>57.2</td>
</tr>
<tr>
<td>1951/52</td>
<td>23 746</td>
<td>10 168</td>
<td>42.8</td>
</tr>
<tr>
<td>1958/59</td>
<td>24 190</td>
<td>6 024</td>
<td>24.9</td>
</tr>
<tr>
<td>1963/64</td>
<td>25 926</td>
<td>7 173</td>
<td>27.7</td>
</tr>
<tr>
<td>1965/66</td>
<td>26 098</td>
<td>8 176</td>
<td>31.3</td>
</tr>
</tbody>
</table>


Many educationalists throughout the country came to believe that the period of elementary education was unduly prolonged and that secondary education suffered thereby. They recommended that the programme of secondary education should begin at least two years earlier, with grade 7, and that the elementary schooling be shortened to six years. The impetus behind the extension of secondary education was the contention of The Committee of Ten that the period of the four-year high school was too short to provide the necessary background in the liberal arts required for admission to, and success in, higher education. Dumas and Beckner point out that:

"The first strong move to revise the 8-4 plan of organisation came with the report of the Committee of Ten in 1893. It was the opinion of this committee that several subjects being taught in high school such as algebra, geometry, and foreign languages should be started earlier. It was further recommended that elementary school be limited to six years and the high school program started with the seventh grade."

In one of the conferences called to study the problem of reorganisation of the whole system in 1901/1902, John Dewey expressed the opinion that six years were enough for elementary schools to accomplish their aims of organising "certain modes of activity in observation, construction, expression and re-
flection" and that six years were necessary in the secondary school to accomplish the aim of "opening the mind to avenues of approach to all the phases of nature and society and acquiring a sympathetic knowledge of these areas of life-culture, in a word".  

Other educators attacked the 8-4 plan for the massive numbers of drop-outs during the first year of high school. This was partly attributed to the fact that the transition from the eight-year elementary school to the highly departmentalised and academic high school was a shock for many students.

Psychologists also pointed out that the early adolescents have their own unique needs and characteristics. They recommended special schools for this age group.

In 1915, another study group, called the Committee on Economy of Time, recommended a 6-3-3 plan of organisation. They came to believe that the intermediate three-year school would be a transitional school.

Whatever the reasons were for attacking the regular scheme of the 8-4 structure, there was an agreement among educationalists and psychologists in favour of increasing the duration of secondary education at the expense of the elementary schools. They supported the establishment of a new school which would incorporate some qualities of both elementary and high schools, and enriching and modifying the upper grades of the high school. However, such an idea of a shortened elementary school was opposed by many sections of society and did not instantly achieve wide adoption. Gradually, through the first half of the twentieth century, the regular type declined and the reorganised scheme increased both in number of schools and in enrolment. Yet, the four-year high school is still a typical pattern of organising the comprehensive high school in rural communities as well as in many urban centres.

1.2 The Reorganised Type

The reorganised scheme has developed and achieved its present status because of multiple factors, such as: the growing demand for a more extensive type of citizenship education combined with the criticisms of the traditional 8-4 system with its shortcomings; the increased awareness of the public high school as a non-selective institution coupled with a growing concern of the lack of articulation between the eighth and ninth grades; the high rate of
drop-out and retardation as revealed by the pioneer studies of Ayers, Strayer and Thorndike; the recommendations for a more gradual transition from the elementary to the secondary schools; and the desire of providing an appropriate educational programme for early adolescents, such were the basic reasons for the reorganisation of the structure of the high school.  

The early agitators for reorganisation were advocates of a 6-6 scheme, after which the idea of a transitionary school gained more and more acceptance. This led to the establishment of a new pattern based on divided junior and senior high schools following six years of elementary schooling. Hence, both the 6-6 and the 6-3-3 schemes are usually referred to as the reorganised schools in contrast to the traditional type of 8-4 plan.

The type of school organisation is often determined by the school buildings. For example, if the elementary and the high school buildings of those schools organised on the regular scheme 8-4 are overcrowded, the condition can be relieved most economically by the construction of a new building and the change to a 6-3-3 scheme. The seventh and eighth grades are removed from the elementary schools and the ninth grade from the high school to form a junior high school of three years and a senior one of three years too. But, since the establishment of a junior high school requires an extra building and separate equipment, usually a duplication of that in the elementary and senior high schools, therefore in many areas, particularly where there are no overcrowded buildings, housing the seventh, eighth and ninth grades in a separate school is found to be uneconomical. Hence in such areas the undivided junior-senior high school type is preferable.

In spite of the diversity of special grade groupings, reorganised patterns can be classified in general to two main schemes: 6-3-3 or 6-6 plans. An analysis of the reorganised pattern follows:

(i) The 6-3-3 Scheme

This provides for an elementary school of 6 grades, and a junior and a senior high school of 3 grades each. The junior high school plays an intermediary role between the elementary and the senior high schools. It usually includes grades 7, 8 and 9. It was argued that this school represents a predictive solution to the majority of the problems of secondary schools imposed by the university requirements, industrial needs and educational awareness. Stoumbis and Howard argue that:
"College and university faculties were largely of the opinion that the new organisational pattern would do much for a better preparation of the pre-college student; industry hoped that the new schools would meet at least a part of the need of job training; public school personnel believed that junior high school would reduce pupils dropout, improve retention, and furnish some pre-vocational training; and there was considerable expectation that the junior high school would provide a broader range of course offerings that would be of material value in the education of all youth."

The junior high school may not have proved itself on all these goals, yet it has achieved marked success in its relatively short history. It has rapidly diffused across the country and experienced a remarkable growth since its introduction. For example, while 31 towns with population of 25,000 or more had junior schools in 1912, there were 187 towns incorporating such schools in 1914. The number of the junior high schools increased from 55 in 1920 to 7,920 in 1966, and the percentage of the junior high school rose from 0.4% of the total number of the public secondary schools in the United States to 30.3% in the same period. Table 6.2 shows the growth movement of the reorganised schools from 1920 to 1966.

The growth of the junior high school during the first half of the twentieth century was indeed phenomenal. It is evident that this increase has taken place since 1920. The number of such schools in 1930 was more than thirty times the number in 1920. Twenty years later, this figure nearly doubled. Moreover, this type reached its peak of 30% of all the public secondary schools in 1966. This means that the number has more than doubled within 15 years from 1952 to 1966. Commenting on this growth, Lambert observes:

"In 50 years, the number of separate junior high schools has increased from one to approximately 5000, a figure which represents 21% of all secondary schools, enrolling 25% of all students at secondary level. Since 1952, the number of such schools has increased by one half, the enrolment by one fourth."

The senior high school, like the junior high school, came into existence as a result of a change from the traditional 8-4 system. The typical senior high school is one comprising grades 10, 11 and 12. It is housed in a building erected specifically for its purposes. Occasionally, however, it shares the building with the junior high school, but the two schools are operated under
### TABLE 6.2: GROWTH OF THE REORGANISED HIGH SCHOOLS IN THE USA 1920-1966

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Secondary Schools</th>
<th>The 6-3-3 Scheme</th>
<th>The 6-6 Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Junior High Sch.</td>
<td>Senior High Sch.</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1920</td>
<td>14326</td>
<td>55 0.4</td>
<td>22 0.1</td>
</tr>
<tr>
<td>1930</td>
<td>22237</td>
<td>1 842 8.3</td>
<td>648 2.9</td>
</tr>
<tr>
<td>1938</td>
<td>25057</td>
<td>2 372 9.5</td>
<td>959 3.8</td>
</tr>
<tr>
<td>1946</td>
<td>24122</td>
<td>2 653 11.0</td>
<td>1 312 5.4</td>
</tr>
<tr>
<td>1952</td>
<td>23746</td>
<td>3 227 13.6</td>
<td>1 760 7.4</td>
</tr>
<tr>
<td>1959</td>
<td>24190</td>
<td>4 996 20.6</td>
<td>3 040 12.6</td>
</tr>
<tr>
<td>1964</td>
<td>25926</td>
<td>7 143 27.6</td>
<td>5 568 21.5</td>
</tr>
<tr>
<td>1966</td>
<td>26 098</td>
<td>7 920 30.3</td>
<td>4 942 18.9</td>
</tr>
</tbody>
</table>

Source: USA, Office of Education, Digest of Educational Statistics, 1971, op.cit., p.46

Separate administration. Classes in the typical senior high school are significantly smaller than those in the junior high school. The usual senior high school class enrolls approximately 25 pupils as compared with 30 in the usual junior high school class. However, the smallest senior high school class contains only 9 whilst the largest enrolls 47 pupils (usually in physical education or music).

The growth of the separate senior high schools during the last fifty years is notable. Table 6.2 shows the increase in the number between 1920 and 1966, when the percentage rose dramatically from 0.1% to 18.9%. This percentage reached its peak of 21.5% in 1964. The fall from 21.5% to 18.9% in 1966 can be explained by the demands for the return to the 8-4 scheme due to various reasons. All this is evident from Table 6.1 which shows the increase in the percentage of the regular type from 27.7% in 1964 to 31.1% in 1966, and the decline in the percentage of the reorganised type from 72.3% to 68.7% in the same period. Table 6.3 also illustrates the number and percentage of public secondary schools in the US according to grade groupings in 1968.
on the basis of 6-7-8 grades followed by a 4-year high school.

However, in spite of its concern with the lower secondary school grades, the reorganisation movement has borne fruit in the upper grades as well. From the standpoint of organisation there would seem to be less grounds than has sometimes been assumed for comparing the junior and senior high schools. The two school units are apparently more alike in organisation since they share their major merits and defects.

(ii) The 6-6 Scheme

This form includes six years each for both the elementary and secondary schools. It constitutes either a 6-year combined junior-senior high school or a single unit of 6-year secondary school. The differences between the combined junior-senior schools and the undivided 6-year secondary schools are scarcely to be found in organisation, but some variations exist in the extent of provision and in the detailed practices operated by the two schools. The 6-6 scheme of organisation is commonly found in small school systems. In some of the rural areas a six-year high school constitutes the community high school. In such circumstances, the school may be of comprehensive nature, offering an extensive programme in all of the common fields of study. But most six-year secondary schools are of limited comprehensive nature; occasionally, six-year high schools are established in larger districts in order to serve the pupils in fringe areas of cities.

The pioneer advocates of the movement of organising public high schools in the US supported the 6-6 scheme. This support can be attributed to a number of reasons: first, it is probable that the combination of junior and senior units in one organisation stimulates the reorganisation of both units. Second, the combination probably facilitates certain arrangements for articulation which are not impossible but usually difficult to achieve within separate organisations. Third, the combination may permit both units to obtain services which neither would enjoy if they were separately organised, i.e. combining the staff may allow more elective use of teachers' varied interests and abilities in the development of the extra-curricular activities. Finally, the adoption of the combined organisation is likely to free the junior high school grades from certain hampering effects of tradition which still cling to the separate schools. Some of the advantages of the 6-6 over the 6-3-3 scheme are outlined by Bent and Kronenberg as follows:
### TABLE 6.3: NUMBER AND PERCENTAGE OF PUBLIC SECONDARY SCHOOLS IN THE UNITED STATES ACCORDING TO GRADE GROUPINGS, 1968

<table>
<thead>
<tr>
<th>Type of School</th>
<th>No. of Schools</th>
<th>Percentage of Total Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior High Schools</td>
<td>7712</td>
<td>30.6</td>
</tr>
<tr>
<td>(a) grades 7-8</td>
<td>1848</td>
<td>7.3</td>
</tr>
<tr>
<td>(b) grades 6-8</td>
<td>804</td>
<td>3.2</td>
</tr>
<tr>
<td>(c) grades 7-9</td>
<td>5060</td>
<td>20.1</td>
</tr>
<tr>
<td>Senior High Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) grades 10-12</td>
<td>3142</td>
<td>12.5</td>
</tr>
<tr>
<td>Junior-Senior Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>grades 7-12</td>
<td>4444</td>
<td>17.7</td>
</tr>
<tr>
<td>Regular High School</td>
<td>7840</td>
<td>31.2</td>
</tr>
<tr>
<td>(a) grades 8-12</td>
<td>790</td>
<td>3.2</td>
</tr>
<tr>
<td>(b) grades 9-12</td>
<td>7050</td>
<td>28.0</td>
</tr>
<tr>
<td>Combined Elementary and Secondary School</td>
<td>2029</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>25167</td>
<td>100.0</td>
</tr>
</tbody>
</table>

"1 - Greater economy is secured since only one building, one set equipment, and one administrative office are required.

2 - Greater articulation is secured by eliminating the break or gap, between the ninth and tenth grades. This is natural tendency for students to leave school in greater number immediately following the completion of any school division, especially if the culminating activity of that division consists of a commencement exercise and the awarding of diplomas.

3 - Promotion by subjects is facilitated in the 6-6 plan since both divisions are housed together and one system of records is kept.

4 - Greater articulation is secured through teaching methods since the same teachers who instruct the senior high school may be assigned classes in the junior division. This will secure greater continuity, prevent overlapping, and assure more adequate preparation for the latter division, or at least if pupils are not prepared, teachers have no one to blame save themselves."

The advantages of the 6-6 scheme can be recognised by the fact that this organisational type has increased more rapidly than the separate junior and senior high school during the period from 1920 to 1959. This is evident from Table 6.2, in 1959 this pattern represented 41.9% of all public secondary schools against 12.6% for the senior high schools and 20.6% for the junior high schools. Since 1960 the 6-6 scheme has declined in number and changed in ranking. Throughout the subsequent years, the number of the separate junior and senior high schools has exceeded that of the undivided secondary schools. Table 6.2 indicates that the number of the latter fell from 10,130 schools in 1959 to 5,060 in 1966, and its percentage also dropped from 41.9% to 19.4% in the same period. This trend continued to be prevalent in the last decade. The available figures for 1968 indicated that the combined junior-senior high schools represented 17.7% while the separate junior and senior high schools represented 30.6% and 12.5% respectively.

However, this change in the ranking of the schemes since 1960 may be explained by the growing trend towards the middle school organisational scheme and the tendency to revive the 4-year high school as shown by Figure 12.

1.3 The Middle School Scheme

Although the 6-3-3 scheme has been the most common pattern of structure, the junior high school, including grades 7 through 9, has never been universally
FIGURE 12


accepted throughout the country. Different forms of this school have existed for many years. In the 1914-18 period, for example, Davis reported that 7.5% of junior high schools were the 6 to 8 type. Douglass also found, for the same period, that 6% of the reported junior high schools were the 6 to 8 type. The traditional 7 to 9 junior high school has been subject to criticism. As a result, a substantial number of school districts have adopted different grade organisational patterns to obviate the dissatisfaction with the junior high school. These patterns are sometimes called intermediate schools but, more often, middle schools.

The middle schools have various grade organisations. One can define different schemes all over the country. This type includes 6-2-4, 6-2-2-2, 7-2-3, 5-3-4, 4-4-4, 5-4-3, and 3-5-4 plans. Each of these provides for a separate middle school of two, three, four, or five years. Figure 13 illustrates these different forms of the middle schools.

An analysis of these various types raises two legitimate questions: how many grades or years belong to the middle unit? And which grades or years are most appropriate for the middle school? A theoretical answer can be found in a statement issued in 1967 by the Committee on Junior High School Education, National Association of Secondary School Principals. The Committee points out that:

"Only two years or two grades are not enough to provide stability and to fulfill the stated educational goals of these schools because most pupils enter one year and leave the next. A one-year school is least desirable. At the other extreme, pupils who are five years apart in age have little in common to function effectively together in the same unit. The best solution is a middle unit consisting of three or four years."

On the other hand, a practical answer is to be found in the actual implementation. In many cases, the grades included have been established because of the stresses of enrolment, financial resources, building facilities, or community pressures. Some states, because of building considerations or sheer tradition, retain grade nine with the upper three and maintain a two-year middle school, while in other communities, a two-year school has not been found as satisfactory as a three-year middle school, due to the lack of stability. However, for one reason or another, various organisations of middle schools, including grades 7 and 8, grades 6 to 8, or grades 5 to 8 have been developed in many districts. Emmett L. Williams notes:
Figure 13

The different forms of the middle schools in USA

Middle schools
"The middle school is characterized by extreme variety. However, despite the fact that middle schools probably differ from one another more than they resemble one another, they do have some features in common."

Several reasons have been offered for the change from the traditional junior high school to middle schools. These reasons comprise earlier maturity of children and their increasing sophistication, the stigma of the junior name, college and high schools requirements, and the need for a third division in public education. Stoumbis and Howard sum up the reasons given for this change to include

"the earlier sophistication and maturity of youth; criticism of high school-type activities in the junior high schools; changing curricula and innovations in education; and the need for a distinct middle unit in the public schools, between elementary and high school, with a status, curriculum, and staff specifically its own."

Proponents of middle schools see them as a promising solution to the inadequate 6-3-3 organisation. They argue that the middle school is a better organisational pattern partly because it is not hampered by nine-grade high school-course requirements, and partly because it is more likely to avoid the over-sophistication caused by imitating high school practices and has better potential flexibility in curriculum. Commenting on the distinguishing features of the middle school, Atkins states that the middle school is

"characterized organisationally by flexibility, environmentally by sensitivity to changing needs, and instructionally by individualization."

M.Ann Grooms also contends that

"the middle school provides a program aimed at the 10-14 age group. One that stresses flexibility rather than acquisition of specific skills as does the elementary school; further, it does not emphasize the specialization of the high school."

Recent years have seen an intensified interest in the 5-3-4 and the 4-4-4 structures. Both these schemes have gained popularity because they appeal to the four-year high school advocates, the proponents of a middle unit and to those who want pupils introduced earlier to specialised teachers. Some districts have operated a long-standing practice of organising the middle schools. Grade 6 is removed from elementary to junior school and grade 9 is
returned to the high school. On the other hand, a few districts are making a more radical shift by setting up a middle school to serve pupils from the age of upper childhood through to early adolescence. These schools usually include grades 5 to 8, and are proposed in large cities as a means of ending the de facto segregation in some neighbourhood elementary schools.

A small but increasing number of districts have adopted another type of grade organisation. They operate a scheme of 6-2-2-2, that is a six-year elementary school followed by middle school of two years, and the last four years of secondary education are divided into two units of two years each. The first unit is called the lower secondary school and the second, the upper secondary school. Each is housed separately. Illinois was the pioneer in this movement; since 1950 the one 4-year high school has developed into: two upper schools with grades 11 and 12 and five lower schools with grades 9 and 10. This type, it is said, has many advantages. Among the most important of these are: the protection of the young students from the domination of the aggressive older students, the realisation of the small size of school, providing better home, school and community relationships, as well as better personal relationship among the students and individual teachers, and the gradual transition from the self-contained classroom and elementary school subjects to the methods of the human relation units and working out human relationship between teachers and students.

The growing interest in middle school movement has sparked off several surveys which have endeavoured to ascertain, among other aspects, the number of such schools actually in operation. As early as 1949, the National Education Association, in a survey of city school organisation, found that 12% of secondary schools in the cities samples were the 6-2-4 scheme, and 2% were of the 5-3-4 type. In 1955, the Office of Education published a bulletin No.21, 'Junior High School Facts - A Graphic Analysis,' by Gaumnitz and Others, which disclosed that of the 3,227 junior schools in the United States in 1952, 2,395 (74.2%) were grades 7 to 9; 627 (19.4%) were grades 7 and 8; and 205 (6.4%) were of other types. According to a survey made by Tompkins and Roe in 1957, the two-year middle school is the second most common type of junior school in the US. A nationwide survey of middle schools in the 1965/66 school year produced information regarding middle schools in 44 states. In indicated that 446 public school districts in 29 states were operating 499 middle schools. An Indiana survey in 1967 found that only 82 schools of the 134 junior schools had a seventh grade, 131 an
eighth grade, 16 a sixth grade, and one school had a tenth grade.  

An investigation of changes in junior high schools in the North Eastern United States in 1965 revealed that approximately 16% of schools had changed from the traditional 7 to 9 pattern to a middle school organisation of 6 to 8 or 5 to 8. It pointed out that most of the middle schools have been recently re-organised. It also indicated that some junior high schools were in the process of investigating a change to the middle school pattern.  

In 1967/68, Alexander conducted a study designed to trace the growth of the middle school. He estimated 1,110 middle schools in the United States. This figure is twice the number (499) in the 1965/66 survey. He found that 66% of the middle schools combined grades 6 to 8, 30% were 5 to 8 schools, and the remainder were schools with grades 4-8, 5-7, 6-9 and 4-7. He also pointed out that while only 10.4% of the middle schools were established before 1960, 42.9% were set up during 1966/67.  

It is evident that the 6-3-3 and the 6-6 schemes are predominantly prevalent, yet fundamentally sound and certain to gain ground, is the middle school type. Some educationalists go so far as to assert that the middle school concept may become the major educational development of the future. However, the best answer to the question of organisation is really an individual district matter, determined by such variables as size of school, enrolment trends, curricula offerings, student scheduling priorities, community sentiment, and personal philosophies of what constitutes quality of education. Diversity of organisation is viewed as a source of strength, growth, and greater flexibility.

2. The English Model  

Though the early organisation of the English comprehensive schools was heavily coloured by the London experience of the all-through school as well as the Leicestershire experiment of the two-tier type, the comprehensive school organisation differs considerably. Commenting on the various forms of the comprehensive schools, Conway states that:  

"My reflections on the major types and the variety within each type leads me to think that no two comprehensive schools are alike."  

The form of organisation has been left to the local educational authorities to adopt the scheme which is most appropriate to local circumstances.
Yet, in 1965 the Labour Government announced a policy based upon eliminating the separatism in secondary education, and calling for gradual conversion of all secondary schools into some form of comprehensive system. No legislation was imposed, but local authorities were required to submit plans for the reorganisation of secondary schools on comprehensive lines. Circular 10/65 gave an implicit guidance on the methods of reorganisation through six main forms of organisation. These six ways of going comprehensive can be briefly summarised as follows:

(a) The all-through comprehensive school, with an age range of 11-18.
(b) A two-tier system where all pupils transfer at eleven to a junior comprehensive school and all go on at thirteen or fourteen to a senior comprehensive school.
(c) Comprehensive schools with an age of 11-16 combined with sixth-form colleges for pupils over 16.
(d) A system of middle schools which straddle the primary-secondary age ranges. Transfer from primary takes place at the age of 8 or 9 to a comprehensive school with an age range of 8 to 12 or 9 to 13 leading to a comprehensive school with an age range of 12 or 13 to 18.
(e) A two-tier system in which all pupils on leaving primary school transfer to a junior comprehensive school, but at the age of 13 or 14, some pupils choose, or are selected for, transfer to the upper tier.
(f) A two-tier system in which all pupils on leaving primary school transfer to a junior comprehensive school. At the age of 13 or 14 all pupils have a choice between long-course and short-course upper tiers.

While the first four schemes were accepted by the circular as fully comprehensive in character, the last two types were regarded as incomplete comprehensive. They would be acceptable as a temporary stage of reorganisation because they separate children into different schools according to their different aims and aptitudes. The circular advocated the proposal of the all-through school, as a simplest and best solution, and stressed that this type should be adopted whenever possible. On the other hand, the circular approved the system which incorporates automatic transfer at the age of 13 or 14 to a senior comprehensive school. It indicated that such systems
"have two clear advantages over other two-tier systems. They avoid discrimination between pupils at the point of transfer; and they eliminate the element of guesswork about the proportion of pupils who will transfer to senior school."

The sixth-form colleges were viewed with caution, and the middle schools were to be approved only in a few experimental schemes.

It is interesting to note that the Government did not ask authorities to adopt any particular pattern of comprehensive schemes. Consequently some of these schemes have been widely adopted, others have been largely ignored, and at the present time, there are schools with over twenty different age ranges operating in England and Wales. Benn, for example, points out twenty-two different age ranges operating in the organisation of secondary schools. Figure 14 illustrates the various forms of comprehensive schools in England and Wales. However, one can group these different types into three basic schemes. The first is the all-through school which takes pupils all the way through their secondary education from 11 or 12 to 18. The second is the tiered scheme, where some or most of the junior or secondary schools become middle or lower schools of various age range and the upper schools take pupils from 13 or 14 through to 18. The third type is the sixth-form college scheme where some or all of the schools in any scheme break at 16 and education thereafter is concentrated in a sixth-form college. It is pertinent to discuss these three schemes of comprehensive schools in detail.

2.1 The All-Through Comprehensive School

This is considered as the 'orthodox' comprehensive school. It offers a wide range of courses to all secondary school children from 11 to 18 in a given neighbourhood. This scheme was the first in this field. Until 1957 it was the only type and it has, until now, held the pride of place. This is evident from the statistical figures. Pedley, for example, points out that when the 10/65 Circular was issued "sixty local education authorities in England and Wales were providing one or more secondary schools of this type". Benn and Simon, in their survey, also found out that "This trend is indeed already taking place ... and 38% of all schools were being planned as orthodox self-contained 11-18 schools in England and Wales."
FIGURE 14
Organisational Patterns of the English Comprehensive Schools

1. All-through comprehensive school

Primary  Secondary

2. Two-tiered scheme

Primary  Junior High  Senior High

Or

Primary  Junior High  Senior High

3. Sixth-form college scheme

Primary  Lower school  6th F.C.

Or Sixth-form linked with 11-18 school

Primary  11-18 school

4. Middle school scheme

Primary  Middle  Upper

Or

Primary  Middle  Upper
Moreover, all the figures given in the surveys indicate that this type of comprehensive school remains dominant. The majority of schools replying to the NFER survey in 1966 were all-through schools, i.e. 246 out of 331 schools, or 74%.\textsuperscript{45} Also, the percentage of all-through schools in 1968 was maintained as high as 56.2% of all 1,532 comprehensive schools in England and Wales.\textsuperscript{46} The all-through schools, however, are spread very widely. Generally many authorities often have at least one all-through comprehensive school even if they operate a tiered scheme or a separate sixth-form. Moreover, many authorities operate only all-through schools.

Benn and Simon distinguish two kinds of all-through comprehensive schools: one type is self-contained school due to its unalloyed sixth-form intake, while the other type takes regularly additional pupils for its sixth-form.\textsuperscript{47} The second type is sometimes called 'Mushroom', and considered as a part of a separate sixth-form scheme outlined in Circular 10/65. These two types differ in their size. The 1968 survey revealed that the average size of the first type is 970 pupils against an average size of 1,137 in the 'Mushroom' type. The first type is a popular organisation, it represented 52% of all comprehensive schools, whilst the second was a minority of 4%.

Table 6.4 compares different aspects within the various schemes of the comprehensive schools organisation in England and Wales.

One of the differences between the all-through schemes and other types of comprehensive schools is the range of size. The orthodox comprehensive school was originally seen as an outsize school due to the management of a successful sixth-form that could offer a variety of courses with reasonably economic use of staff. The Ministry of Education Circular 144 of 16 June 1947 argued that large comprehensive schools would be necessary so as to ensure a viable and economic sixth-form.\textsuperscript{48} Pedley suggests that "a sixth-form of 120 or more becomes necessary to justify staffing and equipment on a really efficient scale."\textsuperscript{49} It was stated that it would need a total of 1,875 pupils aged eleven to eighteen in order to produce 120 pupils in the sixth form. Circular 10/65 suggested that a six or seven form entry\textsuperscript{50} would be able to support an adequate sixth form.\textsuperscript{51} However, the extension of compulsory schooling to sixteen, combined with the increase in the average percentage of each year group staying at school after the school leaving age would make 1,000 pupils aged 11-18 a reasonable size of a comprehensive school of this type.
TABLE 6.4: NUMBER OF SCHOOLS AND STUDENTS IN THE DIFFERENT TYPES OF COMPREHENSIVE SCHOOLS IN ENGLAND AND WALES, 1968

<table>
<thead>
<tr>
<th>Average range of school</th>
<th>Number of schools</th>
<th>% of total schools</th>
<th>Number of pupils</th>
<th>% of total pupils</th>
<th>Average size of school</th>
<th>% of pupils staying on beyond SLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-18 (i)</td>
<td>345</td>
<td>52.1</td>
<td>334,939</td>
<td>64.2</td>
<td>970</td>
<td>56</td>
</tr>
<tr>
<td>11-18 (ii)</td>
<td>27</td>
<td>4.1</td>
<td>30,716</td>
<td>5.9</td>
<td>1,137</td>
<td>60</td>
</tr>
<tr>
<td>11-16</td>
<td>139</td>
<td>21.0</td>
<td>81,715</td>
<td>15.7</td>
<td>587</td>
<td>39</td>
</tr>
<tr>
<td>11-13</td>
<td>26</td>
<td>3.9</td>
<td>8,887</td>
<td>1.7</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>11-14/15</td>
<td>69</td>
<td>10.4</td>
<td>34,721</td>
<td>6.7</td>
<td>503</td>
<td></td>
</tr>
<tr>
<td>13-18</td>
<td>34</td>
<td>5.1</td>
<td>18,295</td>
<td>3.5</td>
<td>538</td>
<td>63</td>
</tr>
<tr>
<td>14-18</td>
<td>16</td>
<td>2.4</td>
<td>9,397</td>
<td>1.8</td>
<td>587</td>
<td>76</td>
</tr>
<tr>
<td>16-18 (6th F.Col)</td>
<td>2</td>
<td>0.3</td>
<td>1,164</td>
<td>0.2</td>
<td>582</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td>0.5</td>
<td>1,810</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>661</strong></td>
<td><strong>100.0</strong></td>
<td><strong>521,644</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Benn, C. and Simon, B., Half Way There, op. cit., p.522

Despite the defects of outsize, the all-through comprehensive school has many advantages. Commenting on such advantages, Elizabeth Halsall asserts that:

"Large 'all-through' schools make an economic use of scarce teaching talent in their large sixth forms, maintain continuity of teaching better than any other type of reorganisation, have reasonable staying-on rates and run serious risks of failing in the field of personal development and participation. Small 'all-through' schools maintain continuity of teaching, have reasonable staying-on rates, promote personal development and participation, but are less economic in their use of scarce personnel than the other types."

2.2 The Tiered Scheme

The desire to overcome the drawback of selection at 11+ on the one hand, and eliminate the defects of huge comprehensive schools on the other, led to the introduction of an alternative scheme of organising secondary education on comprehensive lines, the two-tiered scheme. It has been designed to provide secondary education in two stages. Though the two-tiered type has
long been implemented in the United States, it has recently been introduced into England by Pedley in 1956. He suggested an interim scheme whereby all children should go direct from primary to junior comprehensive schools and stay at least three years there. At the age of fourteen pupils who wished to go to the grammar school would do so without selection, but their parents must agree to keep them there for at least two years. The others would complete their education in the junior comprehensive school.

This scheme was institutionally implemented in a modified way by Leicestershire in 1957. Leicestershire's plan provides secondary education through two stages: first, all children at the age of eleven are promoted from primary to the high school (formerly converted modern school). Then, a free transfer from the high school to the upper school (formerly grammar school) takes place at the age of fourteen. All pupils so willing would be promoted, provided their parents signed a statement of guarantee to remain for two years or longer.

The two-tiered system constitutes two individual schools organised next door to each other and separately administered. It is relatively simple form of organisation. Burgess argues that this scheme can be established when

"ex-secondary modern school usually becomes the lower, and grammar school, the upper, tiers. Or when the authorities use the former grammar school as senior school and the former secondary modern as middle school."

Generally, the lower school takes the age-range of 11-13 or 14, while the upper takes the age-range of 13 or 14-18. Recently, most of the 13-18 schools have 9-13 middle schools rather than lower schools of 11-13. For example, Leeds operates 11-13 lower schools followed by 13-18 upper schools, while West Riding runs partly 10-13 middle schools followed by 13-18 upper schools and partly 8-12 middle schools followed by 12-18 upper schools. A scheme of 11-14 lower schools followed by 14-18 upper schools exists in Waltham Forest, other types of 9-13 middle schools followed by 13-18 upper schools operate in Bedfordshire. Sometimes a three-tiered scheme is found, for instance, Flint runs 11-13 lower schools followed by 13-16 upper schools and then by a sixth-form college, while Wigan operates 8-12 middle schools followed by 12-16 upper schools, then sixth-form college.

The two-tiered scheme has become popular. Benn and Simon in their
survey of 1968 confirmed a rise in such a system. The percentage of the two-tiered scheme, as can be seen from Table 6.5, amounts to approximately 22% of all types of comprehensive schools in England and Wales. This is nearly double the figure of the NFER survey of 1965, which indicated the percentage of this type as 12.7%. 58

The following table shows the development of the different forms of comprehensive schools between 1965 and 1972.

TABLE 6.5: PERCENTAGE OF DIFFERENT TYPES OF COMPREHENSIVE SCHOOLS IN ENGLAND AND WALES, 1965-1972

<table>
<thead>
<tr>
<th>Type</th>
<th>1965</th>
<th>1968</th>
<th>1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 (12) - 18</td>
<td>78.7</td>
<td>56.2</td>
<td>56.2</td>
</tr>
<tr>
<td>11 (12) - 16</td>
<td>8.3</td>
<td>20.0</td>
<td>21.1</td>
</tr>
<tr>
<td>Sixth-form College</td>
<td>-</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>11 - 13</td>
<td>5.2</td>
<td>3.9</td>
<td>2.2</td>
</tr>
<tr>
<td>11 - 14 (15)</td>
<td>1.6</td>
<td>10.4</td>
<td>8.0</td>
</tr>
<tr>
<td>13 - 18</td>
<td>2.6</td>
<td>5.1</td>
<td>7.6</td>
</tr>
<tr>
<td>14 - 18</td>
<td>3.3</td>
<td>3.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.6</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

No. 331 (sample) 661 (sample) 1532 (all)

Source: Monks, T.G., Comprehensive Education in England and Wales, op.cit., Table 1, Appendix 5, p.229; Benn, C. and Simon, B., Half Way There, op.cit., Table 6.3, p.125

The table shows that the increase in the tiered scheme was greater between 1965 and 1968, but was not significant between 1968 and 1972. It also clarifies that the lower school (11-13) steadily declined from 5.2% in 1965 to 2.2 in 1972. This may be attributed to the growing trend of the middle school while the decrease in the 11-14 or 15 schools can be explained by the growth of the 13-18 pattern as a result of the extension of compulsory schooling and the trend towards fully comprehensive schools. However, in the next few years the proportion of the tiered system will gradually rise since so many schools are being planned.
Three types of the two-tiered scheme can be distinguished, due to the differentiation made by Circular 10/65: total transfer, free-choice and guided choice types. It is worthwhile examining them here further.

(i) The Total Transfer Type

In accordance with this type, all pupils in the lower school move on automatically to the upper school. The age ranges of the lower schools can be 9-13; 11-13; 10-13 or 11-14, with upper schools of 13-18 or 14-18. The lower schools are sometimes called middle schools particularly those of age ranges of 9-13; 10-13; and 11-14. The thirteen-plus break is considered more desirable than the fourteen-plus. Anyhow, whatever the age of transfer is, all pupils in a fully comprehensive tiered scheme are transferred from the middle or the junior comprehensive schools to the senior comprehensive schools.

(ii) The Free-Choice Type

Despite the lumping together of all parental choice schemes in Circular 10/65, it is clear that parental choice can be relatively genuine or limited; the genuine-choice type is usually 11-14 (15) lower schools running parallel with 14-18 upper schools. Pupils at fourteen years given a choice of transfer to the upper school, or remaining an extra year in the lower school. The specific characteristics of this type are the respect for parents' choice, the non-external examinations in the lower schools, and the increasing trend towards the conversion of grammar schools to its comprehensive role. Though the pressure of some upper schools to prevent the transfer of a large number of the less academic children, the rate of transfer in this type rises each year and proves that the free-choice scheme obviously operates in many cases, Benn and Simon point out that in 1968 there were

"quite a number of free-choice transfer systems slowly but surely evolving into fully comprehensive tiered systems."

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However, as a result of the rising of the school-leaving age to sixteen in 1972, most of the genuine free-choice schemes have come to an end.

(iii) Guided-Choice Type

Most of the guided-choice types operate a thirteen-plus transfer to
select a minority proportion of pupils for the upper school. The upper school has presented very little change. It still proceeds as a selective grammar school. Documentations about this type clearly indicate that the grammar tradition will be preserved and enhanced. The choice process is very limited. Teachers deal with the giving of advice. Most parents do not insist against it. If they do so, they have to see the upper school head-teachers who explain the different nature of the two kinds of schools in the scheme; but parents do not often protest. Benn and Simon argue that "in guided-choice methods of transfer there is always appeal against the decision. But the whole appeal structure is likely to be intimidating and probably only confident and usually middle-class parents will want to face it."

The argument against guided-choice tiered schemes can be briefly stated as follows: this type is still selective and operates in favour of middle-class children and against working-class children. The Advisory Centre for Education in 1967 stated "this process can work against the interest of the working-class child even more than selection by an eleven-plus exam"

Unofficial reports in the Middlesborough Press never denied the percentage of pupils being guided from the middle-class districts of the town to be as high as 50%, while the percentage from some schools in working-class districts was as low as 6%. Halsall asserts that "Guided-choice schemes merely lead to the perpetuation of the 11+ at a later age of transfer."

Evaluating the two-tiered schemes, Halsall concludes that:

"Owing to the unusual degree of autonomy enjoyed by British schools, the tiered schemes produce problems of liaison more difficult to resolve than in any other country; this difficulty is likely to be intractable and be a permanent one. The tiered schemes do not fit our situation, in the context of the deeply biased attitudes of British heads and teachers."

2.3 Separate Sixth-Forms Scheme

The inconsistency between the intractable difficulty of changing the striving trend towards building sixth-forms within the same school, and the small number of pupils who might wish to stay on for the sixth form education
in non-selective schools, combined with the shortage of highly qualified teachers, create a problem of managing efficient and economic sixth-forms, particularly within the small comprehensive schools. This problem has been dealt with by various solutions. One was the co-ordination of certain schools with a further education college. A second solution was for several schools to form a consortium to provide sixth-form courses. A third was the establishment of a sixth-form college to which all sixteen-plus pupils form, say, two neighbouring schools could be transferred.

The sixth form is not a form in the sense that others are or used to be. Not only does it represent the sixth year, but usually includes the sixth, the seventh, and part of the eighth year. The idea of the sixth-form college is not new. It was introduced by Croydon's Chief Education Officer in 1954, but this concept proved too radical for Croydon to adopt. However, the first sixth-form college was opened in 1964 in Hexborough, West Riding, and in Luton two years later. A more radical proposal suggested by Mumford in 1965 was based on the fusion of secondary and further education in a junior college catering for sixth form students and for further education students, whether full- or part-time, working for vocational or technical qualifications. Thus, the separate sixth-form scheme came into existence. Sharp observes that

"The sixth form is peculiarly an English phenomenon. We think of it as the pride, the apex and the justification of a secondary school."

The separate sixth-form scheme has different formats. The simple form is operated where all comprehensive schools in an area keep pupils until the age of sixteen, then they transfer to a separate sixth-form institution. The formats of this scheme differ according to the ranges of age, the types of courses, the kinds of regulation, and the forms of entry. Some are run as schools for the age groups 16-18, whilst others operate within schools for the 11-18 age-range. Some cater for 'A' level work only, whilst others provide 'O' level, C.S.E. and general courses as well. Some schemes are operated under further education regulations in former schools and take a much wider range of pupils for a greater range of courses, while other sixth-forms are wholly incorporated into existing further education colleges. Some sixth-forms can be highly selective, due to the requirement of examination passes for entry, while others are entirely open to any pupils who want to
complete the sixth year of education. Thus, sixth-form schemes mean different institutions to different local education authorities. Circular 10/65 made a clear distinction between three types of the sixth form colleges:

(a) The junior college which caters for all pupils staying on beyond the age of sixteen,

(b) a college which requires certain conditions, e.g. the possession of a stated number of 'O' levels or a declared intention to take 'A' level subjects, and

(c) a college which is, in effect, attached to one school and to which pupils could transfer from schools lacking sixth forms.

The separate sixth-form scheme is likely to be very popular, since one third of all schools planned under the future comprehensive system are organised according to such a scheme. The trend towards more separate sixth-form schemes may be attributed to the rise in number of the 11-16 schools. Table 6.5 shows the marked increase in the percentage of 11-16 schools from 8.3% in 1963 to 21.1% in 1972. The following table which demonstrates the percentage of each type of comprehensive schools founded during 1963-1972 asserts the same trend. It indicates that such schools rose from 5% to 35%.

**TABLE 6.6: PERCENTAGE OF EACH TYPE OF COMPREHENSIVE SCHOOLS FOUNDED DURING THE PERIOD 1963 to 1967 and 1972 IN ENGLAND AND WALES**

<table>
<thead>
<tr>
<th>Year of foundation</th>
<th>Types of comprehensive school by age range</th>
<th>No. of schools per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11/12-18</td>
<td>11-16</td>
</tr>
<tr>
<td>1963</td>
<td>68</td>
<td>5</td>
</tr>
<tr>
<td>1964</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>1965</td>
<td>41</td>
<td>23</td>
</tr>
<tr>
<td>1966</td>
<td>43</td>
<td>36</td>
</tr>
<tr>
<td>1967</td>
<td>49</td>
<td>34</td>
</tr>
<tr>
<td>1972</td>
<td>48</td>
<td>35</td>
</tr>
</tbody>
</table>

*Source: Benn, C. and Simon, B., Half Way There, op.cit., p.118*

Many local authorities dislike, however, break-at sixteen schemes, particularly those who have chosen to go for all-through schools. Others support such schemes, especially in depopulated rural areas, where a nearby...
town has a flourishing sixth-form college. Both sides have their arguable grounds. The advocates of a break-at-sixteen system argue that at this age pupils welcome the more adult atmosphere of a sixth-form, junior or further education colleges; besides, the separate sixth-form institutions are able to provide a wider variety of courses in a more economic and efficient way, than many small schools with sixth forms. The counterpart argument is based on three pitfalls facing such schemes. They are: defects of selection, segregation between academic and vocational studies and vitalisation of the parallel system. Outlining these three dangers, Benn and Simon state that:

"The first is selectivity at sixteen with denial of opportunity and waste of talent, especially to pupils who achieve just under the requirements for centres or colleges, who need longer to achieve these requirements than is usual, or who wish to pursue a general or untraditional sixth form course rather than the traditional academic one. ... The second danger is the divorce between academic and vocational work, or between pure studies and technical courses - in both concentrated sixth forms and in schemes where schools cooperate with further education colleges. The third is that re-organisation will, in fact, never really take place - with grammar/modern segregation merely replaced by co-existence of 11-16 on the one hand, and 11-18, 12-18 or 13-18 comprehensive schools on the other, with guidance between the two types taking place at eleven or twelve or thirteen."

Evaluating the separate sixth-form schemes, Halsall points out that:

"The sixth form college scheme makes the most effective use of well-qualified teachers in subjects where there are enough classes to be taught for timetables to be filled. In subjects where there are few takers, e.g. music, it is probably wasteful. ... any other scheme than the sixth-form college applied universally over a period would possibly cause a shortage of such staff of catastrophic proportions. This fact will probably force us into the adoption of the sixth-form college scheme, in spite of its weakness with regard to the promotion of high staying-on rates. A change in examinations and curriculum policies might prevent this."

All the aforementioned comprehensive schemes are being carried out in one part of the country or another. However, the all-through comprehensive school is the most popular scheme. It was chosen in 1969 by 62 education authorities providing approved long- or short-term reorganisation plans.
Various kinds of middle school schemes have been chosen by 52 authorities. At the same time, schemes of the two-tiered system including 11-16 schools concerted with 11-18 or 13-18 schools or sixth-form colleges were planned by 48 authorities, and that including 11-13 followed by 13-18 schools or 11-14 followed by 14-18 were planned by 32 authorities. The scheme of sixth-form colleges following 11-16 schools or middle schools was planned only by 25 educational authorities.\(^78\)

Despite the particular criticisms of each scheme, all the three major schemes are capable of being fully comprehensive schools. What matters more than the type is the way in which the local authority choose to operate it.

3. **The Swedish Model**

In contrast with the wide variety of forms of comprehensive schools in the United States and in England and Wales, the comprehensive school in Sweden is remarkable for its unified form of organisation at both compulsory and upper secondary levels.

3.1 **The Basic School**

The structure of the Swedish comprehensive school, 'grundskola', is simple. It covers the compulsory schooling which runs for nine years. It constitutes an integrated school including primary and junior secondary education. Marklund points out that

"In Sweden, the earlier system, with elementary school and a number of lower secondary schools partly parallel to each other, has been fully replaced by a nine-year compulsory comprehensive school."\(^79\)

The basic school is structured in three levels of three grades each: the lower level, 'lagstadiet', from grade 1-3; the middle, 'mallanstadiet', from grade 4-6; and the upper level, 'hogstadiet', from grade 7-9.\(^80\)

The division of the comprehensive school into three stages does not imply any jumps from one stage to a higher one. The Swedish comprehensive school is a homogeneous unit, and such a division is regarded primarily as a practical organisational measure. Marklund and Soderberg assert that

"The division into departments is due to certain practical problems, primarily the employment of different categories of teachers with training mainly for the department in which they teach."\(^81\)
The transition from one stage to another means more development and more substantial courses. Though the lower and the middle stages are similar to the old primary school in many respects, the upper stage is quite new. Figure 15 illustrates the structure of the nine-year comprehensive school and the major differences between the divisions. The main characteristics of these stages are discussed in detail below:

(i) The Lower Level

This consists of the first three grades. Teaching in this level is provided by class-teachers, who take their respective classes in all subjects. Pupils are associated predominantly with a single teacher, though exceptions can be made for individual subjects. Children at this level are often divided into groups, in order to give them more individual instruction. Therefore, the teacher does not take the whole class for all the weekly periods. For example, in the first year of a-type class, the teacher has the whole class for only eight of the twenty lessons a week, the other twelve being used for group instruction. In the second year the corresponding figures are sixteen and ten, in the third twenty-six and four. While in b-type classes, the corresponding numbers of lessons differ somewhat since each class constitutes more than one year-group. Class enrolment is maximised at 25 pupils. A new class must be formed as soon as the number of pupils exceeds that figure. The number of periods per week is fixed to 20 periods in the first grade, 24 in the second, and 30 in the third. At this level the basic school offers the same courses to all the pupils.

(ii) The Middle Level

It forms grades 4-6. This level also operates according to the class-teacher system. One teacher is in charge of all subjects except for practical subjects, such as handicrafts, domestic science, etc. which are taught by special teachers. Physical education and music are sometimes assigned to specially trained staff. However, changes of teacher in individual subjects are more common at this level than in the lower level. Marklund and Soderberg argue that

"The class-teacher system has, however, become considerably modified, above all in the middle department. Specially trained teachers take
FIGURE 15
Organisation Pattern of the Basic Comprehensive School in Sweden

- Direct preparation for gymnasium
- Humanities
- General practical
- Technical
- Practical-technical
- Mercantile
- Commercial
- Social-economic
- Domestic science

<table>
<thead>
<tr>
<th>Grade</th>
<th>g</th>
<th>h</th>
<th>pr</th>
<th>t</th>
<th>tp</th>
<th>m</th>
<th>ha</th>
<th>s</th>
<th>ht</th>
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<td>28</td>
<td>13</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>22</td>
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Groups of Optional Subjects

about three-quarters of all instruction in handicrafts. Teachers other than class teachers may take charge of instruction in other subjects, too. Thus two teachers may exchange subjects owing to special interest or special training."

A class enrolment at the middle level cannot have more than 30 pupils. If the subjects taught involve practical practice, the class will often be divided into two groups. In their fourth grade, pupils will have 34 periods a week, and they have 35 in the fifth and sixth grades.

(iii) The Upper Level

This level represents the junior secondary school. It includes grades 7-9. At this level, the different subjects are taught by subject-teachers. The older the pupils become the more they differ in interest and aptitudes, hence one of the principal characters governing the organisation of the upper level is the optional subjects. A few elective subjects are available in the seventh and eighth grades, while in the ninth grade pupils are grouped into nine lines based on four main study areas: theoretical, social general, technical-mechanical, and commercial. These lines or streams can be described as follows:

Stream (g) is a year of preparation for the gymnasium.
Stream (h) is mainly a humanistic line giving a good general education.
Stream (Pr) is a practical line offering workshop practice, domestic science, and office and shop practices.
Stream (t) offers instruction in technology with emphasis on mathematical and electrical engineering.
Stream (tp) gives more specialised education than the (t) line and aims at pre-vocational training.
Stream (m) is a general commercial course with a broad general content.
Stream (ha) offers more specialised commercial training.
Stream (s) is a line offering social and domestic subjects as a preparation for careers as social workers, nurses, etc.
Stream (ht) gives a specialised education in the same field as the (s) line but with a rather strong emphasis on work in the home.

More streams may be arranged by special permission of the National Board of Education. For example, an aesthetic stream (e) with more comprehensive course in music, art, drama, etc. has been organised in some cases. In other
areas, where forestry is the prevalent economic activity, a forestry stream (skog) may replace other lines of the practical streams. However, in all but the first stream, pupils may choose between a more theoretical (h, t, m, and s) and a more practical (pr, tp, ha, ht, e, and skog) lines. Yet, due to the choice system and the lack of pupils among other forces, the organisation of all the streams could be impossible.

At the upper level of the comprehensive school, pupils are not assigned to classes according to the optional subjects they have chosen. Nor are classes organised in accordance with pupils' marks, but due to a free-choice system practised by parents and pupils. The most striking result of the implementation of the principle of free-choice electives has been the demand for theoretical as opposed to practical studies. In 1962/63, for example, only 28.2% of the pupils in grade 6 chose to follow the practical subjects in grade 7; and in the following year the percentage dropped to 24.5%. Nevertheless, Harnqvist suggests that such percentage might well be misleading. In a recent study, defining the term 'theoretical' as the study of two foreign languages; special course in English; and mathematics, he found that the percentage of pupils following 'theoretical' studies when compared with the old school system, had in fact decreased. However, a comparison of the enrolment in the several lines of streams in grade 9 will emphasise that the percentage of the enrolment in the more theoretical lines is significant (more than two-thirds). The following table demonstrates the enrolment in the theoretical lines (g, h, t, m, and s) and the practical lines (pr, tp, ha, ht, e, and skog) of the ninth grade streams.

Having found that such a differentiation in the ninth grade has functioned in a similar manner as selection and led to social, as well as sex, differences in the choices, the National Board of Education eliminated the process of differentiating the students into lines in the final year of the comprehensive school. As from 1970, a new curriculum was implemented providing a relatively small number of elective courses which are taught for three hours per week in grade 8 and for four hours per week in grades 7 and 9 at the senior level of the basic school.

Although the 9-year comprehensive school is a municipal organisation, the action of municipalities is limited by Laws in force throughout the whole country. This may explain the unitary form of organisation which dominates the structure of the Swedish comprehensive schools. However, differences between municipalities exist in the completion form of the
<table>
<thead>
<tr>
<th>Line</th>
<th>Boys No.</th>
<th>Boys %</th>
<th>Girls No.</th>
<th>Girls %</th>
<th>Total No.</th>
<th>Total %</th>
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<tr>
<td>Gymnasium (g)</td>
<td>13 976</td>
<td>41.3</td>
<td>17 227</td>
<td>52.0</td>
<td>31 203</td>
<td>46.60</td>
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<tr>
<td>Humanities (h)</td>
<td>4 049</td>
<td>11.9</td>
<td>5 995</td>
<td>18.2</td>
<td>10 044</td>
<td>15.00</td>
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<td>Technical (t)</td>
<td>6 710</td>
<td>19.8</td>
<td>104</td>
<td>0.3</td>
<td>6 814</td>
<td>10.10</td>
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<td>Mathematics (m)</td>
<td>746</td>
<td>2.2</td>
<td>1 723</td>
<td>5.2</td>
<td>2 469</td>
<td>3.70</td>
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<tr>
<td>Social-economics (s)</td>
<td>76</td>
<td>0.2</td>
<td>1 328</td>
<td>4.0</td>
<td>1 404</td>
<td>2.10</td>
</tr>
<tr>
<td><strong>Total Theoretical</strong></td>
<td>25 557</td>
<td>75.4</td>
<td>26 377</td>
<td>79.7</td>
<td>51 934</td>
<td>77.50</td>
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<tr>
<td>Aesthetics (e)</td>
<td>64</td>
<td>0.2</td>
<td>139</td>
<td>0.4</td>
<td>203</td>
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<td>General practical (pr)</td>
<td>193</td>
<td>0.6</td>
<td>49</td>
<td>0.1</td>
<td>242</td>
<td>0.35</td>
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<tr>
<td>Practical-technical (tp)</td>
<td>6 967</td>
<td>21.0</td>
<td>130</td>
<td>0.4</td>
<td>7 097</td>
<td>10.70</td>
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<tr>
<td>Commercial (ha)</td>
<td>909</td>
<td>2.1</td>
<td>2 925</td>
<td>8.9</td>
<td>3 834</td>
<td>5.50</td>
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<tr>
<td>Domestic Science (ht)</td>
<td>110</td>
<td>0.4</td>
<td>3 455</td>
<td>10.5</td>
<td>5 565</td>
<td>5.50</td>
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<tr>
<td>Forestry (skog)</td>
<td>88</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
<td>88</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Total Practical</strong></td>
<td>8 331</td>
<td>24.6</td>
<td>6 698</td>
<td>20.3</td>
<td>15 029</td>
<td>22.50</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td>33 888</td>
<td>100.0</td>
<td>33 075</td>
<td>100.0</td>
<td>66 963</td>
<td>100.00</td>
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</table>

*Source:* Calculated from Mallea, J.R., The Implementation of Swedish Educational Policy and Planning, op.cit., p.104
school. Lower and middle stages of the comprehensive school are to be found in all municipalities, while some municipalities, for demographic reasons, lack the upper stage. The National Swedish Board of Education in 1970 estimated the number of municipalities which run complete comprehensive schools at 470 out of a total of some 900, just slightly over 50%.

3.2 Upper Comprehensive Secondary School

The reorganisation of upper secondary education in Sweden in the 1970s is mainly based upon the idea of integration. This idea was pressed as a result of the success of the experimental 9-year unified comprehensive schools. The implementation of an integrated upper secondary school gradually took place during the 1960s.

Following the report of the Senior Secondary School Commission, the Riksdag decreed in 1964 a new structure for the gymnasium beginning in the school year 1966/67. The former structure of three separate gymnasias - academic, technical and commercial - was replaced by a single three-year gymnasium with five lines of study: humanities, social sciences, natural sciences, economics, and technology. Though the normal duration of study was three years, technological line had a fourth year to qualify the students as secondary school engineers. The organisational structure of the new gymnasium is demonstrated by Figure 16.

The organisational structure of the reformed gymnasium, however, was influenced, to a greater or lesser extent, by higher education requirements and manpower needs. For example, the technical and economic streams were introduced in order to prepare students for direct entry to their employment careers. The division of the technical and economic lines into sub-streams in the third and fourth grades was also affected by the specialisation requirements of the different fields of higher studies and the labour market. Furthermore, the popularity of the technological line among boys and the humanities and social sciences among girls is explained by the different interests of both sexes in the type of streams leading to the future study or vocational career (e.g. in 1966 the percentage of the first choice in the technical line was 37.1% for male against 2.1% for female students, in contrast, the corresponding figures in humanities and social sciences were 19.2% against 63.2%).

Three advantages were achieved through this structure. The first was
FIGURE 16

Structural Pattern of the Reformed Gymnasium School in Sweden

4th year

Subjects in common 9.5 periods per week

the minimisation of the distinction between liberal and vocational education at this level. The second was the increase in the chances for studying technology and economics. The third was the equivalent of all the lines to qualify for university entrance. 94

The reorganisation of the gymnasium was not the only change brought by such a pressure for reshaping the upper secondary school system. A two-year full-time continuation school 'fackskola', was established as a result of the social demand for increasing the number of students wishing to pursue full-time education beyond the compulsory schooling, as well as a result of the demand from the labour market for middle-level personnel. Mallea argues

"This demand for senior secondary education did not result in an expansion of the prestigious gymnasium. Rather, in 1962, Parliament, in a decision based partly on general manpower needs, accepted in principle the establishment of the two-year 'fackskola' continuation school."

95

The continuation school comprised three lines: social, economic and technical. It was designed to give pupils a well-directed education in order to prepare them for their future professions. In other words, it was more career-orientated than the gymnasium by paying much attention to the practical application of the theoretical studies. 96

The organisational structure of the continuation school was influenced by the idea of delaying differentiation. With the exception of the technical line, significant differentiation did not occur until the second year. 97 Figure 17 illustrates the differentiation in the continuation school.

In practice, the fackskola suffered by comparison with the gymnasium and had some difficulties on normative and institutional grounds in gaining widespread acceptance. The long traditional prestige of the gymnasium, which opens the way to university education, attractive professional and wide employment opportunities, has resulted in a strong tendency of demanding gymnasium education. Recent figures compiled by the city and county of Stockholm reinforced the attractiveness of the gymnasium as compared with the fackskola. In 1967 it was reported that there were 7,981 first choice applicants for 5,790 places in the public gymnasia. In contrast, there was less demand for the continuation school in the same region (e.g. there were 3,233 first-choice applicants for fackskola against 3,880 as a second choice. 98 Furthermore, in spite of the proclaimed official policy, graduates from the continuation schools have little chance of completing higher education, also
"Few industries have shown much interest in either the school or its graduates." 99

On the other hand, the progress in industry and commerce, combined with the complication of the process of production has created a greater demand for more skilled personnel than the apprenticeship training and the part-time vocational systems can supply. 100 This climate enforced a remarkable pressure to reform the upper secondary school system. Considerable attention has been given to vocational education due to major support from the communities, industry and commerce, and the State.

The Committee on Vocational Education in 1963 - just a year after the decision of setting up the continuation school, recommended the establishment of a new full-time system of vocational schooling. 101

The vocational school was a two-year course of theoretical and practical subjects. It was open to all pupils of gymnasium-age. It offered full-time and part-time courses. Some schools have both types of courses, whilst others have only one type. Three types of vocational schools were to be

found. One type served the industrial field. It included the local and central workshop schools, 'verkstadsskola', as well as the firm school, 'foretageskola'. The local workshop schools existed in certain towns and enrolled students from neighbouring municipalities. While the central workshop schools operated in the sparsely populated areas of the counties and enrolled students from the countryside, the firm school was run by a large industrial enterprise and was subsidised by the State. A second type of vocational school served the commercial field. This type of school offered commercial education and office training. It was extended to include retail trade training as well. The third type served the domestic field. This type provided courses which train girls in house-management. There were also courses in child-care, catering, hospital-work, etc. 102

The trend towards the integration of these various types of upper secondary school was assured by decision makers. As to the stated policy, the different types of upper secondary schools were to be close to each other in terms of curricula structure, corresponding transfer, and school location. Mallea indicates that:

"Official policy stated that the three institutions were to be closely related. For example, the fackskola and gymnasium were to share common entrance principles; the basic structure of their respective curricula was to be similar, particularly in the lines corresponding to each other; transfer was to be made possible from one school to the other; fackskola were always to be established at places where gymnasia and as a rule nowhere else; and finally, it was planned that a gymnasium and a continuation school sharing the same site would, as a rule, be housed in the same buildings and have a common administration." 103

In 1968 the Riksdag resolved in favour of the replacement of the gymnasium, continuation and vocational schools by a single institution, namely the integrated upper secondary school, as from the school year 1971/1972. The integrated school is structured in three basic sectors: arts and social; economics and commercial; and technical and scientific sectors. These include twenty-two lines of study lasting two, three, or four years. The division into sectors and lines is shown by Figure 18.

The majority of lines are divided into sub-alternatives and variations. There are also a number of special courses of varying length, some of them can be taken immediately after comprehensive schooling, while others are delayed until a more advanced stage. However, the range of lines and special
courses differ from one place to another.

The National Board of Education sums up the implications of the integrated upper secondary schools as follows:

"The lines corresponding to the former upper secondary school (gymnasium) remain intact. Those corresponding to continuation school have undergone certain alterations, e.g. their organisation is simplified and studies are more vocationally oriented. The new school entails a thoroughgoing reform of vocational education. Thus more scope is given to general subjects and students receive a broader basic education."

The three-year lines and the four-year line are mainly theoretical. They qualify pupils primarily for admission for higher studies in their respective fields without requiring an entrance examination. For studies in an adjacent field it may be necessary to supplement the leaving certificate by studies in certain subjects. In contrast, few of the two-year lines are theoretical, and do not prepare pupils for further studies, while the majority of the two-year lines are vocational and prepare students exclusively for a specific career.
The integrated structure of upper secondary school has considerable advantages. Socially, it is hoped that the introduction of an integrated school will diminish or eliminate the social connotations attaching to the various subjects, particularly the differences of status traditionally applying between theoretical and practical studies. Then it will be possible for the individual student to choose a line of studies on ground of his or her wishes, interest and aptitudes. Educationally, a single structure of upper secondary school will make it easier to diffuse resources of staff, as well as make it easier for students to change their line of studies if they wish. Economically, an integrated school not only will reduce administrative costs to a certain extent, but it will also make for a more effective utilisation of resources such as expensive special facilities and technical apparatus.

The elimination of the prestige given to the theoretical lines, as well as the combination of theoretical and practical subjects in each line has reflected in the increase in the number of students choosing practical lines. Pointing to this evidence, Stenholm asserts that:

"The majority of pupils in the integrated upper secondary school are now to be found in the two-year vocational lines. 52% of the pupils are to be found in these lines compared to 30% in the three- and four-year lines, and to 18% in the two-year theoretical lines. There are also more applicants for every available place in the vocational lines than in the theoretical lines. The nursing line, the agricultural line, the electro-technical line and the motor-engineering line, have almost 200 applicants to 100 places. On average the two-year vocational lines have 123 applicants to 100 places compared to an average of 100 applicants to 100 places in the three- and four-year lines, and an average of 76 applicants to 100 places in the two-year theoretical lines."

To ensure the equality of the lines of studies, Parliament passed a Bill in 1972 which makes "all lines of the integrated upper secondary school lead to general qualification for higher studies."

The organisational structure of the integrated upper secondary education has, on the whole, proceeded without difficulties and on an experimental base. It is responsible for the greater part of upper secondary education in Sweden. This structure is now operating in 220 of the country's 278 municipalities or a percentage of 79%. In spite of their design to accommodate all 16-year olds, the integrated upper secondary schools in 1976 encompassed only 90%
of those leaving the comprehensive schools. However, this pattern of structure is clearly too recent for judgment to be passed now.

4. Conclusion

Having examined the structural organisation of the comprehensive school, we were able to conclude that no uniform type of organisational structure exists. Several formats have emerged in the countries concerned, due to their particular initial conditions. All these structural formats are regarded as an embodiment of the idea of the comprehensive school. Each form is thought to be, with all its advantages and defects, an appropriate answer to the question of structural organisation under certain conditions prevailing in a particular country or in a certain location.

In the United States and England, the choice of an organisational scheme is an individual district, or local education authority concern. In contrast, one form predominates in Sweden, which is formulated and adopted at the central level by the National Board of Education. The municipalities have enjoyed no freedom of choice regarding structural organisation. However, not all schools at the gymnasial level have all the lines of specialisation, nor have all the basic comprehensive schools in the different municipalities complete nine grades.

The structural organisation is, on the whole, determined by such variables as the size of the schools, age group, enrolment trends, curricular offerings, students' priorities, existing buildings, psychological considerations, and community sentiment.
REFERENCES


3. Dumas, W. and Beckner, W., op.cit., p.305


5. For example, Charles Eliot, President of Harvard University, is usually placed first among the educational leaders who influenced the reorganisation of the school system. He was appointed chairman of the Committee of Ten in 1892 by the National Education Association, and recommended the introduction of liberal arts studies in the seventh and eighth grades in order to achieve the basic skills at the elementary level. (Bent, R.K. and Kronenberg, H.H., op.cit., pp.110-111, Dumas, W. and Beckner, W., op.cit., p.36)

6. Dumas, W. and Beckner, W., op.cit., p.305


8. For example, the work of G.Stanley Hall in 1904 pointed out that pupils in the 7th, 8th and 9th grades constitute a more or less homogeneous group and should be given special consideration. (Smith, W.A., The Junior High School, New York, The Macmillan Co., 1930, pp.153-3)

9. Dumas, W. and Beckner, W., op.cit., p.305

10. Lounsbury, J.H., 'How the Junior High School Came to Be,' in Stoumbis, G.C. and Howard, A.W. (eds), Schools for the Middle Years, Scranton, Pa., International Textbook Co., 1969, pp.4-5


13. Pringle, R.W., op.cit., p.25


16. Ibid., pp.165-6
17. Alexander, W.M. et al., op.cit., p.16
19. Stoumbis, G.C. and Howard, A.W. (eds), op.cit., p.81
23. Stoumbis, G.C. and Howard, A.W. (eds), op.cit., p.86
25. Stoumbis, G.C. and Howard, A.W. (eds), op.cit., p.81
26. Atkins, N.P., Rethinking Education in the Middle: Theory Into Practice, Columbus, Ohio State University College of Education, 1968, p.118
27. Grooms, M.A., Perspectives on the Middle School, Columbus, Merrill, 1967, p.4


40. Ibid., Para. 10, p.3


43. Pedley, R., *The Comprehensive School*, op.cit., p.57

44. Benn, C. and Simon, B., *Half Way There*, op.cit., p.120

45. Monks, T.G., *Comprehensive Education in England and Wales*, op.cit., p.13

46. Benn, C. (ed.), *Comprehensive Schools in 1972*, op.cit., p.iii

47. Benn, C. and Simon, B., *Half Way There*, op.cit., pp.120-1

48. Rubinstein, D. and Simon, B., op.cit., p.45

49. Pedley, R., *The Comprehensive School*, op.cit., p.46

50. A form entry means the number of children who would be taught as a class or form - say 30 children. Therefore, a six or seven form entry means 180 or 210 pupils entering the school in the first year. (Burgess, T., *Inside Comprehensive Schools*, op.cit., p.14)


54. Leicestershire adopted a similar plan to Pedley's suggestion in two areas: Wigston and Hincley in 1957 (ibid., p.53)
55. The County Authority of Leicestershire first decided to promote talented children - roughly 8 to 10% of a whole age group - from primary to the new junior high school at the age of ten, and from the junior high school to the senior grammar school, the upper school, at the age of thirteen. But later the county recognised that the early advancement of clever children was unsatisfactory on educational grounds, therefore, it was decided that all children are transferred at the age of eleven (ibid., p.54).


57. Benn, C. and Simon, B., Half Way There, op.cit., p.59

58. Ibid., p.161; Monks, T.G., Comprehensive education in England and Wales, op.cit., p.229

59. Benn, C. and Simon, B., Half Way There, op.cit., p.165

60. Maclure, S. (ed.), op.cit., p.29

61. Benn, C. and Simon, B., Half Way There, op.cit., p.166


63. Ibid., p.27


65. Ibid.

66. The 1969 Report, Sixth-form Opportunities in Inner London, pointed out that, "The number of pupils per form entry who might be expected to stay on ... varied from two to three in some divisions, and from five to six in others ... This means that even by 1975 five- or six-form entry non-selective schools in certain parts of London will provide only small 'A' level groups" (Inner London Education Authority, Sixth-Form Opportunities in Inner London, London 'LE', 1968, p.18)


70. Sharp, J., op.cit., p.12

71. Ibid., p.63
72. Benn, C., The Comprehensive Schools in 1972, op.cit., p.11
73. Ibid., p.11
74. Dept of Education and Science, Circular 10/65, op.cit., pp.4-5
75. Benn, C. and Simon, B., Half Way There, op.cit., p.179
76. Ibid., p.190
78. Bell, R. et al., (eds), op.cit., p.113
80. OECD, Educational Policy and Planning: Sweden, op.cit., p.67
81. Marklund, S. and Soderberg, P., op.cit., p.64

84. The term 'class' has a different meaning in the Swedish context. It means a number of pupils instructed together regularly regardless of whether they belong to the same year-group. A distinction between classes can be drawn in accordance with the kind of group taught inside a class. A-type class contains only one year-group, whilst B-type class includes more than one year-group. More than 80% of the classes in Sweden are A-type. (Marklund, S. and Soderberg, P., op. cit., pp.63-4)
86. Ibid., p.64
88. Ibid., p.103


94. For example, such studies became available at 130 institutions whereas previously there had only been 28 technical, and 31 commercial gymnasia. (Spolton, L., *The Upper Secondary School, A Comparative Survey*, Oxford, Pergamon Press, 1967, pp.170-2; Dixon, W., op.cit., pp.170-2); The National Board of Education, *The Swedish School System*, op.cit., p.2


97. Ibid., p.107

98. Ibid.

99. Mallea, J.R., op.cit., p.105


104. The Swedish Institute, *Primary and Secondary Education in Sweden*, op.cit., p.3


106. Ibid., p.5


108. The Swedish Institute, *Primary and Secondary Education in Sweden*, op.cit., p.3

CHAPTER SEVEN

SELECTION AND ALLOCATION TO COMPREHENSIVE SCHOOLS

1. Selection for Comprehensive Schools in a Tracked System
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   1.2 Basic Assumption of Selection
   1.3 The Traditional Methods of Selection
   1.4 Effects of Selection

2. Allocation Procedures for Comprehensive Schools in a Unified System
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      (iii) Bussing
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      (i) Catchment-Area Method
      (ii) Feeder-Schools Method
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3. Conclusion
SELECTION AND ALLOCATION TO COMPREHENSIVE SCHOOLS

The provision of secondary education in the nineteenth century was, almost everywhere, separated from primary education and considered as a privilege for the minority. By contrast, primary education was regarded as a means of training children of the labour classes to be obedient, honest, hard-working and literate workers. The growing aspirations of the population, together with the increasing need for an adequate and advanced educated labour force, imposed the conception of a successive process of education. The United States had early put this norm into practice by instituting the common school system which bridged the gap, and facilitated the articulation between primary and secondary education. In contrast, most of the other countries have been hindered in their efforts to put this ideal into practice.

Thus, where the secondary school was free and a direct continuation of the primary school, the transfer from primary to secondary school was a relatively simple task. But the device of transition raised many problems and was regarded as a complicated matter where a two-track system existed and a tuition fee was charged. One of the problems has been how to select the students for the different tracks. Another problem has been related to the fairness and reliability of the methods used in that selection and the different effects of the selection device.

The present chapter is confined to the examination of two major issues: the selection of students for comprehensive schools within a co-existing system and the allocation of pupils to comprehensive schools within a united system.

1. Selection for Comprehensive Schools in a Tracked System

Secondary education provided by grammar school or its equivalent has, largely for historical reasons, enjoyed much greater prestige than any other type, due to its access to universities and other channels of professional careers. Yates argues that

"The academic secondary school, however, has a long tradition going back to medieval Latin school. It has tended to recruit the bulk of its pupils from the higher socio-economic strata, and usually from especially designated preparatory schools."

1
When it was only the children of the well-to-do who sought to enter
the secondary schools, the problem of selection was not serious, for there
were enough places to absorb all the candidates who met the minimum
requirements in the scholastic attainment. The real difficulties have arisen
in recent years by the increase of pupils who sought to continue their edu-
cation. Thus the excess of the demand for academic school places over the
available supply has created the problem of selection. Such a problem is
not a simple one because many sociological, economic, psychological, and
administrative considerations are closely interwoven. Stressing this inter-
action, Vernon points out that

"It is entirely false to regard the problems of selection
merely as a matter of psychological techniques. The
main difficulties are rather social and political in
origin; basically they arise from differences in social
attitudes among different sections of the community."

Within a two-track system, the responsibility of providing all pupils
with a course of secondary education suited to their age, abilities and
aptitudes can only be effectively discharged if an agreement can be reached
between administrators, teachers and parents concerning the different types
that are necessary to fulfill these conditions. Nevertheless, many education-
al administrators have been forced, due to the demand of a significant pro-
portion of parents, to the conclusion that an academic school is the only
acceptable form of secondary education. Therefore, educators are faced with
two alternatives: either to accept the competitive situation and to select
each year a group of primary school leavers considered most suitable for an
academic course, or radically to reorganise the secondary school system in
a way which removes the distinction between the different types.

Due to the environmental, emotional and intellectual considerations
involved in selection, our approach to examine the different solutions offered
to such a problem necessitates a discussion of the age of transfer, the basic
assumption of selection, the traditional methods used in selection and its
social and educational effects.

1.1 Age of Transfer to Secondary Schools

Generally speaking the chronological age serves as a criterion for the
allocation of the pupils to the different stages of education. It is a normal
administrative procedure that the point of starting school, as well as the
point of transition from one level of education to another, is identified in terms of age. For example, the age at which children are allowed to attend schools varies from the age of five in England to seven in Sweden, while the United States and Egypt fix the age of entry at six. It also seems to be a general practice that the transfer of children from primary to secondary schools occurs when they attain a stipulated age rather than by reference to their level of attainment. 4

The age of transition from elementary to secondary education depends, to a considerable extent, upon the organisational pattern of secondary schools, and upon the length of compulsory schooling. For example, in countries where children proceed from primary to a common secondary school, such as in the US, the choice of the age of transition depends on decisions concerning the appropriate functions of the two stages in terms of the envisaged curricula, and on the age of development from childhood to adolescent. However, the age of transfer where different types of secondary schools obtained, such as in England, involves certain additional considerations. The length of the period of compulsory schooling also affects the age of transfer. In Egypt, for example, transfer from primary to preparatory stage occurs at the age of twelve due to six years of compulsory education, while in Sweden, transfer to the second level of education takes place at the age of sixteen, due to nine years of compulsory schooling provided by the basic school.

As far as the age of transfer in the countries under investigation is concerned, it is apparent that there are marked differences. In the United States, the transition from elementary to secondary schools depends upon the organisation of the school system within a particular state. In districts where the traditional 8-4 type operates, transfer occurs at the age of 14, whilst it takes place at the age of 12 where the system runs on the re-organised 6-3-3 or 6-6 type. When the middle schools were established, the age of transfer to such schools largely varied, due to their different structural types.

In England, the transition from primary to secondary schools is often effected around the age of eleven, though there are certain exceptions. However, with the existence of a tripartite system, transfer is recommended to be made at the age of 13, or even later. Moreover, since the Education Act of 1964 gives the local education authorities the power to establish other ages of transfer, transition occurs in some areas when children are ten, twelve, or thirteen. 5
As regards Sweden, the age of transfer from the folkskola to the
gymnasia experienced a great deal of change in accordance with the reform
of the school system. Until the beginning of the twentieth century there
was no transfer, in the common sense, from primary to secondary schools, due
to the lack of connection between the two stages. Decision to go to higher
studies was to be made as early as the age of seven. With the establishment
of such a linkage the admission to the state secondary school required three
years of attendance at the folkskola, thus transfer was to take place at the
age of ten. In 1928, with the introduction of the 5-year realskola, based
on 4-year elementary schooling, and the 4-year municipal middle school built
on 6-year elementary schooling, transfer from primary to lower secondary edu-
cation occurred at the age of 11 or 13. This situation, however, remained
until 1950. By the implementation of the 9-year compulsory comprehensive
school, there is no longer need to transfer children from primary to lower
secondary schools since both types of school have been incorporated in a
single basic school. Consequently at present, transition from the basic
school to the gymnasial level takes place at the age of 16.

To sum up, the decision making with regard to the age of transfer from
primary to secondary education should take into account the period during
which the characteristics of adolescence are developed, and consequently the
curricula as well as the methods of teaching are to be changed to cope with
such a maturity. This decision will also depend on the length of compulsory
schooling and the organisational pattern of secondary schools. The age of
eleven is considered on administrative rather than educational grounds, due
to the fact that this age is too early for any special aptitudes to show
themselves.

1.2 Basic Assumptions of Selection

The traditional system of selection of children for various kinds of
schools was not simply a matter of expediency. It rested, to a considerable
extent, on the work of psychologists who gave advice to the educational
planners and the decision-makers. In England, for example, according to such
an advice by the Hadow and Spens Committees, the selection of different types
of children for different forms of secondary schools had been justified.

The defence of selection rested upon three basic assumptions. The first
is that the level of ability remains, more or less, constant from the age of
transfer to secondary school onwards, and it can be accurately measured. The second is that only a recognisably smaller proportion of children, perhaps no more than a quarter or a fifth, are capable of benefiting from an academic type of secondary education. The third is that children's abilities vary and require different types of schools; and, in particular, it was asserted that the brighter children would be held back if they were educated with the rest. 9

It was argued that these assumptions, in many ways, are rational. Griffiths, for example, points out that these assumptions seem "so commonsensical, so absolutely right, that they are extremely hard to shake." 10 Nevertheless, in the passing of years, these assumptions have been increasingly open to criticism, and it has become clear that there is no educational justification for selecting pupils for different types of schools at the age of eleven. 11 One may, however, in the light of the considerable changes in the views of psychologists and sociologists criticise these assumptions accordingly.

As far as stability of ability is concerned, it was pointed out that a child's performance can vary greatly from one test to another, so that a decision based on a test taken at eleven may be wrong a year or two later. 12 This is catastrophic for the selection process which depends upon the intelligence quotient for distinguishing children. Moreover, the tests, although ostensibly educational, are in effect social. The relationship between social class and measured ability indicates that the latter is determined, to some extent, by upbringing and environment. A number of Left-wing writers, backed by the scientific investigations of Eells, Davis and Havighurst in 1951 in Chicago, has claimed that intelligence test results largely or mainly reflect social class differences. 13 The children of manual workers and poorly educated parents are likely to do less well in normal intelligence tests. 14 It has been suggested that perhaps 20-25% of the variability in test scores can be attributed to environmental causes, whilst the genetic component accounts for some 75-80%. Vernon considers intelligence as ultimately dependent upon a multi-factorial genetic potentiality for the building up of complex mental processes. Moreover, its expression in daily life or in the test performance also depends upon the extent to which this potentiality is stimulated by appropriate experience and upbringing. 15 Thus, the concept of equality of opportunity for all children through selection by ability has turned out to be untenable. Consequently the results of intel-
ligence tests and other tests of ability are treated with more caution than before since they are not valid instruments of differentiation.

The second assumption of selection - that there is a small minority of academic children - is equally open to question. Most official reports in England showed that there were as many able children outside grammar schools as inside them, and a large number of suitable children, even in terms of measured ability, was not selected. Burgess contends that modification or even abolition of selection has shown in practice that many more than the previously accepted minority can pursue an academic secondary education.

The last assumption of selection - that separate schools are needed for separate abilities - can also be severely criticised. The chief defence of different schools has come from those who are concerned with the needs and interests of the minority in schools. Many of the fears that the bright children are held back, if they are not taught separately, come from the American experience. Perhaps the most remarkable evidence about the weakness of this assumption came from Sweden. The Swedish experiment showed that children of higher academic ability perform as well - or even better - in the comprehensive school than in the selective one.

Thus, it is clear from the aforementioned argument that selection at the early age of ten or eleven could no longer be justified on psychological grounds. This point of view had for long been adopted in the US. It has been fully accepted in Sweden since the 1950s, and has officially been accepted in England and Wales since the 1960s. The Newsom Report of 1963 asserts that

"the essential point is that all children should have an equal opportunity of acquiring intelligence, and developing their talents and abilities to the full."

1.3 The Traditional Methods of Selection

England is a remarkable case for the investigation of the traditional methods used to select children for secondary education. Its complex social history, its elitist pattern, its tripartite system of secondary education, the influence of the successive Reports submitted by the Consultative Com-
mittees between the wars, and the natural desire of parents to ensure the best opportunities for their children, had combined to create a climate of opinion which helped to make the process of selection for secondary education a matter of genuine concern and, in many cases, of anxiety. 21

The available data, the persistent efforts throughout the present century to improve selection procedures and the continual process of retaining some methods of selection based on the scholastic work done in the primary school make it imperative to examine the traditional methods of selection in the English context.

Being responsible for the selection of children for secondary education, the local education authorities have operated different procedures. Despite the variations among authorities, the traditional methods of selection can be identified as written examinations in English and arithmetic, intelligence tests, standardised attainment tests, essays, teachers' assessment, cumulative record cards, personal interviews, and respect of parents' wishes. The intention here is to examine each method in some detail.

(i) Written Examinations

Selection procedures were based on means of competitive examinations. There was little conformity in the methods used to decide which children in the primary schools merited scholarships to attend the available places in grammar schools. 22 Many local education authorities, however, devised district-wide examinations consisting of papers of the traditional type, usually in English and arithmetic. 23 The London County Council, for instance, established in 1894 its Junior County Scholarship Examination, which consisted of tests in French, algebra and natural science. 24 Two different examination papers are set each year in arithmetic and two in English.

This method of selection was adopted because it was felt to be, at that time, the fairest means of assessment of scholastic attainment, and it enabled the selection committee to base its decisions upon comparable grounds for all children throughout the district. It also gained the public's confidence. It was assumed that a properly conducted examination would be fair because it resulted in a definite mark which had all the appearance of precision and reliability. It helped the administrators to distinguish with a clear conscience between one child and another. 25

Nevertheless, the findings of the research conducted into the shortcomings
of this method revealed that the precision and reliability are, to a considerable extent, illusory, and exposed great variation in the judgments of examiners in assessing even the same written paper. Such results led to the development of a new type of examination, namely, the standardised tests which have since been applied to both mental and scholastic abilities. These results also led to the belief that one type of examination was not a satisfactory basis for the judgment of children's abilities, interests and aptitudes. Thus during the 1930s and 1940s the majority of local authorities appear to have used some combination of standardised intelligence and scholastic attainment tests as a part of their selection procedures.

(ii) Intelligence Tests

Intelligence tests and intelligence quotients play a very important part in the selection procedures. Every child has to work through one of the NFER, Moray House, or other tests, including locally-constructed tests.

Intelligence tests can be grouped or individually administered. They may also be verbal or oral and pictorial types. The non-verbal tests, using either pictures or abstract diagrams, are more suitable than verbal tests for younger schoolchildren. Describing intelligence group tests, Vernon writes:

"A test suitable for application to groups of pupils normally consists of a printed booklet containing a large number of questions which have been shown, by preliminary trial, to range from very easy to very difficult for the children concerned. All questions are 'objective' in the sense that only one right answer is possible, and this is usually effected by the multiple choice system."

He also draws the distinction between individual and group tests by stating:

"Individual administered tests usually follow quite a different type of construction, and incidentally avoid reading difficulties, since almost all the questions are given orally, or by practical demonstration ... A child does not have to attempt all the items he can manage within a given time, as in the group test. Instead, successive sets are applied, ranging from the age level that can be managed completely up to the level where he fails completely. For this, his own level on the Mental Age Scale can be calculated."
The intelligence tests provoke more criticism and misunderstanding than other types of selection procedures. They have been, and still are, the subject of widespread concern often on quite irrational grounds. Much of this concern is based on the suspicion attached to them down the years in the popular press and on a general feeling that psychology is a doubtfully valid discipline. Parents expressed their worries about the capacity of their children to do them. They opposed the intelligence tests because they were emotionally involved in their child's I.Qs, since the failure in intelligence tests, as was argued, cannot be explained by inefficiency or illness on the day of the examination, or other excuses. However, despite the fact that experiments show group-tests to be much less affected by keenness, state of health, distractions, etc. it is nonetheless true that all relevant circumstances which influence each individual child are beyond complete control. Politicians also oppose the intelligence tests on different grounds; Vernon suggests that intelligence tests can be coloured by political prejudices. He argues that:

"The strongly Conservative dislike them, partly because they are new-fangled, but partly also because they clearly show many lower-class children to be the equal of, or superior to, their own. Communists and many less extreme socialists believe, on the other hand, that they favour the middle and upper classes."

Intelligence tests were also attacked because the lack of agreement over the definition of the variables intended to be measured. Nevertheless, the tests are widely used to eliminate the vagaries of subjective judgment of ability; they also represent an important part of selection procedures.

(iii) **Standardised Attainment Tests**

In these tests endeavour is made to avoid the defect of the written examinations by constructing a paper consisting of a large number of short questions. The questions are graded in an empirically determined order of difficulty, and the usual method of answering them is for the children to choose one of several alternatives set out in the test paper. The answer is either right or wrong. Marking of such tests, therefore, would not be affected by personal judgment. For this reason, such a test can be applied to a large number of children and the papers can be marked by a large number of teachers with the assurance that the standards of marking are the same.
The standardised attainment tests (objective tests) are designed to afford direct evidence of the ability of the child in mastering the primary school subjects. The field in which attainment is tested appears to be restricted to English and arithmetic. This restriction is based on three grounds. First, they are the common elements of primary school curriculum and therefore afford the fairest basis of comparison between children in different schools. Second, the danger that a wider field of subjects would restrict the freedom of primary schools by bringing a greater part of their work under the influence of an examination syllabus. Third, the close correlation between attainment and intelligence scores makes it a fair assumption that a child of good intelligence who does well in the attainment test in English and arithmetic would do equally well if tested in other subjects. Thus a pupil's attainment in English and arithmetic is acceptable as a fair sample of his achievement in the whole curriculum. Objective tests are constructed to include one or more of the following items: short answer true/false; directions; matching; classification, multi-choice or multi-completion.

As compared with the traditional examination paper, the objective test seems to be fairer. It provides a greater impartiality of assessment of a child's ability and attainment than can be obtained from a subjective examination of the traditional type. The findings of research show that the result of an objective test is more valuable than of a single narrative examination in predicting future success in cognate activities. Another advantage of the standardised attainment test is that it permits the establishment of a reliable order of merit among pupils who take it. Marks obtained are expressed on a normal distribution with mean 100 and standard of deviation 15. The resultant scores give a significant representation of the standard of an individual in relation to the general population of his own age.

Though serving their purposes satisfactorily, standardised objective tests have come under criticism. The attack has been concentrated around the harm which objective tests bring to primary school curriculum. It has been argued that the use of the objective tests led to the ignorance of certain important skills, such as the practical skills in science and the oral skills in languages, and to the emphasis on other skills which prepared the pupils for working through the tests. On the other hand, the exclusive use of multi-choice items of the objective tests has been responsible for the neglect, in some cases, of the art of writing consecutive prose. Yet, no serious
criticism has been levelled against the reliability or the predictive efficiency of these tests. Watts and Slater argue that

"There is some truth in these criticisms and it is of great importance that those who employ such tests should be aware of their limitation. It is, however, indisputable that standardized tests provide more reliable evidence than any other type of examination."

The change in the use of intelligence, English and mathematics tests is illustrated by Figure 19.

(iv) Essays

The traditional essay-type was attacked on two grounds: the subjectivity of its marking and the narrow range of ability which it sampled. As far as marking essays is concerned, several post-war inquiries by Wiseman, Finlayson, Nisbet, and Edward Penfold reinforced two conclusions. First, it is impossible to secure a high degree of consistency or reliability in the marking of essays as from one marker to another, or by the same marker from one occasion to another. Second, efforts to raise the reliability to a "respectable" level by the adoption of analytic marking schedules, or by previous consultation between markers make practically no difference.

To eliminate the subjectivity of marking, it was proposed that four independent markers should take part, using a quick method of general impression marking, when an aggregate mark adopted as the final score, age-allowance being applied, and the score converted to a quotient. By this method, a reasonably high mark re-mark correlation is obtained. Moreover, this device as Vernon has suggested, can reduce the inherent subjectivity of essay-marking to reasonable proportions.

As regards the adequacy of the sampling of ability provided by essay type, it was found by an investigation carried out by Finlayson that variations in subjects selected were considerable. Moreover, variations among pupils at different topics were greater than between markers marking the same topic. This finding was confirmed by Vernon and Millican. They conclude that

"it is feasible to include the essay in selection examinations, but that it is desirable to have a minimum of 3 essays from each pupil, each marked by 3 markers, if a reliability closely comparable to that of objective tests is to be achieved."

Due to the criticism of subjective marking and narrow sampling, the use
FIGURE 19

Proportions of the English Education Authorities Using Different Tests

- 1964
- 1968
- 1972

N.B. The total number of Local Education Authorities with allocation procedure was 143 in 1964, 131 in 1968 and 111 in 1972.
of essay-type examination in selection was largely abandoned. But, the exclusion of the essay brought serious attack on the objective tests. Therefore, it was argued that reverting to the essay-type of examination would produce equally undesirable, even if different, effects on junior-school teaching. Moreover, this is less likely to occur if the essay is added to the objective test, not substituted for it. Many experiments have shown that adding an essay to the ordinary test battery raises the predictive value slightly. Wiseman, for example, found no fall in validity when essay marks were added to the results of objective tests. Peel and Armstrong found that the follow-up English marks are suggestive of the value of the essay as an ingredient in the entry examination.

In conclusion, it could be admitted that there still exists some disagreement among psychologists who favour or oppose the re-introduction of the essays into the selection examinations.

(v) Teachers' Assessments

It is an acceptable concept that heads and staff of primary schools are largely able to give relevant information concerning pupils' abilities and assessments. It was also argued that the assessment of the child as a young person with his needs and aptitudes can be efficiently made only by one who knows the child as a person. The duty of making such an assessment devolves upon the teacher since there is no other who can discharge it.

Assessments made by teachers are used, according to Yates and Pidgeon, either as an alternative to external examinations or as an additional source of evidence. Teachers' assessments are usually based upon one or more areas of children's performance, such as: the results of any examinations set in primary schools especially during the final two years; the scores obtained in the objective tests of ability and attainment; and their own judgment of children's performance or any other relevant considerations.

There are major criticisms addressed to teachers' assessments. One attack is based on the evidence that teachers' general impressions of children's suitability to an academic course, as well as the marks given to the school work are affected by teachers' personal reaction towards the children. Another protest is that, though evidence is lacking, it seems likely that teachers' judgments may be affected by social class. For example, the middle-class child tends to impress the average teacher as being better suited to grammar school
education, whereas socialist teachers, who probably come from poorer backgrounds, may over-compensate against middle-class qualities. Further criticism is based on the fact that teachers' assessments are lacking accuracy due to their different views on standards of attainment. 51

(vi) **Age Allowance**

Within the group of children eligible for transfer to secondary school every year there are differences in age amounting to a year as far as the main group is concerned, and exceeding this period if under-age candidates are concerned. There is considerable evidence that minor differences in age between primary school leavers account for perceptible differences in their scores in tests, or written examinations and in the assessments of their teachers.

The problem of differences in age between candidates is an acute one due to the fact that the local authorities hold only one examination each year. It is also complicated by the fact that the effect of differences on the scores which children obtain varies from one test to another. Unless these age differences are taken into consideration, and appropriate corrections introduced into the assessment of children's performances, there will be a tendency for the older children in the age group to secure a disproportionate share of the available places in the academic school. 52

An approach to this problem has been to give the younger children a bonus of certain marks. This bonus is usually termed the age allowance. Most education authorities have introduced age allowance into the systems of scoring applied to selection procedures. The introduction of age allowance usually springs from a desire to be fair to all candidates in the competition for a limited number of places of academic education in a dual-system. In advocating this approach, Sir Godfrey Thomson wrote

"The object of an age allowance is not to improve prediction, but to do justice to children born in different months of the year." 53

However, it is advisable to calculate appropriate age allowance in cases of using unstandardised examinations or tests. It is preferable to calculate age allowance for boys and girls separately and possibly for each test. If standardised tests are used, the effects of age differences would be insignificant due to the fact that the process of standardisation incorporates an
adequate age allowance in the system of scoring for each test.

Local education authorities, however, are free to choose one of three alternatives. The first is to instruct their teachers to take age into account when making their assessments to offset the tendency of giving higher rating to the older children. The second is to require the teachers to ignore the age differences and then apply a correction for age when scaling and quantifying the assessments. The third choice is to refrain from giving any instructions to their teachers at all.54

(vii) Cumulative Record Cards

It is assumed that there are a number of characteristics which a child proceeding to secondary school ought to possess and cannot be assessed by a written examination. Ballard, for example, in his essay on 'The Special Place Examination' stated that the written examination

"says nothing about the child's character; it says nothing about the child's interest; it says nothing about his capacity to apply himself to his school studies, it says nothing about his background of book learning - a background which is presupposed by the secondary school course."

55

It is also argued that despite the objective tests being of great use in making decision on the 'clear-accepts' and the 'clear-rejects', they are less useful in differentiating those in-between - besides, there is a possible inaccuracy of relying on the results of a single testing session. For this a general trend towards trying to assess the whole child as a person was stimulated and experimented through the use of cumulative record cards.

A large number of schools have used various forms of records of pupils' progress. The difference was infinite in the scope of the items included and in the methods used in recording. This made the comparison between individual children intensely difficult and necessitated the need for some authoritative decision based upon systematic inquiry and common argument as to both the form and the content of the cumulative cards. As a result of a conference on 'The Future Development of Educational and Vocational Guidance,' held in 1944, three separate record cards for the infant, the primary and the secondary schools were suggested.56

The cumulative record cards are used chiefly for gaining an overall picture of individual children. They are of great value in particular cases,
when, for instance, two or more pupils from the same school are similar in most respects in the order of ranking of suitability, some discrimination has to be observed in accordance with the degree of importance attached to their personal qualities. Vernon considers that

"Record cards which provide cumulative data, including scores on successive sets of standardized tests, are of particular value, not merely as an aid in selection, but also for the educational guidance of children - throughout their primary - and secondary - school career."

57

It is emphasised that cumulative record cards should provide information mainly about the way a child differs from the average in personal qualities. This should be a useful indicator to the reasons for the differences often found between the educational index and the intelligence quotient of a child.

(viii) Interviews

An interview of a child by a single person, who is a stranger to the child, or by a small panel of teachers is often included in the selection procedures. It is assumed that this method could help in bringing together all the relevant data, as well as assessing the child as a person. It could also make possible the collection of further information on his interests and abilities.

Interviews are considered very important particularly for the border-zone pupils. Sometimes all these latter are interviewed, but the usual practice is to interview only those who still remain doubtful cases. Yates and Pidgeon point out that most of the authorities in 1956 used interviews only for border-zone candidates, whilst 13.1% of authorities interviewed some of the other children, and only one authority arranged an interview for every candidate. Interviews are not confined to the pupils. Certain other persons, such as primary school heads, class teachers and the children's parents are also interviewed. 58

Unfortunately, the interview appears to the interviewers as a highly successful method of selection, due to the general tendency to think that they themselves are good assessors of personality. Advocates of interviews believe it is a valuable method of assigning children's discernible characteristics. In contrast, opponents argue that the deeper nature of the child is hardly likely to be evaluated effectively through an artificial situation in
a few minutes. In 1949 the Committee of the National Union of Teachers condemned the interviews, particularly when they are managed by a single person, such as the head of the receiving secondary school who will be anxious to secure the maintenance of his school's tradition. The Committee believed that a short interview conducted by a stranger can make no valid contribution to the assessment of a child's characteristics. Many psychologists would agree with the N.U.T. Committee that interviewing is thoroughly undesirable for several reasons:

(a) It puts a considerable strain on many children so that the behaviour observed may be quite uncharacteristic.
(b) Interviewers may be susceptible to the personal appearance and manner of the child.
(c) Interview is affected by social class and age.

However, since interviews have been unpopular with parents and caused considerable anxiety to children, it is advisable that interviews conducted by persons other than the child's teachers should form no part of the selection procedures.

(ix) Parents' Wishes

Parents are the natural guardians of their children's interest. Most parents usually think and plan for the future of their children; they have an inalienable right to declare their wishes and to be assured that those wishes will be fully respected and taken into account. Therefore, any selection procedure for secondary education cannot completely ignore parents' wishes. The 1944 Education Act states that

"So far as is compatible with the provision of efficient instruction and training and the avoidance of unreasonable public expenditure, pupils are to be educated in accordance with the wishes of their parents."

Yet, the extent to which parents' wishes can be taken into consideration is likely to be determined by many conditions. Apart from the shortage in the desirable academic schools, there is the relative prestige of particular schools, the relative convenience of transport, past and present contacts, and children's already formed friendships. Generally, the right of the parent may be subject to two limitations. One is the suitability of a child for a certain type of school, the second is the fairness of giving the available places to those who are manifestly suitable. For these reasons it is impossible to base selection solely on parents' wishes since a large number
of parents entertain a stubborn prejudice by demanding best opportunities irrespective of abilities. Parents, however, are to be asked to indicate their wishes in respect of their first and alternative choices of the type of secondary education, and to give information as to the possible future career of their child, and their wishes should be given as great consideration as circumstances permit.

It is an administrative function to keep parents thoroughly informed about the variety of education provided in the secondary schools available to their children, so that they will not prejudge them on the basis of gossip or on their own previous experience with schools. The consultation between the parents and the primary school teachers as to the future education of the child would facilitate the expression of positive judgment based on the needs and the abilities of the child.

(x) Border-Zone Procedure

Border-zone is defined as a group of children who present a difficulty for decision. Vernon defines the border-zone group as

"the group whose selection results do not provide reliable evidence as to whether they will be suitable for grammar school or not."

The border-zone varies in size according to the characteristics of the method of assessment employed. However, it is possible by measuring the unreliability of any test or examination, to define the limits of a border-zone.

Candidates falling within the border-zone require special treatment and further assessments in order to secure greater justice in judging their suitability for an academic course in secondary education. Teachers and many parents are aware of misplacing children within this group in accordance with quantitative selection procedures. Further assessments of qualitative measures, as well as of children's backgrounds have been required in order to improve this discrimination and to minimise any unfairness.

In the very broadest sense, all authorities have border-zone procedures. Two types may be identified. They are:

(a) The collection of additional information, not for a middle doubtful group, but for the whole of the upper range.
(b) The re-examining of the component parts of the criterion measure to discover, for example, large discrepancies between teacher rating and tests scores.\textsuperscript{65}

It is only the first type which involves the use of primary heads' assessments, interviewing all or a group of such children, assessing their personal qualities, considering the child's cumulative record card, and/or additional standardised tests in intelligence, English and arithmetic of a slightly different kind from those which had already been given in the main assessments.

To sum up, one may reach two main results. The first is that the best procedure for dealing with border-zone candidates is to significantly reduce their numbers. The second is that the best results are likely to be attained by collecting as much evidence as possible for each child concerning his abilities and attainments.

1.4 Effects of Selection

The fact that there is a notable disparity in terms of social prestige between the academic and other alternative forms of secondary education has provoked many unfortunate repercussions. Consequently, the selection device has undesirable effects. Apart from the personal effects on both the child and his parents, there are the social and scholastic effects on society and on the primary school. It is argued that since no procedure of selection has been, or is likely to be, devised which can guarantee perfect reliability and validity, injustice is inevitably done to a number of children. The injury of selection is discussed in terms of personal, social and scholastic effects below.

(i) Personal Effects

It has been pointed out that selection gives rise to undue misery and frustration to many. The children themselves sense the intensity and anxiety surrounding the examination. Those who fail to gain entry to an academic school are haunted by a consciousness of their own inadequacy and inferiority. This is evident from the following extract:

"Some of the children who fail to gain places in the former (grammar schools) regard themselves as second-class citizens on that account and develop feelings of frustration and resentment."
\textsuperscript{66}
Since selection will largely decide the kind of further education that is open to the child as well as the kind of career he will be able to choose, the sense of strain naturally increases as the examination approaches. Valuable rewards such as bicycles are offered; relatives send greeting cards wishing the child good luck on the fateful day; and a large number of candidates wear lucky charms.\(^{67}\)

It has been mentioned, on the basis of the replies of some 30 junior-school teachers personally known to W.H. King, that various symptoms of nervous tension were observed, particularly among girls, and that the interview was much more feared than the test. There are, moreover, countless stories of emotional breakdown, sickness, disturbed nights, etc. among children around the time of the examination. Nevertheless, the accuracy of these stories is difficult to check.\(^{68}\)

Though fully admitting the undesirability of imposing emotional strain on eleven-year-old children, Vernon suggests that the normal upbringing of every child does involve many pressures, frustrations and disappointments. In order to examine the incidence of maladjustment, the British Psychological Society studied the school record of a sample of 212,000 children between the ages of five and sixteen. Its findings have indicated that 5,705 cases were referred to Child Guidance Clinics.\(^{69}\) The age distribution is shown in the following table.

<table>
<thead>
<tr>
<th>Age</th>
<th>5+</th>
<th>6+</th>
<th>7+</th>
<th>8+</th>
<th>9+</th>
<th>10+</th>
<th>11+</th>
<th>12+</th>
<th>13+</th>
<th>14+</th>
<th>15+</th>
<th>16+</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of referrals</td>
<td>9.2</td>
<td>8.6</td>
<td>13.0</td>
<td>13.6</td>
<td>13.3</td>
<td>11.3</td>
<td>8.7</td>
<td>2.7</td>
<td>7.1</td>
<td>5.6</td>
<td>6.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>


The table indicates that there is no sign of any rise at 10 or 11+; on the contrary, there is a gradual decrease from the peak ages of 7+ to 9+.

Considering nail-biting as a symptom of emotional disturbance, Birch has studied the frequency of such behaviour among 4,000 children, and pointed out that it occurred among 50% of all children concerned.\(^{70}\) Vernon, among other psychologists, concludes that there is no evidence to support the notion of
widespread mental health effects. He writes:

"a small proportion of children who are liable to nervous upset anyhow, may be seriously affected by the examination and its preceding strain, but the great majority are not."

Yet, the psychologists who have reached this conclusion are strongly opposed to the selection system due to the interference with the health, educational and personality development of children in general.

The anxiety attached to selection is also applicable to parents. They are anxious that their children should prove themselves bright and emerge among the chosen few who win places in academic schools. Undoubtedly parents differ greatly in their self-restraint and foresight. But even if they avoid telling children directly that they have to work hard in order to pass, there are probably few who do not transmit their anxieties indirectly. Some parents decide to have their children's intelligence tested as early as two or four years old, in order to reassure themselves that the children are likely to pass the 11+ examination.

Apart from the emotional strain, there have been the strains arising from wrong-allocation or being misfits. Classifying this group, McClelland suggests two categories:

"those whom we should have admitted but have failed (admit-fails), and those whom we should have rejected but who have made good (reject-successes)."

The uneasiness caused by selection can be deduced from the cases of children who were denied admission to grammar schools and were found to succeed in direct-grant or independent schools. It is more striking that 5% of pupils in modern secondary schools have scored more than the average grammar school pupils in the G.C.E. examination.

Notwithstanding, the number of children likely to be wrongly allocated by a particular selection procedure depends on many variables, such as: the proportion of the total number of candidates to whom academic school places are awarded; the range of reliability and validity of the methods used in selection; and the size of the border-zone together with the efficiency of procedures used in discriminating among those children. England, for example, showed the number of wrong allocations to amount to 10% of children in any age-group, or about 60,000 children per year. McClelland has found that the number of misfits amounted to 422 out of 1,975 children, or about 21.4%
of whom 13% were reject-successes and 8% were admit-fails. In order to overcome such an error, it has been recommended that after two years spent in secondary schooling another transfer should be considered to and from grammar schools. Table 7.2 shows that such transfers have not been made in substantial numbers into the grammar schools, whereas the transfer from grammar schools has been negligible due to the fact that such a transfer was generally regarded as demotion by pupils and parents concerned. It was pointed out that it is likely that most of the pupils involved are transferred at the age of fifteen or sixteen from schools which do not provide courses for G.C.E. or other examinations.

<table>
<thead>
<tr>
<th>TABLE 7.2: MAXIMUM AND MINIMUM PERCENTAGES OF TRANSFER TO AND FROM GRAMMAR SCHOOLS AFTER THE AGE OF 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
</tbody>
</table>


Thus, wrong allocations have not been practically eliminated by such theoretical recommendations and have injurious effects on the children.

(ii) Social Effects

Selection has also injurious consequences which affect society as a whole and the working-class children in particular. One may discuss the social effects of selection in terms of social stratification and inequality of opportunity in England.

The dual system of English secondary education with its sharp cleavage between one form for the elite and the other for the working-class children has for long been a reflection of the social class system. Accordingly, children are classified into different intellectual categories: the top few who demonstrate high ability are creamed off and sent to the grammar schools,
whilst the less able attend modern schools. In social terms, this divisive procedure, according to Griffiths, perpetuates frustrating social class differences, which, in turn, to a considerable extent hamper the development of a sound nationhood.\textsuperscript{78} It is argued that the selection device is not only socially divisive, but results in a waste of potential talents. Lowndes, for example, estimated that at the end of the nineteenth century fewer than 6 children out of every 1,000 attending elementary schools were able to secure a grammar school education. In addition, an international study of university admissions concluded that the admission process to British universities began at the end of primary education when 75\% of the pupils were effectively prevented from embarking on preparation for it.\textsuperscript{79} However, the notion that only a relatively small proportion of children can benefit from an academic type of secondary education has been subject to criticism.

The relation between social class and the opportunity of entering a grammar school depends on four variables: the size and the social and intellectual composition of the age group and the number of grammar school places available.\textsuperscript{80} However, since the distribution of marked scholastic ability cuts - to some extent - across social classes, the selection task would be affected by the pupils' potential social achievements. For instance, children from professional homes are more likely to be academically motivated than are children from working-class homes. Consequently the opportunities for children of non-manual workers are more likely to be greater than those of working-class children. This is evident from different studies and reports. The Robbins Report, issued in 1963, for example, pointed out that despite the increase in the proportion of boys entering universities from 3.7\% in 1928/47 to 5.8\% in 1960, the relative prospects of going to the university for middle- and working-class boys remained static. The Report estimated that in 1960 as in 1928/47, sons of non-manual workers were six-and-a-half times more likely to gain university places than those of manual workers.\textsuperscript{81} Rubinstein and Simon have found that

"By 1950, one child in five transferred from the primary to the grammar school, compared to one in seven or eight before the war; and of those gaining a place in a grammar or technical school, one in eight went directly to a university compared to one in 22,000 from a modern school."
\textsuperscript{82}

An inquiry was conducted by Floud and her collaborators to investigate the effects of the social background on the pupils' opportunity of securing
a grammar school place. Two areas - South West Educational Division of Hertfordshire and Middlesbrough in Yorkshire - were chosen. These areas were similar in so far as each was self-contained, had sufficient range of educational provision, and were of comparable size, but they offered contrasts in social character. It was found that in Middlesbrough 12% of children of working-class parents secured grammar school places, whereas 15% did so in South West Hertfordshire where the working-class people had better living conditions. 83

In another inquiry, Floud and Halsay studied the social implications and found that the proportion of working-class children who secured grammar school places as shown in Table 7.3 was clearly very small. It declined gradually from 14.9 in 1952 to 11.3 in 1954. Thus, class chances for grammar school courses have deteriorated for working-class boys and improved for the sons of the professional and white-collar groups. 84

**TABLE 7.3:** THE PROPORTION OF BOYS AGED 10-11 IN EACH SOCIAL CLASS AWARDED GRAMMAR SCHOOL PLACES IN SOUTH WEST HERTFORDSHIRE, 1952-1954

<table>
<thead>
<tr>
<th>Father's Occupation</th>
<th>1952</th>
<th>1953</th>
<th>1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and managerial</td>
<td>39.6</td>
<td>58.5</td>
<td>63.6</td>
</tr>
<tr>
<td>Clerical</td>
<td>34.4</td>
<td>44.2</td>
<td>46.2</td>
</tr>
<tr>
<td>Supervisory, small shop-keepers</td>
<td>20.8</td>
<td>29.5</td>
<td>31.9</td>
</tr>
<tr>
<td>Manual workers, skilled and unskilled</td>
<td>14.9</td>
<td>14.0</td>
<td>11.5</td>
</tr>
<tr>
<td>All</td>
<td>19.3</td>
<td>21.4</td>
<td>20.9</td>
</tr>
<tr>
<td>Number</td>
<td>736</td>
<td>974</td>
<td>1094</td>
</tr>
</tbody>
</table>

**Source:** Floud, J.E. and Halsay, A.H., Social Class, Intelligence Tests and Selection for Secondary Schools, op.cit., p.211

Since most working-class children lack linguistic ability, they score low marks at the 11+ examination; it was also found that these same children from working-class families scored lower in verbal tests of ability than in non-verbal tests. In lower working-class groups, the verbal scores are greatly depressed in relation to the scores at the higher levels of non-verbal tests. The scores on the verbal tests of the majority of children from this group tend to fall within the average range of the test, whilst
the scores on the non-verbal test tend to yield a normal curve of distribution skewed to the right, that is, in the direction of the highest scores. This may be explained by the linguistic deprivation experienced in their social background. Ayerst, estimating the social class structure of pupils in modern schools, finds that nine-tenths of the pupils in such schools are the children of manual workers, the fathers of only 3% could be classified as in professional or administrative employment. Thus, we may safely come to the conclusion that working-class children suffer from the injurious effect of selection.

(iii) Scholastic Effects

Selection also has harmful effects on the work of the primary schools since it tends to divert the attention of the teachers from their proper concerns. The scholastic effects can be identified in terms of curriculum and coaching.

It is argued that selection at 11+ distorts the primary school curriculum. Teachers feel uneasy about introducing new methods for subjects when they know that their pupils will eventually be sitting an external leaving examination. Parents criticise any school practice (e.g. projects) which seem to them to reduce the chances of achievement at the 11+ examination. Preparation for such an examination often dominates the last years of primary education. It is apparent that the efforts of some teachers are devoted to cramming those pupils who have a chance of passing, neglecting school subjects or activities which do not directly contribute to this end. Confirming these effects on curriculum, the White Paper, Educational Reconstruction, stated in 1943:

"Instead of the junior schools performing their proper and highly important function of fostering the potentialities of children at an age when their minds are nimble, and receptive, their curiosity strong, their spirits high, the curriculum is too often cramped and distorted by over-emphasis on examination subjects and on ways and means of defeating the examiners."

Thus the tendency among primary school teachers to train their pupils for the particular kind of tests or examination used in selection has meant that the primary school curriculum has become determined by the tests rather than the tests reflecting the curriculum. Clegg, for example, considers that if
the decision of selecting children for grammar school was based solely on testing their ability, this

"would be the main and most serious occupation of certain Junior Schools for the whole of their four-year course, to the detriment of many other activities which ought to be occupying these years."

However, referring to King's questionnaire, Vernon indicates that there are several variations between schools concerning the effect of selection on the primary curriculum. The majority of the teachers involved in the inquiry has denied that selection has any effect on the education of 9-10 year old children. Admitting that this very small sample does not represent the rank of typical junior school staff, the fact remains that if the selection was abolished, most of the undesirable teaching methods and the environment of strain would disappear.

The other harmful scholastic effect attached to selection is the coaching. Although many parents are tempted to supplement the schools' effort by coaching their children themselves, or by a tutor out of school hours, it is argued that coaching renders the pupils unfit for sounder methods of study and deadens their initiative. Coaching implies that children are told the right answer and given additional hints on tackling such items quickly and effectively. It has harmful effects. Though it could make a total difference of 12 to 15 points in an intelligence test, it may sometimes render it useless.

Coaching renders the equality of opportunity meaningless, since it is significantly correlated with social class structure. Available data suggest that children in better socio-economic areas are more often coached than in poorer areas. Gibson finds that there were clear relationships between coaching and parental occupation and the educational level. He also points out that 51% of the children of executive, professional and clerical fathers went to outside tutors, as against 17% of children of skilled, semi-skilled and unskilled fathers.

Yet, when coaching is criticised, teachers and parents alike emotionally defend it on the basis of professional integrity and personal freedom. The question of coaching is, however, far more complex than most critics would allow. It involves several moral aspects which are often in contradiction with those aspects prevailing in a competitive atmosphere.
2. Allocation Procedures for Comprehensive Schools in a Unified System

Allocation procedures used in a fully comprehensive school system naturally differ from those used in a track system where selection is between different types of school. In the context of comprehensive school organisation there is no longer a need for selection. Allocation schemes within the unified school system operate to maintain an easy transfer from primary to secondary schools and to bring about a smooth articulation between elementary and secondary education.

The rationale of the new allocation schemes is to implement fair and uncomplicated transfer procedures. Through such schemes, pupils' transition from primary to secondary stage would be as natural as their transfer from one grade to another. It would, of course, be tempered by parental choice and conditioned by the philosophy of neighbouring schools. Problems attached to the traditional procedures together with the injurious effects of selection are more likely to disappear in countries which have established a unified school system covering both the primary and the junior secondary stages. These new allocations are examined in each country under investigation.

2.1 Allocation Procedures in the United States

The overriding norm which has contributed to the modelling of American thought was the belief in the perfectibility of man, his capacity for progress, and his right to an opportunity to realise himself. Thus all institutions existed to make a man free and creative, and educational provision was considered the chief means to this end. This belief led to the rejection of the old pattern of European selective systems of education. Consequently, the American public education system includes little, if any, selective procedures. Ovard confirms that:

"Only in private schools the policy of selectivity is in effect. In these schools admission may still be on the basis of examination, ability to pay, parental tradition and influence, promises of success, and other such specific requirements as may be set by the school."

In the public system practically all boys and girls are permitted freely to the next level of education after having been certified as having satisfactorily completed the previous programme. Outlining the basic assumption
of allocation to American schools, King writes:

"It is expected that every ordinary child will attend a public school close to his home, moving on from elementary school to high school at a later stage without examination, together with all other boys and girls who went to school with him."

Therefore, pupils are admitted to secondary school on the basis of completion of elementary school without any impediments such as examinations, high class standing or social position. According to Stanford, the American secondary school is not designed for a certain social class, but it is the second stage in the continuous educational scheme. He points out that "The high school in the United States is truly democratic so far as the composition of its student body is concerned, children come from all sorts and conditions of families."

However, with the increasing emphasis on mass education, the growing support of public education, and the general federal aid to education, all adolescent children who can profit - in any manner - from instruction should be provided with a full opportunity for education. At present, therefore, admission to the high school is primarily a matter of assessment and placement of students in the appropriate programme. The student may be assigned in special programmes, but rarely is he excluded from attending a public secondary school. Ovard confirms that by noting:

"Today's admission requirements allow entrance to any person of secondary school age, usually from 12 to 18 or 19, who can profit by the opportunities afforded him and who will not, because of physical, mental, or social handicaps, become a menace to other students."

In the assignment of each individual, emphasis is placed upon putting him where he can develop the most in terms of his interests, abilities, disposition, and limitations, with other members of the group. Miller indicates,

"Thus assignment always has an eye both to the particular individual being assigned and the effect of the assignment on him and to the group or class or school to which he is being assigned and the effect of his membership upon such group."

Before moving from elementary school to junior high school or from junior to senior high school, it is common practice that pupils spend a spring visiting day in the receiving school. Special activities as well as tours of the
building can be arranged. Meeting with the principals, counsellors or representatives of the various departments can be scheduled. Group conferences with the parents of the students may be arranged through the parent-teachers organisation to explain the programmes and the choices.

Three remarkable procedures are used to allocate the students to the comprehensive schools in the United States. These procedures are examined under the following headings: catchment-areas, clustering and bussing.

(i) Catchment-Area Method

Since the majority of high schools are usually strictly districted, the most salient method of allocation has become the catchment-area system. All students in a given geographical area will transfer to an assigned high school in the district. Although school districts are similar in purposes, they are widely different in their characteristics. Some districts provide only elementary education, others only run high school education. However, the great majority of pupils are enrolled in districts that provide both elementary and secondary education. According to Campbell et al., more than 80% of the districts in the US have not co-terminous boundaries with other units, whilst only a minority of school districts classified as city, county, town, or township have co-terminous boundaries. Efforts have been made in the past to reorganise school districts to obtain a more efficient system. The major emphasis has been to reduce through consolidation the number of small rural districts. As a result the number of these schools in the US has decreased from approximately 100,000 in 1945 to 23,464 in 1966. Through such consolidation and reorganisation larger school units with improved material facilities and a wider range of curriculum offering became possible. Tanner points out that:

"School consolidation and district reorganisation have resulted in significantly larger secondary schools which are able to offer more specialized educational facilities."

Since the legislatures emphasise that every child shall have the privilege of a high school, great efforts have been made to secure equality of enjoyment of high school privileges. Accordingly, a student who has completed elementary school and lives within a reasonable distance (normally three miles) attends the district high school. Students are, however, permitted to attend high school in another district because of inconvenience of access or other reasons.
The Public School Code Supra deals with high school attendance in another
district in three situations. These are:

(a) Where the district of residence maintains no high school.
(b) Where it provides no public school other than a vocational one.
(c) Where the programme of studies offered in the resident district
high school terminates before the end of the twelfth year. In all three situations, students may attend, at the expense of the sending
district, the nearest or most conveniently located high school. Thus, the
school district containing such a school has a duty to accept all the pupils
residing in other districts who choose to go to its high school or who have
been assigned to it by the sending school district. An opinion which was
expressed in 1959 by the Pennsylvania Attorney General, 18 D & C 2nd 233 makes
this point clear by stating:

"Where a school district maintains no high school, or
only a vocational high school, or a high school which
terminates before the twelfth year, residents may
attend a high school in another district without the
consent of the resident district."

Students desiring to attend a high school in another area other than the
high school in the district where they live must first obtain the permission
of the board of school directors of the district. In addition, if pupils
desire to have their tuition paid they must secure written permission from
the board of school directors where they are residents. According to Sch.
1608,

"the board of school directors of the district in
which any such pupil resides may enter into a written
agreement with the receiving district for the attendance
and tuition of the pupil."

(ii) Clustering Method

The increased population in urban areas had resulted in overcrowding in
large cities. Efforts have recently been made, therefore, to decentralise the
urban school system by forming subdistricts in order to be more responsive to
the desires of the residents. With such a trend towards decentralisation in
large cities, the use of clustering or feeder-schools method in allocating
students to high schools have been found convenient. This method is also
been proven to be of great help in approaching the problem of racial make-up
in large cities, to achieve some sort of racial balance. Benn and Simon suggest that

"Thus, an all-negro primary or lower school will be switched from its association with an all-negro upper school and become one of the lower schools feeding a predominantly white upper school in the same general area."

106

(iii) Bussing

The disappearance of the all-grade-one-room school, due to the increase in centralisation and consolidation of rural schools, together with the concentration of population in urban areas, has caused the acceptance of transporting students to and from schools as a legitimate part of the expenditures in public education.

Pupil transportation has been a common practice all over the United States since 1920. It became an important part of public education with the practical use of motor-vehicles and the development of hard-surface roads. Although buses are the usual mode of student transportation, trains, boats, and even horse-drawn vehicles serve in some parts of the country. 107

The use of transportation has extended to many fields in education. In addition to transporting students to and from schools, there are many additional educational activities requiring the use of school busses.

Bussing was provided exclusively in rural areas but in large cities it was confined to handicapped students. It has now been extended to serve a considerable number of students in large cities where schools are numerous and students do not live within a reasonable walking distance of their schools. Thus, eventually all school systems, rural and urban, are at present providing bussing for some proportion of their students. The United States Office of Education (USOE) reported in 1920 that 356,000 students (approximately 1.7%) of the public elementary and secondary schools enrolment were transported at public expense. By 1925 then the number had more than tripled, with about 1,100,000 students being transported. This rapid growth has continued with a substantial increase each year to reach over 6,900,000 pupils in 1950, and to nearly 17,000,000 in 1966 - or approximately 40% of enrolment in public education. 108

The rationale of transporting students is the belief that all pupils, regardless of geographical location, should have access to adequate and ap-
propriate educational opportunities. The recent states laws have recognised that student transportation is a necessary element in equalising educational opportunities for all students and in eliminating small, expensive and insufficient schools. The segregation and civil rights issues have recently introduced bussing for reasons other than distance to school. The de facto segregation resulting from housing practices is common in the large cities. Attempts to achieve racial balance and give pupils better and broader educational experiences have led to bussing of pupils from one part of the city to another.

There are wide variations among the states as far as bussing is concerned. In some states local school boards are required to transport all students living farther than a specified distance from school. In others, this applies only to certain ages or grades. Although bus service would be provided if the distance was more than a two-mile walk for primary pupils or more than a four-mile walk for secondary pupils, the recent trend has been to decrease this distance. Reeder points out that

"Whereas the early state laws on pupil transportation only permitted school districts to transport elementary school pupils living more than a certain distance from school, the tendency among the more recent state laws has been to require the transportation of both the elementary and the secondary school pupils living more than a certain distance from school. Moreover the tendency has been to decrease that distance."

Whilst Dumas and Beckner state that

"Bus service is usually provided when elementary students must walk more than three-fourths of a mile and secondary students more than about two miles."

The school administrators pay special attention to the planning of pupil transportation routes. They usually prepare the routes map several weeks before the opening of the school year. They take into account the physical features of the school district, as well as the shift in the school population and the change in the boundaries of the school district. Information such as the name, age, grade, and residence of each child entitled to transportation must be known before the map can be constructed. The length of a school bus route is determined by the time required to traverse it. The time is also determined by the spread of the bus which, in turn is affected by the condition of the roads. Except in unusual cases, pupils are not required to spend more
than one hour on the bus, either morning or evening. A maximum of forty-five minutes is preferable, and whenever possible, pupils who have the long ride in the morning should have the short one in the evening. However, in any given county, pupil-transportation routes are planned by the County Board of Education and the County Superintendent of Schools for the whole area. The administration of the bussing programme has become very complex. It involves many aspects of management which require efficient personnel and a high proportion of expenditure as well. Such aspects include the development of plans for the purchase of school buses, the drawing-up of school-bus routes and schedules, and the selection, training and supervision of school-bus drivers. It also involves the mechanics assigned to vehicle maintenance, the keeping of records for purchases and stores, and the coordination of the transportation operation with the instructional and other needs of individual schools. School systems take on a considerable responsibility for the safety of students who are being transported.

However, many of the educational developments could not have come about without provision for bussing large numbers of students. Universal access to public secondary schools is also dependent on it. In general, the development of student transportation has facilitated the allocation procedures to the comprehensive high schools in America, as well as broadening and enriching the educational programmes throughout the country.

2.2 Allocation Procedures in England

Transfer from primary to secondary schools has been given new dimensions by the initiation of secondary school for all. Accordingly, every child is to have the secondary education best suited to his or her abilities, interests and aptitudes. With the growing acceptance of the idea that comprehensive schools provide not only great variety of educational activities, but social justice and community solidarity, comprehensive education has, as mentioned in Chapter 5, dramatically increased during the last decade. As a result, the process of selecting children for grammar schools was considerably slowed down.

Thus shortcomings of selection, political considerations and the changing pattern of secondary education have imposed the policy of abolishing - or at least gradually eliminating - early selection at eleven plus. Such changes have led to the orientation of new allocation schemes which would facilitate
transfer from primary to both selective and unselective secondary schools.

However, the allocation policy and procedures vary considerably from one authority to another due to the pattern of organisation of secondary education. Although the practices are more difficult to categorise, three groups of authorities mainly coincident with the classification of the types of organisation can be identified:

(a) authorities with few or non-existent comprehensive schools operate selective procedures throughout their area;

(b) authorities with comprehensive schools predominating in some parts and grammar and modern schools in others, administer a selective procedure in only part of their area; and

(c) authorities with essentially total comprehensive systems have no selective procedures. 115

It is interesting to note the increase in the number of authorities who have in fact completely abolished selective allocation procedures. While there were only two in 1964, the number has sharply risen to 26 in 1968, and 50 in 1972. 116

Allocation procedures in a fully comprehensive system is a crucial issue, and has so far received little investigation. The NFER continues to produce yearly reports on allocation procedures in local authorities, but it continues to be concerned mainly with allocation to grammar schools. Neither in the 1969 NFER Trend, nor in the first report of 1968 on comprehensive education was there much information given on allocation to comprehensive schools. Benn and Simon published the first national figures about five methods of allocation, collected from 728 comprehensive schools in 1968. 117 Four years later, 1430 comprehensive schools gave information about the methods used in allocation. Although the 1972 methods are categorised somewhat differently from the 1968 survey, a comparison between the two years is of some interest. Table 7.4 illustrates this comparison.

The table shows that catchment-areas' entry is still the most popular method of allocation to comprehensive schools. If guided choice and selective entry were taken together, 18% of comprehensive schools are still associated with 11+ or 13+ selection procedures, however informally these may operate.

In the following section we are going to examine in detail the three widespread methods of allocation used in England: the catchment-areas, feeder-schools and parental-choice methods.
### TABLE 7.4: COMPARED PERCENTAGES OF USING METHODS OF ALLOCATION IN ENGLISH COMPREHENSIVE SCHOOLS

<table>
<thead>
<tr>
<th>Methods used</th>
<th>% in 1968</th>
<th>% in 1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catchment area</td>
<td>34</td>
<td>48</td>
</tr>
<tr>
<td>Catchment only</td>
<td>(33)</td>
<td></td>
</tr>
<tr>
<td>Catchment plus organised parental options</td>
<td>(15)</td>
<td></td>
</tr>
<tr>
<td>Feeder systems</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Feeder only</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td>Feeder plus organised parental options</td>
<td>(8)</td>
<td></td>
</tr>
<tr>
<td>Parental choice</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Guided parental choice</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Selective</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Catchment plus selection</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>Part selective</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>Other and Unknown</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Total number of schools</td>
<td>661</td>
<td>1430</td>
</tr>
</tbody>
</table>

**Source:** Benn, C. and Simon, B., *Half Way There*, op.cit., p.448

(i) **Catchment-Area Method**

This method is strongly associated with the fully comprehensive organisation. Its use drops in frequency where comprehensive schools co-exist with grammar schools. The catchment-area system is widely used as a method of allocation in England. It comprises two distinct types: catchment areas determined by geography and those drawn by authorities.

The geographical catchment-area method usually coincides with the natural geography of the district and small town. In such areas there is only one comprehensive school. Accordingly, one choice of school for most pupils is available. All the pupils who can travel to this school attend it. Therefore catchment areas in the country districts and small towns are normally easy to decide in a fully comprehensive system.
The delineation used in the catchment-area method is practised in large towns where there are more than one comprehensive school, and pupils can travel to any of them with reasonable ease. A decision, therefore, has to be made about the specific area each school shall serve. This decision involves formal drawing of zones by representatives from the schools, the local inspectorate, councillors and authority officers.\textsuperscript{119}

The rationale of zoning is to give each school a full roll as well as to achieve a balanced intake. Zoning can be worked out in different ways. Three types of zoning can be identified: natural, artificial, or administrative zoning.

Natural zoning is based on the neighbourhood principle. It is drawn to encompass the school's natural district boundaries, and designed to get all the pupils who naturally belong to a school's area included in the zone drawn. This type accords with the definition of comprehensive school. Its advocates find that natural zoning is practicable, since a school's natural area contains a good cross-section of abilities and of social class. They claim that it is wrong to give a school too artificial an intake because it then loses its valuable and life-giving connection to its own area, staff get out of touch with the problems of many children, and some pupils feel alienated in a school too far away from home.\textsuperscript{120}

Artificial zoning is seen as an approach to the problem of the weakness of balanced-ability intake coinciding with natural zoning, and of the controversy related to the parental choice versus administrative decisions. In response to a variety of pressures, most authorities operate catchment-area allocation, in accordance with artificial zoning, either to achieve a balanced intake or to permit some degree of parental choice. The pressure for opting out is low where efforts have been made to equalise facilities, staffing and courses between all comprehensive schools. But where different standards of comprehensive schools exist, the pressure becomes greater and the choice a process of guided selection between two types of schools.\textsuperscript{121}

To be fully effective, this type of zoning has to be reasonably well enforced, in a sense that all pupils in the areas designated must go to the schools assigned to the areas. Many teachers and administrators favour artificial zoning. They argue that it can be used in a positive and creative way in a fully comprehensive system and in highly populated areas, without being an artificially engineered matter. Nevertheless, parents find this type of allocation is at odds with their choice.\textsuperscript{122}
As regards administrative zoning, it is used only as a method to split a city into large administrative areas rather than to ensure either a balanced entry or a neighbourhood basis for individual schools. In this sense, it is not strictly a catchment-area method of allocation, but one of parental choice. 123

Zoning policies vary from one authority to another; though it is widely acceptable that zones should be regularly reviewed as population patterns shift - if for no other reason. Some authorities have reviews every few years and hear regular representations from the community, while others review only occasionally, or only when the council changes hands and they hear no representations. The basis of rejecting or accepting pupils, particularly when there is over-subscription, is different. In some areas secondary heads select and reject according to criteria of their own and do not have to give their reasons. In others, this private autonomy is gradually eliminated. Secondary heads either being asked to justify their policies publicly, or - more usually - the authority itself laying down a policy for all schools. 124

The catchment-area method of allocation has been long debated. Several parent bodies urge zoning to overcome the problems of advantaged versus disadvantaged schools in some areas. Most pupils and parents prefer the school in their areas. Other, though sometimes few conservative, educated and middle-class parents protest against strict zoning as implying restriction of their free choice. A recognition document in 1964 indicated that local education authority committees accept zoning far more willingly than they used to. They believe that comprehensive schools cannot develop properly unless they have their quota of able pupils. Circular 10/65 recognised that zoning would be necessary and urged LEAs to draw boundaries to achieve a possible balanced intake. 125

(ii) Feeder-Schools Methods

This method is based on linking primary schools to individual secondary schools. Thus all pupils from any given primary school will automatically transfer together upwards to a given linked mixed comprehensive school or two-linked single-sex comprehensives. Feeder-schools method facilitates the flexibility of allocation procedures in case of crowdedness or falling number problem by subtracting or adding a feeder-school. 126

The implication of such a method varies among authorities. Rotherham
Authority, for example, has operated a feeder-school system in conjunction
with zoning and parental choice in order to secure adequate numbers of
students in each comprehensive school.  

Sheffield Authority has organised
a more systematic line method by attaching primary school to a specific compre-
hensive school. Although some primary schools in Sheffield feed short-course
comprehensives (12-16 types) and others feed the long-course ones (12-18 all
through types), all the pupils are transferred to the area sixth forms on an
equal footing. Sheffield's Chief Education Officer, G.M.A.Harrison, points
out that:

"On the whole primary schools feed the nearest
secondary school with which many of them have
a previous association, but ... with very many
post-war secondary schools which have had to be
built wherever sites are available, secondary
schools are not so obviously related to a par-
ticular community or area of the city. Indeed ...
there is sometimes an unfortunate concentration
of secondary schools in particular parts of the
city and this had meant that some primary schools
have to feed a secondary school which is not neces-
sarily the nearest."

As soon as comprehensive schools were established in Newcastle, the
authority introduced a more specific organised linking scheme of transfer.
Primary schools were informally classified as A, B, or C, in accordance with
the type of intake each had and the areas of housing each served. Each
secondary school was then assigned one A, two Bs, and a C as its feeder
schools, so that each comprehensive school would have a balanced intake.
But the Newcastle Council under a Conservative majority in 1967 widened the
small parental option and introduced a systematic parental choice as an
integral part of the scheme.

The link between primary and secondary schools in some areas within the
Inner London Education Authority is negligible owing to the fact that a large
number (40 to 50 in some cases) of primary schools feeds a single comprehensive
school.

Statistically the feeder-schools method is the second most popular al-
location procedure used in England. According to the 1968 survey conducted
by Benn and Simon, 19% of 661 comprehensive schools taking part in the survey
reported that they used such methods. However, they have indicated that
certain sectors used the linking method more frequently than others (i.e. 38%
Roman Catholic comprehensive schools used it), and that the popularity of the
system was greater in the north of the country than in the south.\textsuperscript{130}

It is claimed that using the feeder-schools system in allocation would achieve many benefits, such as: a closer relationship between primary and secondary schools, an effective co-ordination between the two schools in curriculum and teaching methods, better liaison possibilities between lower and upper secondary schools, and a minimum break between a small and a big school. Nevertheless, if too many parents are permitted to opt out of the linking arrangements, as in the case of zoning in catchment-area schemes, the link becomes rather ineffective and could make comprehensive schools develop as semi-selective schools. In order to eliminate this controversy, any allocation system which cuts across the preference of parents for the nearest schools must give a good explanation. However, it seems likely that the success of the feeder-schools method depends on the outcomes of the actual linking.

(iii) Parental choice

Choice has always been the presumed method of allocation to secondary schools. Parental choice can be free or guided. The differences between the two types are not explicit, but a closer look soon reveals the rationale behind the use of the different terms. The distinction is mainly associated with the pattern of organisation dominating the secondary stage. Free parental choice is difficult to operate in a track-system, nor can it operate in any form of comprehensive systems administering selective and non-selective interim schemes (i.e. schemes (iii) and (iv) in Circular 10/65). Benn and Simon have considered that free choice methods can be distinguished from guided ones by the absence of any selective schools in the area at any age.\textsuperscript{131} However, free parental choice is likely to operate successfully in a fully comprehensive system, whereas a guided one is considered an effective method of replacing selection at 11+, 12, 13 or 14.

Parental choice in a fully comprehensive system is a method of transfer whereby the only variable taken into consideration in the allocation processes from primary to secondary schools is the parents' preference. Though all other allocation procedures allow some individual choice, this method depends only on parents' choice.\textsuperscript{132} Commenting on the advantages of free parental choice, Benn and Simon point out that

"Free-choice systems can work successfully because the majority of parents now, as always, actively
wish to choose the school for their area. Obviously choice systems work best in local authorities where all the schools - although individually each different - are thought to be of comparable standing in the community and able to offer a comparable range of opportunities."

However, it has been argued that the maintenance of free choice for some may delay the development of many. The danger of too much free choice in a comprehensive system is concealed in some forms of inequality. This harm might lead to an imbalanced intake, or perhaps to hidden advantages for certain groups over others. It has also been felt that this method tends to make schools more class and colour segregated. Furthermore, parents who actually get their first preference choice, according to Benn and Simon, will be those who are most aggressive or knowledgeable or influential.134

The practice of parental choice in allocation for comprehensive schools has presented a specific dilemma. Much debate has been raised either by individuals or groups of parents, political parties, teachers and administrators. Some have argued for free parental choice, whereas others opposed too much free choice. For example, parents-oriented bodies, such as the Advisory Centre for Education (ACE) argued that "the advent of comprehensives reduces the degree of choice available to parents."135 Although the Confederation of Association for the Advancement of State Education (CASE) effectively took part in the campaign on behalf of parents' choice nationally, the members say locally something different. For instance, a group of (CASE) parents in one reorganised local authority came to the conclusion that "a system where transfer is based entirely on parental choice is likely to produce its own inequalities."136 Unlike Labour, the Conservatives, owing to their virtual support of grammar schools, are active campaigners for parental choice of schools in the state system. In Newport, for example, a Conservative local Council has altered the method of transfer from catchment zoning, adopted by Labour, to parental choice.137 Teachers have also been influential. The NUT confirmed that "the existence of comprehensive schools can be undermined by unrestricted parental choice."138 Education administrators are often those expressing concern at unlimited free-choice systems. The Deputy Education Officer of Hampshire has considered the suggestion of parental choice on its own as acceptable regulator for secondary school admission to be misleading. He wrote that any local education authority had "a particular responsibility for those children who are not lucky enough to have articulate and discerning
parents." He then added,

"Unless we, as ratepayers and taxpayers, not just as parents, are prepared to contemplate empty places in one school and the provision of additional places in a neighbouring school, there can be no complete freedom of consumer choice."

The Chief Officer in the West Riding of Yorkshire commented that,

"The only way of meeting parental choice, that I can think of, is to make all schools twice as big as we need them and at the same time shut half of them down or keep them only partially filled."

However, it seems that choice system is more supported by the political Right, by the consumer oriented associations like ACE and CASE, while it is opposed by the political Left, many teachers, and most administrators. On the whole, the conflict seems to be between the right of individuals to practise their freedom and the duty of the community to protect the collective good.

2.3 Allocation Procedures in Sweden

Prior to reform admission to the Swedish secondary schools was based on competitive examinations and on teachers' judgment. Traditionally, the teacher decided who was to go on to junior secondary school or gymnasium and who was to remain in the final classes of compulsory schools. Sweden had not been able to satisfy the demand for either junior or senior secondary education. Husen has estimated the number of applicants for the realskola and the girls' school exceeded the available places by more than one-third. A study of OECD pointed out that in some years as many as 25% of all applicants for gymnasia were refused entry. It has also indicated that it was even more difficult to gain entrance to the technical and commercial gymnasia. In 1960 approximately 20% of the applicants for the general academic gymnasia were not accepted, while the corresponding figure for the commercial and technical gymnasia was about 40%. Many educationalists as well as politicians and laymen were dissatisfied with the early selection and the segregation of pupils at the age of 10 or 13.

As the secondary schools were located only in bigger communities, both geographical and economic conditions contributed to a very skewed socio-economic composition of their pupil population. The relation between education'
and social background has been the subject of a great number of empirical investigations in Sweden. Lena Johansson, for example, interviewed in 1968 a representative sample of about 6,000 persons in ages 15-75 years. One indication of the relationship between social background and education is given in Table 7.5, which shows the percentage in different age groups of persons with "Student-examen" or more, i.e. having graduated from upper secondary education of the academic type (gymnasium). The table shows that social class differences are great at all three age levels, but more so in the older ones where the frequency of graduates is very low in general. It also demonstrates that a great increase in graduation has taken place within the age span of the youngest group and therefore the data do not show the situation in the present school system.

### TABLE 7.5: PERSONS WITH "STUDENT-EXAMEN" OR MORE IN PER CENT OF DIFFERENT AGE LEVELS AND SOCIO-ECONOMIC BACKGROUNDS

<table>
<thead>
<tr>
<th>Father's social and occupational group</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-29</td>
</tr>
<tr>
<td>I. Upper middle class (professional and managerial)</td>
<td>45</td>
</tr>
<tr>
<td>II. Lower middle class</td>
<td>12</td>
</tr>
<tr>
<td>III. Working class</td>
<td>7</td>
</tr>
<tr>
<td>All together</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Scase et al., op.cit., p.7

However, since the 1950s the Swedish educational system has undergone a radical reform that affected the selection process. The implementation of the 9-year comprehensive school has resulted in the abolition of selection to junior secondary schools, and the removal of early streaming from the educational system. One of the major aims of establishing the new grundskola was the elimination, or at least minimisation, of the effects of social class and geographical location, in determining the educational opportunities. The unified school has proved, to a great extent, to be effective in achieving these aims. Through such a school Sweden has been able to realise a more rational distribution of educational resources and to lessen the under-
representation of the countryside and working class students in secondary schools. 145

Accordingly, the first selective admission policy was adopted and implemented at the end of the basic school for students who want to attend senior secondary schools. Until 1973, before the introduction of the integrated upper secondary school, the admission requirements for the gymnasium were the completion of the advanced courses in both English and mathematics to class 9, in addition to another foreign language such as German or French. 146

These requirements, however, implied further selection or self-selection which operated in accordance with social backgrounds. Ljung and Jansson in their study of the influence of socio-economic variables on recruitment to the gymnasium for a year group in the county of Vastmanland conducted in 1970 found a clear social discrimination. 147 This evident from the table below.

| TABLE 7.6: PERCENTAGES OF ALL STUDENTS IN THE RESPECTIVE SOCIAL GROUP QUALIFIED AND ENTERED GYMNASIA |
|---|---|---|
| Social Group * | % of qualified students for gymnasium sch. | % of students entering gymnasium sch. |
| 1 | 87 | 62 |
| 2 | 58 | 32 |
| 3 | 33 | 17 |

* Group 1 includes university graduates, official and managerial of large enterprises.
Group 2 represents primary school teachers, office workers with lower secondary school certificate or higher education and farmers.
Group 3 comprises office workers, businessmen, and manual workers.

Source: Ljung, B.O. and Jansson, V., Recruitment to the Gymnasium in Sweden, op.cit., pp.7,12

The table shows that more than 70% of the qualified students from social group 1 entered the gymnasium, while the corresponding percentages for social group 2 and 3 are 55% and 50% respectively.

Investigating the correlation between social background and self-selection, Bengtsson in 1969 studied a representative sample of about 2,400 pupils in grade 9 of the comprehensive school and their plans after leaving the compulsory
stage of education. His findings are given in Table 7.7. These indicate that the gymnasium of academic type clearly reflected the middle class direction, while the vocational schools were chosen by working class pupils.

**TABLE 7.7: PLANS OF PUPILS IN GRADE 9 WITH DIFFERENT SOCIAL BACKGROUNDS** (IN PER CENT)

<table>
<thead>
<tr>
<th>Father's social and occupational group</th>
<th>Educational and occupational plans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gymnasium school</td>
</tr>
<tr>
<td>I. Upper middle class</td>
<td>82</td>
</tr>
<tr>
<td>II. Lower middle class</td>
<td>46</td>
</tr>
<tr>
<td>III. Working class</td>
<td>25</td>
</tr>
<tr>
<td>All together</td>
<td>37</td>
</tr>
</tbody>
</table>

Source: Scase, R. et al., (eds), op.cit., p.7

Such social effects led to a growing satisfaction with selection procedures. This, combined with the intention to achieve equality of educational opportunity for all students regardless of social, economic or geographical location, has resulted in another structural change, namely, the integrated gymnasium.

Principally, all pupils could pass straight from grade 9 in the comprehensive school to grade 1 in one of the lines in the integrated gymnasium. The upper secondary school today has a sufficient capacity to take practically all who pass out of comprehensive school. But this does not mean that all must continue their studies immediately. At present, admission to secondary schools is based on applications. However, there is no competition for available places, except in certain lines. In recent years the two-year nursing line has been by far the most popular and has thus required the highest average marks, higher than the three-year lines. Some of the latter came second in the pupils' choice. This is evident from Table 7.8 which shows the minimum marks required for entry in 1973.

It may be noticed that it is the choice of the pupils rather than the academic nature of the line which determines the required marks for entry. It is clear that some academic lines (i.e. technology) admitted pupils with less marks than those attending some two-year lines.
### TABLE 7.8: MINIMUM MARKS REQUIRED FOR ENTRY TO THE GYMNASIUM SCHOOL IN STOCKHOLM IN 1973

<table>
<thead>
<tr>
<th>Line</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic (3-year)</td>
<td>3.13</td>
</tr>
<tr>
<td>Humanities (3-year)</td>
<td>3.45</td>
</tr>
<tr>
<td>Natural Science (3-year)</td>
<td>3.29</td>
</tr>
<tr>
<td>Social Science (3-year)</td>
<td>3.45</td>
</tr>
<tr>
<td>Technology (4-year)</td>
<td>3.13</td>
</tr>
<tr>
<td>Two-year Lines</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>2.71</td>
</tr>
<tr>
<td>Social Studies</td>
<td>2.97</td>
</tr>
<tr>
<td>Technology</td>
<td>2.65 - 3.13</td>
</tr>
<tr>
<td>Clothing Manufacturing</td>
<td>2.29</td>
</tr>
<tr>
<td>Building and Construction</td>
<td>1.60 - 2.60</td>
</tr>
<tr>
<td>Office and Shopwork</td>
<td>2.33</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.27</td>
</tr>
<tr>
<td>Food Technology</td>
<td>2.31 - 2.65</td>
</tr>
<tr>
<td>Forestry</td>
<td>2.38</td>
</tr>
<tr>
<td>Consumption</td>
<td>2.30 - 3.13</td>
</tr>
<tr>
<td>Wood Technology</td>
<td>3.15</td>
</tr>
<tr>
<td>Workshop Mechanics</td>
<td>2.45</td>
</tr>
<tr>
<td>Nursing</td>
<td>3.14 - 3.44</td>
</tr>
</tbody>
</table>

Thus, students are allocated to the different lines according to their free choice if they satisfy certain requirements. The three-lines of social sciences and economics require a special course in English and either a special or general course in mathematics. Both the three-year line in natural science and the four-year technology line require special courses in English and mathematics. With the exception of the two-year technology line which requires advanced mathematics, the two-year lines do not require any particular optional courses. Yet there is always a possibility of supplementary studies, if a certain subject or course is lacking in one's comprehensive school certificate. In general, the optional subjects chosen at the senior level of basic school do not affect the eligibility for various courses in the
integrated gymnasium since the school is dimensioned to accommodate 90% of a cohort of 16-year-olds. Nevertheless, to be enrolled in a line of a first choice, a student has to achieve high marks and to compete with others with similar choices where demand exceeds supply in a particular line. Therefore, some pupils may have to start in a line other than the one for which they applied.

When the labour market demand for people with more advanced education began to slacken noticeably in the late 1960s, Swedish student interest in both advanced and university education temporarily diminished as rapidly as it had previously expanded. A cross-national survey which inquired into students' assessment of whether upper secondary studies would improve their job prospects found that Swedish students were especially pessimistic. The proportion of students who believed that their prospects would be much better after completion of upper secondary studies was only 32% among the Swedish sample, compared to 77% among the English, 74% among the German, 50% among the French, and 23% among the Italian samples. Therefore the prestige traditionally associated with given lines at the gymnasial level shifted rapidly, particularly for those more academic lines which led to university admission. This may also explain the process of opening the university to the graduates from the two-year lines. Pure science and fine arts rapidly diminished, the more applied lines were enhanced.

These tendencies became marked among the preferences shown by students at age 17 as they chose their lines in the gymnasia after finishing the 9-year comprehensive school. Thus, in the four years between 1971 and 1975 the number of applicants for admission to the humanistic line declined by less than 46%, while the applicants to formerly prestigious natural science lines also declined by 31%. Two of the other lines, the economic and social sciences, held their own better, as shown in Table 7.9.

It is worth-while to mention that about 70% of comprehensive school leavers in 1978 went straight on to the upper secondary school, whilst the remaining places were taken by adult students or by other young people who chose to complete their studies in the form of recurrent education. Accordingly, a new trend in admission to secondary schools has emerged. The proposal of the Commission on Marks issued in 1977, has suggested that admission to such schools should consider the applicant's development at comprehensive school as well as any merits he had acquired since leaving. The Commission proposes that each applicant should have points for various merits
TABLE 7.9: APPLICANTS AND AVAILABLE PLACES IN SWEDISH GYMNASIASKOLA 1971-1975

<table>
<thead>
<tr>
<th></th>
<th>Applicants</th>
<th>Places</th>
<th>Applicants per 100 Places</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Year Academic Lines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>5990</td>
<td>28.0</td>
<td>6030</td>
</tr>
<tr>
<td>Humanities</td>
<td>3027</td>
<td>-45.9</td>
<td>3270</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>5714</td>
<td>2.3</td>
<td>4335</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>7636</td>
<td>-30.8</td>
<td>8865</td>
</tr>
<tr>
<td>Technical</td>
<td>6653</td>
<td>-11.0</td>
<td>6570</td>
</tr>
<tr>
<td>Subtotal</td>
<td>29020</td>
<td>-15.6</td>
<td>29070</td>
</tr>
<tr>
<td>2-Year Pre-Vocational Lines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>3006</td>
<td>-49.2</td>
<td>4155</td>
</tr>
<tr>
<td>Music</td>
<td>449</td>
<td>74.0</td>
<td>180</td>
</tr>
<tr>
<td>Social</td>
<td>7937</td>
<td>-41.0</td>
<td>9510</td>
</tr>
<tr>
<td>Technical</td>
<td>2135</td>
<td>-62.0</td>
<td>3945</td>
</tr>
<tr>
<td>Subtotal</td>
<td>13527</td>
<td>-46.4</td>
<td>17790</td>
</tr>
<tr>
<td>Other 2-Year Vocational Lines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textile</td>
<td>459</td>
<td>57.2</td>
<td>440</td>
</tr>
<tr>
<td>Construction</td>
<td>2990</td>
<td>-7.1</td>
<td>3888</td>
</tr>
<tr>
<td>Electronic</td>
<td>5879</td>
<td>-14.3</td>
<td>3240</td>
</tr>
<tr>
<td>Auto Mechanics</td>
<td>4467</td>
<td>21.8</td>
<td>2576</td>
</tr>
<tr>
<td>Food Technology</td>
<td>1293</td>
<td>166.0</td>
<td>960</td>
</tr>
<tr>
<td>Processing</td>
<td>343</td>
<td>345.5</td>
<td>400</td>
</tr>
<tr>
<td>Forestry</td>
<td>796</td>
<td>55.2</td>
<td>520</td>
</tr>
<tr>
<td>Mechanical</td>
<td>4527</td>
<td>159.7</td>
<td>5128</td>
</tr>
<tr>
<td>Distribution</td>
<td>6720</td>
<td>114.2</td>
<td>7425</td>
</tr>
<tr>
<td>Consumption</td>
<td>4163</td>
<td>298.0</td>
<td>5460</td>
</tr>
<tr>
<td>Social Care</td>
<td>13291</td>
<td>-10.8</td>
<td>6870</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1845</td>
<td>262.5</td>
<td>960</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>636</td>
<td>216.4</td>
<td>720</td>
</tr>
<tr>
<td>Subtotal</td>
<td>47409</td>
<td>29.4</td>
<td>38587</td>
</tr>
<tr>
<td>Sum total</td>
<td>89956</td>
<td>6.6</td>
<td>85447</td>
</tr>
</tbody>
</table>

Source: Skolvasendet, (August 1975), p.31
on which the selection is based. Such criteria for selection include, for example, experience of working life, interest of the line of education, prior education, minority sex, and school's evaluation. The applicant's total points are his merit rating. Applicants are to be accepted according to their merit rating. The school evaluation will be made on a 3-degree scale. While point 3 refers to very good prospects, point 2 denotes good prospects and one less good prospects.\(^\text{153}\) This evaluation is to be used only for those applying directly from comprehensive schools. If this proposal passes in the Parliament, admission to upper secondary schools under the new procedure can then be adopted for the first time for applicants entering in the autumn of 1982.\(^\text{154}\)

Two allocation procedures widely operate in Sweden: catchment-area system and feeder-school system. Every school has a specifically defined catchment area, so designed as to permit the pupils to travel the shortest possible route to school with minimum traffic hazards. If the municipality's residential planning has been such that different housing estates have acquired different social composition, then the feeder school process is used to secure a balanced ability intake.\(^\text{155}\) Thereby selection procedures are controlled through a Central Admission Office to distribute the comprehensive school leavers among the different lines. The presence of brothers or sisters, as well as certain medical and social circumstances are taken into account. The computer is mainly used in allocation. Schools use buses, or pay fees of transportation to students who travel long distances.

3. **Conclusion**

The selection problem arises, within a tracked system, when the number of children eligible for transfer from primary to secondary schools exceeds the number of places available in the academic schools. Therefore, it is an inevitable procedure to select among those children the ones most suitable to fill these places.

Available data demonstrate that the assumptions of selection have proved unsatisfactory for many reasons. First, a person's aptitude and ability are not fixed at eleven, or at any other age. Second, at the age of eleven some children are already undergoing the preliminary stage of adolescence, whilst others are not. The disturbance of adolescence has been shown to affect academic performance to a considerable extent. Third, it is statistically
impossible for a single test or examination to be accurate in more than 90% of its results. Although this may seem a small margin of error, the actual number annually affected is great (i.e. in England 60,000 pupils). Finally, to assume that only a small proportion of an elite is suitable to benefit from an academic course would imply a waste of talents.

In spite of the large variety of selection procedures, a high degree of uniformity does exist. Normally, selection procedures consist of a group of intelligence tests, attainment testing in subjects of primary school curriculum, interviews conducted by persons other than the child's teacher, and cumulative record cards. Every procedure has its merits and its defects. The one safe generalisation that can be made about the variety of selection procedures is that they all attract criticism and disapproval. It is difficult to identify any method that has so far been adopted for the purpose of selecting pupils to secondary schools which has not become a subject for controversy. In our opinion, a successful selection can be achieved if personal characteristics other than achievements are taken into consideration.

Selection has many injurious effects on both the individual and society. A wealth of research has quite clearly shown that it produces consequences that are wholly unacceptable in terms of its effects on the children concerned and of the nation's need for an increased supply of educated and skilled young people. According to H.L. Elvin, a leading English educationalist, the only possible conclusion is that selection must end. It is a conclusion which is being increasingly shared by many others.

The clear dissatisfaction with the early selection, which was felt and expressed by many administrators, teachers and parents, together with the growing political consideration of social justice led to the elimination of separating the pupils into different types of schools, particularly at the lower level of secondary education. Consequently, the traditional selection process was abandoned in many countries. New methods of allocation have been devised to cope with the implementation of a unified system of secondary schools.

The United States with its long established junior high school system, Sweden with its grundskola, and mainly the authorities with fully comprehensive system in England, make no selection to transfer children aged 11 or 12 from primary to secondary schools. Many educators have come to the conclusion that allocation procedures rather than selection are to be used in a fully comprehensive system. Thus pupils move on from primary to secondary schools without
any impediments such as examinations, high class standing or social position.

In accordance with the definition of the comprehensive school, the catchment-area method of allocation is predominant. This method is popular in all countries under study. All students in a given geographical area will transfer to the neighbouring comprehensive secondary school. For specific reasons, such as achieving a socially and mentally balanced intake, boundaries or feeder-school methods operate in the three countries as the second most popular procedure. According to this method all pupils from certain primary schools are transferred to a given linked comprehensive secondary school. Parental choice as a method of allocation has raised much debate. Some argue that the comprehensive system reduces the freedom of parents to choose the school for their children. Others argue that there is no logic behind a complete freedom resulting in crowded or empty schools. However, this dilemma has been more discussed in England than in the United States or Sweden. Bussing has emerged as a necessity for transportation of students to and from schools in the rural as well as urban areas wherever the comprehensive school is located within more than a reasonable walk from pupils' residential area. In the meantime bus service has been extended to serve a wide field of pedagogical activities. Transportation is provided on a larger scale in the United States than in England and Sweden.

Generally, allocation to comprehensive schools requires much consultation with the school community in order to adopt and implement the appropriate method of allocation which fosters the objectives and the needs of a particular area or district.
REFERENCES


5. Corbett, A., op.cit., p.3


10. Griffiths, A., op.cit., p.23


13. Vernon, P.E., op.cit., p.103


15. Vernon, P.E., op.cit., pp.102-8


25. NUT, Transfer from Primary to Secondary Schools, op.cit., p.22

26. Ibid., p.23

27. Vernon, P.E., op.cit., p.89

28. Ibid., p.93

29. Ibid., pp.87-8

30. Ibid., p.94

31. Ibid., p.88

32. County Borough of Barrow-in-Furness Education Committee, Classification for Secondary Education, Barrow Printing Co.Ltd., 1946, p.11

33. NUT, Transfer from Primary to Secondary Schools, op.cit., pp.37-9


35. Ibid., p.100

36. County Borough of Barrow-in-Furness Education Committee, op.cit., p.11

37. Transfer from Primary to Secondary Schools, op.cit., pp.26-8


42. The analytical marking schedules were set out to base essay marking on 100 marks distributed on detailed items such as quantity, quality and control of ideas (50 marks), vocabulary (15), grammar and punctuation (15), structure of the sentences (10), spelling (5) and handwriting (5). (Vernon, P.E. (ed.), Secondary School Selection, op.cit., p.120)

43. Vernon, P.E., op.cit., p.121
44. Finlayson, D.S., op.cit., p.132
45. Vernon, P.E., op.cit., pp.122-3
48. NUT, Transfer from Primary to Secondary Schools, op.cit., pp.42-3
50. Ibid.
51. Vernon, P.E., op.cit., pp.138-41
54. Hill, C.J., op.cit., p.18
57. Vernon, P.E., op.cit., p.171
59. NUT, Transfer from Primary to Secondary Schools, op.cit., pp.48-9
60. The Education Act, 1944, section 78.
61. NUT, Transfer from Primary to Secondary Schools, op.cit., pp.50-2
62. Vernon, P.E., op.cit., p.163
63. Ibid., p.86
64. Ibid., pp.154-5
67. Vernon, P.E., op.cit., p.55
68. Ibid., pp.56-7
69. Ibid., p.60
71. Vernon, P.E., op.cit., pp.61-2
72. Ibid., p.55
73. McClelland, W., op.cit., p.103
76. McClelland, W., op.cit., p.119
78. Griffiths, A., op.cit., p.20
79. Burgess, T., Home and School, op.cit., p.92
82. Rubinstein, D. and Simon, B., op.cit., p.43
83. Floud, J.E. and Halsay, A.H., op.cit., p.213
84. Ibid.
86. Burgess, T., Home and School, op.cit., pp.90-1
90. Ibid., p.111
94. King, E.J., Other Schools and Ours, op.cit., p.261
96. Ovard, G.F., op.cit., p.246
99. Miller, V., op.cit., pp.146-7
101. Johnson, J.A. et al., op.cit., p.161
102. Tanner, D., Secondary Education, op.cit., p.53
104. Ibid., p.505
105. Ibid.
106. Benn, C. and Simon, B., Half Way There, op.cit., p.465
107. Dumas, W. and Beckner, W., op.cit., p.280
111. Reeder, W.G., op.cit., pp.332-3
112. Dumas, W. and Beckner, W., op.cit., p.280
113. Reeder, W.G., op.cit., pp.333-7
114. Isenberg, M.R., op.cit., p.1494
116. Ibid., p.10
118. Ibid., p.447
120. Ibid., pp.27-8
121. Benn, C. and Simon, B., op.cit., p.462
122. Benn, C., Allocation Methods in the Comprehensive System, Method 2, op.cit., p.27
123. Ibid., p.28
124. Ibid., p.29
125. Benn, C. and Simon, B., op.cit., pp.462-3
126. Ibid., p.464
128. Harrison, G.M.A., 'Sheffield has Opportunity for All Her Children,' Education, vol.139, 2nd June 1972, p.533
129. Benn, C., Linked Primary and Secondary Schools, op.cit., p.28
130. Ibid., pp.26-7
131. Benn, C. and Simon, B., op.cit., p.452
133. Benn, C. and Simon, B., op.cit., p.452
134. Ibid., p.453
135. Advice to Parents Column, Guardian, January 7, 1969
136. CASE, 'Middle Schools in Merton,' quoted in Benn, C., Parental Choice, p.30
137. Benn, C., Parental Choice, op.cit., p.32
140. Ibid.
141. Benn, C., Parental Choice, op.cit., p.33
142. Husen, T., School Reform in Sweden, op.cit., p.38
143. OECD, Educational Policy and Planning: Sweden, op.cit., p.107
144. Scase, R., Harnqvist, K. and Bengtsson, J. (eds), Educational Reforms and Educational Equality, Stockholm, 1972, pp.5-6
147. Ibid., p.5
148. Scase, R. et al. (eds), op.cit., pp.7-8
151. King, E., Post-Compulsory Education in Western Europe, London, Sage, 1974, p.328


153. Ibid., pp.5-7

154. Ibid., p.10

155. OECD, Policies for Basic Education, National Statement: Sweden, op.cit., p.6
CHAPTER EIGHT

GROUPING IN COMPREHENSIVE SCHOOLS

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CHAPTER EIGHT

GROUPING IN COMPREHENSIVE SCHOOLS

Grouping within schools is a common administrative process adopted to deal with the problem of variation in ability and achievement among pupils. The question of how best to group students within a school has long been debated. Since grouping policy and practice are affected by the political and social forces operating in the community at large, it is expected that grouping patterns will reflect such forces, and differ from society to another and from time to time in the same society.

Our intention in this chapter is to examine the models of grouping adopted and implemented in the chosen countries. To deal with this, we shall discuss some noteworthy research conducted in the three countries concerning the controversial issue of streaming versus unstreaming, and deduce the personal and social effects of such issues. Finally, we shall examine in detail the different methods used in the United States, England and Sweden.

1. Research on Streaming and Non-streaming

Over the last forty years there have been many investigations into the methods of grouping the pupils inside the school. On the whole, such research has been concerned with the pros and cons of streaming and non-streaming. Some of these investigations were carried out to elucidate the academic effects, while other studies were conducted to examine the social effects. The countries involved in this study are outstanding for their investigations in this field.

1.1 American research

Most American research concerning homogeneous grouping dates back to the 1920's and the 1930's. Certain studies were conducted to examine the effects of homogeneous grouping as well as of curricula differentiation, whilst others focussed on the social and personal effects. Some findings suggest that homogeneous grouping is generally advantageous, while others found in favour of heterogeneous classes.

Billet, for example, studies the effects of homogeneous grouping in
the ninth grade. Pupils were divided into homogeneous and heterogeneous class sections at three ability levels. The pedagogical factor was kept under control as far as possible by having the same teacher instruct the experimental classes. Five achievements tests were given at the beginning and at the end of the academic year. The main research findings indicate that homogeneous grouping was of direct benefit to dull pupils, while the bright ones tended to retrogress during the experimental period. ¹

In their study, Barthelmess and Boyer divided the fourth grade pupils of five schools into three ability groups on the basis of scores achieved in an intelligence test. Other schools of heterogeneous class composition served as the control group. Pupils were tested on their achievements in Mathematics, English and Geography at the beginning and at the end of the school year. For purposes of the final comparison, they matched pairs of pupils from the experimental and control group after the initial test battery with reference to intelligence, chronological age and achievement test scores. They found from the second test battery that for 565 matched pairs, significant differences at all ability levels in favour of the homogeneous grouped pupils. ²

Justman in 1954 compared 88 pupils of high intelligence quotient in normal (i.e. unstreamed in the American context) and in special progress (i.e. streamed) classes. He found that pupils in the special progress classes showed higher attainment than equally able pupils in the heterogeneous classes. According to Justman, two explanations can be admitted: first, the stimulation of being enrolled in a select special-progress group; and second, the fact that pupils in these classes covered more material because their courses were set at faster pace, which gave them a broader and better overview of the subjects in which they were tested. ³

On the other hand, Breidestine compared the educational quotient of children in four differentiated schools and in seven undifferentiated schools for each of grades 2 to 9. His conclusion seems to indicate a margin of superiority for the undifferentiated system. ⁴

In her review over thirty investigations on homogeneous grouping carried out between 1923 and 1958, Ruth Ekstroom points out: thirteen studies favouring homogeneous grouping, fifteen studies with no differences in achievement between homogeneous groups, and five studies with mixed results. ⁵

A related study of more sophisticated design was conducted by Walles
and his collaborator. Pupils of the sixth grade in two elementary schools, in a Salt Lake City suburb, were divided, on the basis of their scores on the arithmetic subtest of California Achievement Tests, into two equivalent classes within each school. The one class was entrusted to a teacher who used the grouping approach in the first term and a non-grouping approach in the second; the procedures were served in the other class. At the end of the semester, grouping was again based on the same arithmetic test, which was given a third time at the end of the academic year. As a result data were available for three occasions (Fall, Winter and Spring). Analysis of covariance made it possible to control and evaluate teacher differences, sequence of procedures and students' differences. The research evidence is summarised as follows:

"No significant difference was found between grouping and non-grouping procedures. A significant teacher-by-method interaction was found, the interpretation of which is complicated by a significant school-by-semester interaction. ... It is our opinion, however, that an explanation in terms of interaction between method and teacher personality is, on logical ground, superior to an explanation in terms of school-by-semester interaction."

French's study in 1959 compared achievements in reading, biology, world history, and geometry between homogeneous and heterogeneous classes. Several Navy schools and a New York school were covered by the investigation. The analysis of both Navy and civilian data showed no significant relationship between achievement and the degree of homogeneity in the classes investigated.

H. Borg conducted a study to find out the differences in the effects of an ability grouping system and a random grouping system upon elementary, junior high and senior high school pupils. The variables concerning achievement, social adjustment, pupils peer status, self concept, aspiration levels, attitudes towards school environment were examined. Two adjacent Utah school districts, comparable in terms of teacher training and experience, curriculum and course requirements, were selected. One district employed ability grouping system. The other district adopted heterogeneous grouping classes. Over 2500 pupils from grades 4 through 9 were selected in the two districts at the beginning of the study. This sample was increased to 4000 in the second year. The study covered a period of 4 years to appraise the long-term effects of the two grouping methods. Pupils who
were first tested early in the fourth grade, were followed through the seventh grade. Since all samples were similarly followed, data were collected at all grades from 4 to 12.

The study asserts the following findings:

(a) Neither ability grouping nor random grouping has a consistent general effect upon achievement at any of the grade levels tested. The statistically significant differences found were not large enough to suggest more than a slight advantage for one grouping or the other. Thus the decision to employ ability or random grouping should probably be based on considerations other than achievement. Ability grouping may motivate bright students to realise more fully their achievement potential, but appears to have no effect upon average or slow pupils.

(b) Ability does not appear to be an important element in determining sociometric status in ability grouped classrooms. Ability grouping at the elementary school level provided average and slow pupils a better chance for social recognition than does random grouping. The losses in social classes are outweighed by the gains of average and slow pupils.

(c) Attitude towards peers was found to be consistently related to ability in the random grouped classrooms, while no such relationship was found in the ability grouped classrooms.

(d) The apparent net effect of ability grouping upon the self-concept variables is probably harmful to the development of at least some of the pupils who were educated under a grouping ability system.

(e) With respect to aspiration level, there were no significant differences on the same measures for pupils at the same ability level in both samples. It seems that both ability and random grouping systems have no differential effect upon the measures of aspiration level and value achievement employed.

(f) With regard to the relationship between personality variables and the grouping treatments, the ability grouping is no more likely to develop inferiority feelings in pupils at any ability level than is random grouping. The two grouping treatments do not appear differentially to affect such personality variables as poise, ascendancy, and self-assurance except in the case of average ability level pupils where the random group showed a tendency towards more favourable scores.

1.2 English research

The English investigations in this field are relatively recent. They have been conducted since the 1950's. Such research refers mainly to the primary level, while little is directly related to the secondary level.

In 1958 Rudd studied the effect of streaming on attainment. The experimental group consisted of 90 pupils enrolled in three streams on the basis of results in the eleven plus examination. After every semi-annual examination, the pupils were regrouped in order to accomplish maximum homogeneity in the different streams. A control group of 90 pupils was similarly differentiated with reference to achievements in primary school, but this grouping remained unchanged during the two-year period. Intelligence tests, together with achievement tests in mathematics and English, were administered at the outset of the study and after two and three years. The results obtained pointed to no significant differences between the performance of streamed and unstreamed classes of eleven year olds. 9

In a comparative study of the achievements of 11-year olds in England and Wales, Coevals (Queensland, Australia) and California (USA), Pidgeon suggests that the first group benefits from a superior school organisation. One of the dissimilarities between the school systems is that England and Wales emphasise streaming, whereas the grade system dominates in the other countries. The results might therefore be interpreted in favour of streaming. However, the author adds this opinion

"The most important factor would seem to be the amount of time and effort that is considered desirable to devote to any particular aspect of the curriculum." 10

Inquiring into the reaction of teachers to streaming, Daniels finds out that a large majority of English primary school teachers believe that streaming is educationally sound; that it should be carried out on the basis of ability or of scholastic attainment or of some combination of these two; that dull and backward children make the best progress scholastically when taught in classes made up of children with similar ability and attainments; and that streaming helps the bright children to make the best possible scholastic progress and at the same time gives extra help to the duller children. 11

Daniels has also compared the results of an intelligence test and certain achievement tests as between pupils in streamed and unstreamed junior schools, which were roughly equal in size and located in similar types of areas. The results presented by him point to the superior performance by unstreamed school
pupils both on the intelligence and on the achievement tests in reading, English and arithmetic. He states

"The increase in ability and attainment is achieved without any noticeable 'holding back' of brighter pupils, though it seems true that the main effect of non-streaming is a radical 'pulling up' of the more backward children."

Rouse also contributes to the research in this field. He recently studied the effect of streaming and non-streaming on the level of attainment in mathematics and English. His findings indicate that after four years of unstreamed teaching the slower children had benefited, and the brighter ones had not been held back.

Studying the social effects of streaming by ability, Douglas carried out an empirical research which traced a sample of 491 pupils from the age of 8 through 11. They were divided into two streams on the basis of their ability before their eighth birthday, 62% of the pupils were in the upper stream and 38% in the lower. Apart from a mass of background data collected on each child, a battery of verbal, non-verbal, reading comprehension, vocabulary and mechanical word reading tests were administered at age 8 and age 11. His conclusions show that the early streaming reflected social class structure more than real ability and reinforced the process of social selection. Teachers' judgements of children's ability seemed to be influenced by the type of homes. When children of the same level of ability are considered, the middle-class children tend to be allocated to the upper streams and the manual working-class children to the lower streams. There were 11% more middle-class children in the upper streams than would be expected from their measured ability at eight, and 26% fewer in the lower streams. Lower stream parents appear to be less eager for their children to go to grammar school (i.e. 12% of the middle in the lower streams should have gone to grammar school, but only one in fact did so). Children from lower streams are also likely to leave school earlier. It seems that the less able children in the upper streams are stimulated by high standard of teaching or by the competition of brighter children, whereas in the lower streams the relatively bright children are handicapped either by unsuitable teaching or lack of competition.

Willbig investigated the social implications of streaming by academic attainment in the junior school in order to find out the possible effects on social interaction between on the one hand, children of differing intelligence and socio-economic status level, and on the other hand certain social
attitudes between children in streamed classes. The sample which included 200 boys and girls aged between 9 and 10 years was selected from two contrasting social areas. A sociometric test was administered to determine social interaction between the various groups. The NFER primary verbal test was used as a measure of intelligence and an index of socio-economic status was provided by grading occupations of children's parents. Other tests comprised a brief questionnaire designed to explore children's attitudes towards streaming.

His findings confirm that social interaction, adjustment, and attitudes were better in unstreamed schools. The evidence from this research indicates the social advantages of mixed ability grouping as opposed to streaming by academic attainment. Heterogeneous grouping provided greater opportunities for the formation of mutual relationships between children of differing intelligence and socio-economic levels. In streamed classes, intelligence was a negligible determinant of sociometric status. The sex difference in sociometric choice pattern in unstreamed classes is noted. There was a tendency for children in unstreamed classes to be superior in social adjustment and in social attitudes to children in streamed classes.15

The NFER has conducted several investigations concerning the academic and social effects of streaming and non-streaming. One notable instance included 2000 schools and tested 5500 children of seven years of age annually for three years. The test battery covered nine different areas: attainment in reading; English and mathematics; verbal and non-verbal reasoning; creativity or divergent thinking; interests; attitudes about school; personality; sociometric status; participation in school activities; and occupational aspiration. It found no differences in the average academic performance of pupils of comparable ability and class, though 'divergent thinking' test scores were higher for pupils in unstreamed schools taught by a typical child-centred non-streaming teacher. Moreover, there was no evidence that children of different social classes did academically better or worse in either a streamed or an unstreamed school. It showed that the organisational pattern of school had most effect on children of average and lower average ability.16

Another study conducted by the NFER concentrated to a considerable extent on the effects of teachers in streaming and non-streaming context. Its findings demonstrate the influence of teacher on children. A child-centred approach and its freer atmosphere would appear to make divergent thinking more likely and the non-streamed situation makes a child-centred approach more
favourable. Teachers in streamed schools showed more unity in their beliefs and in their teaching methods, while those in unstreamed schools were found to be diverse in opinion. 17

More recently Lunn in 1970 carried out a large scale longitudinal study of the effect of streaming and non-streaming on personality and social and intellectual development of juniorschool pupils. He has found no relationship between the type of organisation and pupils' progress. Yet, pupils of average ability and below average, were found to have better relationships with their teachers if they were in unstreamed schools and taught by teachers believing in this system.

1.3 Swedish research

The Swedish studies have been recently concerned with differentiation and undifferentiation. Quite comparatively little research was done in this field prior to the 1940's. Much of the previous research was focussed upon the comparison of the two types of the 4-year and 5-year realskola in certain aspects such as pupils' achievements, repetition and dropouts. Even that was subject more to polemics than to objective study. So, the results of such previous research should be viewed and interpreted with great caution, due to the unreliability of the used assessment techniques, together with the different age and social background of pupils in these two types of school. 19

In 1950 the Riksdage was in favour of carrying out an experiment to test the workability of the new 9-year comprehensive school. Stockholm was divided into halves: one area was reorganised along comprehensive lines and the other remained selective. The children in both halves were thoroughly tested at all stages of change. The conclusion was that all groups of students of all kinds of ability did as well, or better, in the reorganised half than in the other. This experiment showed that children of higher academic ability in comprehensive schools perform, at least as well as they do in segregated schools, at the same time children of lower ability work rather better than they do in selective schools. 20 The Stockholm experiment, however, provided strong academic evidence in favour of the comprehensive system.

Since then most of the research was focussed on the division of the studies into theoretical and practical types, and on the comparison of the achievement and aptitude of pupils in the junior secondary schools with those in the upper level of the 9-year comprehensive schools. Recently, the
Swedish research has been concentrated on streaming and non-streaming in upper levels of the comprehensive schools and in the integrated upper secondary schools. Thus, the comparison has become a 'within-school' comparison instead of the earlier 'between-school' comparison. It is useful to indicate briefly the most salient of the Swedish research in this field.

John Elmgren conducted a research on the ability structure and factorial maturity in the Swedish school. He defined theoretical talent in terms of general intelligence. He administered three groups of intelligence tests: two are mainly verbal in the content, and the third is non-verbal and pictorial (a modification of the Minnesota Assembly Test). He took representative samples of 4151 boys and 4154 girls equally distributed at age 10 through 15 in order to explore their theoretical and practical aptitudes and to determine whether one aspect tended to predominate. His findings indicate that this was not the case. He found that practical and theoretical aptitudes are positively correlated. 56% of the pupils were equally gifted theoretically and practically, while 22% were mainly theoretically gifted and the remaining 22% were mainly practically gifted. He concluded that the practical aptitude is of a much more complicated structure than the theoretical one.

Depending upon the outcome of Elmgren's investigations, the 1946 School Commission rejected the prevailing trend of allocating the pupils to appropriate types of education on the basis of practical and theoretical ability. The Commission came to the conclusion that the earlier conception of contrasting theoretical and practical aptitudes was not valid. From an organisational point of view, there is no psychological reason to stream pupils either to theoretical or practical tracks. The Commission recommended that differentiation should be more flexible so that the multi-combinations of theoretical and practical abilities would be considered by the school. Elmgren reports that the conclusion made in the Commission's report of 1948, was, on the whole, correct. He writes

"Broadly, the conclusions drawn by the School Commission and also the interpretation given in the bill are probably valid, although undeniably a number of other results from the School Commission's research could have been advanced in that context."

Using a slightly different approach, Kjell Harnqvist in 1960 studied, at the request of the 1957 School Committee, the correlation between intra-individual differences and inter-individual differences in both aptitude
and interests. Intra-individual differences were used to indicate variations in subjects studied by one pupil, whilst inter-individual differences were used to refer to variations of pupils in a specific skill. His findings asserted that there were differences within an individual as well as between individuals. In his conclusion, he also expressed statistically the correlation between these two kinds of differences. The intra-individual variance in aptitude and interests, on the whole, covered 60% of the inter-individual variance. The School Committee came to the conclusion that the aptitude and the interest profiles of the individuals were not so homogeneous as to justify a general organisational differentiation of pupils into different classes according to aptitude or interest. In contrast, the result provided strong evidence in favour of courses of varying degrees of difficulty in different subjects. Harnqvist's findings, therefore, rejected a system of streaming. He concluded the further the division of skills is carried, the more difficult it is to see any correlation between them. Accordingly, to achieve homogeneous grouping would require a regrouping for every subject. Consequently, the individual would belong to different groups for different subjects. Such a total stratification of pupils would, if performed consistently, mean breaking up the traditional class. 25

Another group of investigations were made to elucidate the differences between streamed and unstreamed classes. Nil-Eric Svenson, for example, conducted a longitudinal study to determine whether different school class-types (plus-selected, and minus-selected) in the various school types have varying effects on the attainments of pupils with similar initial academic ability and home background. The sample comprised all pupils in class 4 of the Stockholm elementary schools (10938 pupils from 348 classes). This population was divided according to marks and residential area into three main groups. The first consisted of the comprehensive school classes which, in principle, were integrated up to the last year. The second group comprised the students who after the fourth or sixth grade, had moved to junior secondary school or girls secondary school (a positively differentiated, selected, group). The third group was made up of the elementary school pupils remaining after the others had moved up to the other schools (a negatively differentiated group). 26

Seven variables influencing the types of classes were taken into consideration. They were: the number of hours given to Swedish, mathematics, and English on the timetable; the respective qualifications of the teachers;
the stability of the class membership; the home background of the pupils; the level of ability within classes; and scholastic homogeneity between class-types.27

His findings were, generally speaking, the same for the classes in the different groups. A slight superiority in the positively differentiated classes during the early phases of the investigation was neutralised towards the end. Thus, the results did not support an early differentiation. His investigation, however, was secondarily concerned with the question of late organisational differentiation. It was concerned with differentiation as a whole. Yet, he found that the secondary school environment was somewhat superior in the early classes, but this superiority declined with the years, and finally disappeared altogether.28

Malmqvist conducted a study at the state experimental school at Kinköping to compare the differences between homogeneous and heterogeneous classes in the new school. The four 7th classes were divided into two groups: one included two unstreamed (heterogeneous) classes, and the second comprise one positively (plus-selected) class, and another negatively (minus-selected) class. The criteria of homogeneity were the students' intelligence and the results of objective tests of knowledge in the sixth grade. It was taken into consideration that the two heterogeneous classes together were equivalent to the two homogeneous classes together, and the four classes had the same groups of teachers. His findings assert that the integrated classes of the 7th grade had somewhat better results than the classes differentiated according to subjects, while in the eighth class the results were the same.29

In a similar experimental investigation conducted by Bertil Carlsson in 1963 at Vaxjo, the results obtained were somewhat different. He found that the theoretically gifted pupils in the 7th grade scored better results in classes differentiated according to the choice of subjects than pupils in integrated classes. Meanwhile, the practically biased pupils in grade 7, as well as both theoretically gifted and practically biased students in grade 8 showed no marked differences.30

Sixten Marklund has studied the effects of size and homogeneity of class on achievements of the thirteen year olds in the Swedish comprehensive school. He chose two samples: one was national, encompassing 150 classes which enrolled 3691 pupils of whom 2608 were in grade 6. The other sample was local (a south Stockholm sample), consisting of 39 sixth grade classes which enrolled 1233 pupils. Students' knowledge and skills in school subjects were measured by standardized tests. Allowances were made for the teacher
factor, and for the social class of the pupils, other variables thought to be important were controlled by the division of the samples into sub-population. The students' intelligence was checked consistently by means of analysis of covariance. The criteria of homogeneity was the standard deviation of intelligence and test results. Comparisons were made in two ways: the first was between results in large and small classes, with homogeneity kept constant, while the second was between results obtained in homogeneous and heterogeneous classes, with the size of classes held constant. In all, 281 comparisons concerning class size, 37 favoured the larger classes, 22 the smaller, and in the 222 remaining comparisons, the differences were not significant. Also out of all 122 comparisons concerning homogeneity, 23 favoured homogeneous classes, 13 heterogeneous classes, while 86 comparisons showed largely identical results.  

Marklund came to the conclusion that

"Although the results of this study indicate that a reduction in class size in itself will probably not lead to improved attainments, it is possible that if steps are taken to use the enhanced pedagogical opportunities and to take the advantage of them in methods of studying and teaching, the problem of homogeneity will become less important."

Husen and Svensson compared attainment in the 5th and 6th grade in three different groups of pedagogical milieu. The first group comprised the academic classes of superior pupils (plus-select), the second consisted of minus-selected classes, and the third group comprised the undifferentiated classes. The sample included 2755 pupils distributed among 144 undifferentiated, 96 plus-select and 86 minus-select classes. To take the social status variable into consideration, the sample was divided into sub-groups. The percentage distribution of the upper, middle, and lower class pupils within the three pedagogical milieux was 7-35-58 in undifferentiated classes; 34-46-20 in plus-select classes; 10-38-52 in minus-select classes; and 13-37-50 in the total sample. The pupils were given tests in intelligence, reading comprehension, sentence structure and spelling; and arithmetic. For each test variable the covariance analyses were reported in Stanine distribution within the three groups cross-classified by the three social status categories. His findings show that the three educational milieux appear to have similar effects on upper class children, and that children from the culturally less-privileged homes seem to respond strongly to selective academic-type teaching, while children from higher status homes seem to receive full intellectual stimulation outside the school.  

2. **Effects of Streaming and Non-streaming**

Streaming versus non-streaming has recently been a controversial topic in education, and the question whether or not to stream in comprehensive schools has become one of the most debated issues. The arguments rage on the academic front, where the opponents of non-streaming can count, with years of experience, the advantages of homogeneous group teaching. They appear quietest on the social front, where a general sense of basic fairness concedes the advantages of heterogeneous group teaching. However, neither side is agreed with much factual or objective backing. Research findings can be placed in three groups: one for streaming, another for non-streaming, and a third inconclusive group. Goldberg et al. conclude that there is 'no consistent predictable effect' attributable to patterns of grouping.

If non-streaming has become an organic method of grouping and emerged as a social force, then pressure to adapt it, and a ground-swell of opinion in favour of continuing with it, would have been applied. Yet, the remarkable swing from streaming to non-streaming may be regarded as clear evidence in favour of indecision. For example, while non-streaming gained considerable support in England and Sweden, due to the existence of some correlations between social class background and stream placement, it lost much ground in the USA since the Sputnik provocation in the late fifties.

Nevertheless, non-streaming is the prevailing method of grouping in comprehensive education. Asserting this point, Kelly writes

"Streaming by ability is now the exception rather than the rule in the organisation of primary schools and there is a growing movement away from it in secondary schools."

This is due to the growing dissatisfaction felt by some educators and laymen with the effects of streaming. These effects can be examined as follows.

2.1 **Effects on Academic Aspects**

It might seem reasonable to group pupils in order to facilitate teaching process. The wide range in ability, readiness and capacity of children of the same age requires grouping devices for effective learning.

Most of the advocates of streaming identify two major results of such a method of grouping: the increase in achievement, and the reduction in the range of abilities of pupils within a classroom.

Perhaps a more acceptable basis for supporting ability grouping is its
potential implication for the effectiveness of the teacher. A considerable number of teachers believe that streaming is a legitimate and worthwhile method. It is not as difficult for the teacher to work with a somewhat homogeneous group. Since grouping tends to reduce the range of abilities and interests, many teachers feel that this reduction makes it somewhat easier to plan and conduct a class. Hilda Taba states 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 the strategy to create conditions for aiding not only academic learning but also the type of learning for which direct teaching is ineffective."

Analysing the responses of a questionnaire sent to a large number of teachers in London and the Provinces, Cyril Burt found that teachers with five or more years experience were fully agreed that a class which was relatively homogeneous in respect of general ability was far easier to teach than one which was heterogeneous. He added

"In a classroom where the pupils vary widely in their abilities, the dull quickly become depressed and often the brightest become bored and restive."

However, streaming should not be accepted uncritically. It is probably beneficial to some bright children and to the very weak, but there is little to commend it for the great majority of children. Warwick argues

"Streaming or grouping by ability so often achieves only two things for the majority. It destroys much of the innate potential of the individual; it places emphasis upon competition rather than a cooperative pooling of experience and skills."

Careful research findings show that achievement is not increased, and the great reduction in variabilities is not realised. Goldberg and Passow find that

"Ability grouping per se did not have any positive effect on the academic attainment... The variations in achievements were influenced more strongly by teacher and group differences in individual classroom than they were by ability range, position, or even the intellectual ability of the pupils."

On the other hand, with non-streaming there has been a convergence of both the brighter and the slower towards the mean. Kelly points out
"The less able do considerably better in the unstreamed school, as one might expect if they are happier, more involved and better motivated, but on the other hand the really bright pupils, the gifted, the high-flyers do less well."

2.2 Effects on Social Aspects

The emotional and social development of children of average and below average ability is strongly affected by streaming or non-streaming methods. There is evidence that streaming produces undesirable social attitudes towards school. Many studies have highlighted its inhibiting effects on those aspects of children's development other than academic, as well as the harmful effects of streaming on the individuals' pictures of themselves. Children's comments show the negative consequence of streaming and indicate the implicit disturbance in themselves. They acquire undesirable labels. Ability grouping also reduces the opportunities for pupils to learn from one another. Many studies show that parents put considerable pressure on children to get into, and stay in, high streams.

Although he was at first enthusiastic for the revival of streaming in American secondary schools, Clark also expresses his vision of the injurious effects of streaming as follows

"I am disturbed at the number of times I have been told 'This is a slow class, you cannot expect much from them' or 'This is one of our slow college preparatory classes. It is not an example of the best we can do'. I am further disturbed at the number of teachers who look down their noses at good average or even better-than-average children just because they are not academic geniuses, and of teachers who are insulted by the number of schools in which the teachers seem to have given up entirely on the slow pupils and make no effort to teach them anything."

Teachers in streamed schools often feel themselves adversely grouped. Those who are assigned to low classes miss more chances than do teachers assigned to high and average classes. Pupils tend to look at their teachers in terms of the group within which they are placed. On the whole, streaming practices often strain staff relationships within a school.

Moreover, streaming by ability reinforces the process of social selection. 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. Kenneth Clark has
condemned streaming on grounds of inequality of opportunity, undemocratic provision, unfair competition and undue pressures. He points out that "Probably the chief argument against homogeneous grouping is the fact that children so segregated lose their individuality... Homogeneous grouping tends to require that children be seen in terms of group characteristics rather than in terms of their own individual characteristics."

Eyre, a headmaster of a junior school, believes that streaming can cripple a child's natural development. In accordance with his experience with unstreamed classes, he is convinced that children taught in heterogeneous groups gained vital important educative experience.

3. Grouping in American Comprehensive Schools

American educators are concerned with the dilemma of homogeneous versus heterogeneous grouping. Some believe that if a school is to offer each student the opportunity for optimum development of his capabilities, the programme of studies and the techniques of instruction must be those most effective for each individual. They reasonably assume that a teacher can do a more competent job if the classroom contains students of relatively similar ability. Other educators support heterogeneous grouping on social grounds such as equality of opportunity and harm of discrimination.

Homogeneous grouping has become acceptable practice in most American school systems. Conant observed that a remarkable change in the attitude seems to have taken place as regards the ability grouping. A very large percentage (96.5%) of schools replying to his questionnaire reported that they were using grouping in one or more subjects. He also found that the old objection to ability grouping seemed to have largely disappeared.

Woods indicated that ability grouping seemed to be meeting with less resistance than at any previous time in the history of American schools. He has attributed this change to the advancement of science in the Soviet Union, as well as the sudden realisation that America must give scope to ability grouping if they are to survive as a free nation. Therefore, there has been once again a definite trend towards grouping. It is widely accepted, for the good of the students and the school, that there should be separate classes depending on the rate of learning of the student.

It is not only the attitude of educators, but also that of the parents towards grouping that has radically changed. Stonecipher noticed that, at
first many teachers and school administrators were lukewarm towards grouping, where many parents were violently opposed to it on grounds of discrimination. But today parents expect grouping to be done. Educators and parents work together to solve basic problems that may be associated with grouping. Consequently, Tanner stresses that

"Only a decade earlier our schools were in hot pursuit of academic excellence through the national curriculum reform projects in the academic disciplines coupled with massive testing programs to discover and develop the academic potential of our nation's talent resources and to screen and group students by ability as well as to impose quality controls on educational machinery."

Nevertheless, not all teachers are in favour of homogeneous grouping. Conant met competent teachers who argued for the heterogeneous grouping, who believe that students of widely different academic abilities and reading skills should be placed in the same class. He also met other teachers who were equally certain that justice cannot be done to either the bright students or the slow readers if both receive instruction in the same class. Some of those who feel that heterogeneous grouping is a mistake advocate tracking. Others advocate grouping students according to their ability.

Although leading educationalists such as Conant and Gardener defended the American comprehensive high school and its diversified aims and functions, they proceeded to propose a variety of mechanisms through which the school would discover and develop the academic potentials of talented youth. Many aspects of Conant's report were tailored for the pursuit of academic excellence. He called for counsellors and special guidance officers to be assigned to highly gifted pupils, the introduction of a system of ability grouping on academic inventory, a system of ranking according to grades in academic subjects only, summer schools for bright students as well as for others, and college-level studies for students with high achievement through advanced placement programmes. Yet, Conant suggests that

"If a comprehensive high school is to fulfil its social political functions, there must be one course required of all in which the assignment to a class is not in terms of ability or promise, but is on a random basis. The existence of such a course stands out as evidence of the schools' commitment of equality."

In 'The Report of the President's Commission on National Goals', released in 1960, John Gardener, then the President of the Carnegie Corporation,
recommended that

"Every school should have a testing program beginning in grade one if not before... there should be various forms of grouping by ability from the earliest year of school."

The NEA's Educational Policies Commission advised educators of the 1960's to "get behind the child and push" maintaining that

"It is appropriate in our society to consider education as a demand upon the individual rather than as a privilege or as therapy."

Thus, from the late 1950's and the mid-1960's American schools adopted massive grouping ability devices to develop the academically talented youth, and to meet the nation's requirement for more and better scientists, mathematicians, engineers and linguists. Yet the peak of the second ascendancy of ability grouping seemed already to have passed. However, in addition to ability grouping, Wilhelms has pointed out a number of kinds of groups: those confined to special difficulties in some subjects, interest groups, special ability groups, friendship groups and committee groups. We confine our discussion to three major grouping devices.

3.1 Tracking

Despite the fact that the comprehensive schools can offer diversified programmes without tracking students, some large urban schools persist in grouping students into tracks.

A track, according to Dumas and Beckner, is an organisational device designed to furnish an appropriate sequence of courses for students with different abilities and interests. Christina Tree sees tracking as conjuring up the image of passengers bound on a set route for a set destination. In her terms, tracking

"means dividing students into set programs, each with a different destination/diploma at the end."

Partial or complete tracking is a common practice in American secondary schools. Students are grouped to one of three tracks: college preparatory, vocational or general tracks. More, or fewer, tracks are used as desired. Each track involves a specific group of subjects, some are compulsory, others optional. Each student is placed in one of the tracks according to his abilities and interests. Those with considerable ability, especially in academic subjects, would be assigned to the college preparatory track.
Students with satisfactory achievement and ability are placed in the vocational track. Those who are not qualified for either tracks are placed in a general track which, according to Tanner, prepares students neither for the world of work nor for post-high school education. Distinguishing between general education and the general curriculum track, Tanner writes

"Where general education is designed to serve all youth regardless of their present and future stations of life, the general curriculum track has served as a means of shunting those students who do not fit into the established college preparatory or vocational programs, into a non program called the general curriculum track."

Theoretically all students, whatever their past record, are free to press for admittance to college preparatory track. However, each high school is free to establish its own criteria for those who enter an academic course. Tree has pointed out that most schools prevent entry to pupils who are more than two years behind in reading and mathematics. Tracking also provides, in theory, considerable flexibility to allow students the opportunity to move freely from one track to another if their records and interests justify a change. However, because of administrative inflexibility, most track systems do not allow students very much freedom to select courses from tracks other than the one in which they are enrolled.

In recent years, the American high schools have come to recognise that tracking serves no useful purpose. According to Tanner, "it only tends to accentuate differences along social-class lines." Tree also regards

"Tracking is a dirty word in the system. Still, the fact is that a variety of high school diplomas, each with a distinct value and set of courses leading to it, are conferred by a variety of academic and vocational high schools."

Tracking has been declared unconstitutional in 1967 decision of the Washington Federal District Court when Judge S. Skelly Wright ordered an end to the practice of grouping students according to tracks in the schools in the state on grounds that such tracking served to perpetuate racial segregation.

3.2 Homogeneous Grouping

This method of grouping is seen as an answer to the demands made upon schools to educate effectively all American youth. Homogeneous grouping or ability grouping is not a new phenomenon in American education. It enjoyed
its first great vogue during the twenties and the thirties. Wilhelms, however, noticed its decrease after 1935, and Shane found that it was again on the increase in the late fifties. 70 The era of the cold war and the space race resulted in an unprecedented national campaign for the pursuit of academic excellence.

The first grouping in a large school was done in Detroit, but now practically all school systems have made grouping a standard procedure. The Detroit plan for homogeneous grouping was based upon special standardised tests designed to measure ability to do school work. Many schools used the intelligence quotient as an index for homogeneous grouping, but nowadays they use a variety of criteria.

Considering the use of one criterion or a group of criteria is subject to debate. Talking with a group of principals who attempted to develop criteria for grouping, Ahrens concluded that

"When criteria in addition to mental ability were used, the groups formed showed a high degree of homogeneity. So they (the principals) reverted to grouping according to the mental ability, believing that the achievement range would be greatly reduced when only ability criterion was used."

71

On the contrary, Woods argues for using a variety of criteria. He writes

"a single criterion does not prove satisfactory. Schools which use scores on mental ability tests, reading tests, or achievement tests as the single determining factor for dividing the pupils find a great deal of overlapping of ability among different sections. Although it complicates the mechanics of administering the plan, a combination of criteria for selection purposes proves much more satisfactory in reducing overlapping between groups and heterogeneity within the groups."

72

On grouping students homogeneously for effective instruction, Graham takes into consideration

"students' achievement scores, potential for learning, interests, reading skills, work habits, special talents in art and music, educational goals and emotional ability."

73

While Johnson and his collaborators count a variety of criteria used in homogeneous grouping, they point out that

"All too often, however, ability grouping has been based solely on the results of intelligence tests."

74
Table 8.1 indicates the type or types of criteria used by American schools in grouping. The five criteria most widely used were found to be: intelligence quotient, school marks, reading levels, standardised achievement test results, and teacher estimates. These may have been used singly or in combination with others. However, it is evident from the large percentages shown using each of the criteria that most of the schools used several rather than a single one. Each criterion was used by more than half of all schools of each type and size. The table also shows that considerably fewer schools used such criteria as interests, special aptitudes, and social and physical maturity. The proportion of schools using various criteria did not vary greatly between the two organisational patterns. Variation between grades was not very large. The only remarkable difference was that the proportion of schools using reading levels as a criterion decreased from grade 7 to grade 9, while the proportion of schools using interests and special aptitudes increased.

There are many different ways of ability grouping as there are schools that conceive a need for them. However, one can consider only three of the most common procedures in existence.

(i) Area-subject grouping

The school usually selects one or more of its general education courses for grouping students. Mathematics and English alone, or in combination with other subjects, are most frequently used. Some schools include science and social studies. Since these courses are required for graduation, the variability of academic aptitude is most pronounced in them.

Having determined the course in which the grouping is to be done, the school has to decide the level of ability to be used in the process. If the school is small, and there are normally two sections of courses, the logical plan is to have two ability groups. If there are three or more sections of the course, it might be desirable to have three ability levels. Few schools are using a grouping plan in which there are five or more ability levels. However, the general practice is to have more than three.75

Table 8.2 shows the percentage distribution of junior high schools and junior-senior high schools having homogeneous groups by subject-areas or combination of areas.

It is clear that in grade 7 and 8 a large majority of schools used such grouping in all four subjects, English, social studies, mathematics, and science. In the 9th grade approximately half the schools grouped pupils
Table 8.1
Percent of schools using specified criteria for grouping for effective learning, by grade, and type and size of school

<table>
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<tr>
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<td>Total</td>
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<td>Total English</td>
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<td>Total Social Studies</td>
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<tr>
<td>Total Science</td>
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</tr>
<tr>
<td>All Others</td>
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</tr>
</tbody>
</table>

in these four subjects. In the 7th and 8th grades no other combinations of subjects attracted a large proportion of schools but in the 9th grade the combination of English, mathematics and science provided the basis for grouping in rather large proportions, and the combination of English and mathematics attracted the next highest proportion.

(ii) Partial grouping

An increasing number of schools is using another method of homogeneous grouping in which only a proportion of the pupils are segregated from the overall group for instructional purposes. Some schools separate the slow learners and keep the average and fast learners together. Others do the reverse by grouping the fast learners and leaving the remaining levels of ability together. The fast learners are grouped in classes of larger size, whilst the slow ones are placed in smaller classes. Greater emphasis is given to the minimum essential and concrete experience.

(iii) Reading grouping

A third method is made on reading test scores. Tree suggests that by circumstance instead of design reading has evolved as the basis of grouping. In 1930, for example, the Bureau of Education Research of the New York City explored the causes of retardation and found that in 90% of the cases it was due to reading. Reading thus began to be stressed and to form the core of the curriculum. With the criticism of IQ scores, the weight was shifted to performance on citywide standard reading tests.76

This method of grouping begins with a basic level of reading and permits a student to move more quickly from one level to another. It also allows easier adaption of text materials and planning of methods of instruction. Its drawback is a certain inflexibility of scheduling if the student elects special subjects which have only one place in the daily schedule.

3.3 Special Grouping

Many schools provide special grouping for mentally exceptional or handicapped students who deserve special attention and careful adjustment of instruction to keep pace with their various abilities and interests, so that every pupil could be helped to make the most of his potentialities. Special grouping may be classified into three categories: gifted, retarded and handicapped groups.

It is argued that the superior or gifted group, those who can make
considerable contributions to the advancement of American society, has long been neglected. Cressman and Benda have attributed this neglect to four interacting reasons: first, teachers have not known how to meet the needs of the gifted child; secondly, there has been little opportunity for individual instruction in crowded classrooms; thirdly, the gifted child often causes little trouble in the classroom; and fourthly there has been a general public apathy toward the problem. 77

The pressure of international events, the development of the new age of science and technology, the shortage of scientific personnel have made it imperative to seek out and develop to the fullest the intellectual and creative power of American youth, particularly the gifted group. 78 Gifted pupils differ from the majority of their classmates in their ability to master abstract concepts, in their spread of comprehensions and in their creative expression. Numerous means of helping talented youth are described in the 1964 Report of the Superior and Talented Students Project of the North Central Association of Colleges and Secondary Schools. The project report summarises the methods, difficulties and results in the 62 projects in such matters as identifying counselling and motivating superior students, and also in providing appropriate curricula experience for them. Because there is no single optimum pattern to educate the gifted, a variety of approaches has been attempted to provide them with better education. In the American experience there are three distinguishable approaches: special schools, honor courses and advanced placement programmes. 79

A retarded or slow-learning group, according to Dumas and Beckner, comprised of those students who are either unable to learn at the normal rate or for some other reason have fallen too far behind to benefit satisfactorily from regular classes. 80 The retarded or slow-learning group is best taught in remedial classes. Such classes are available in many schools. For example, remedial classes for the improvement of reading skills are common and provided by the majority of school districts. Such classes need to be small, and a variety of teaching aids is widely employed. Recent programmes initiated by the Federal Government and supported by federal funds have greatly stimulated the development of such a group. 81

If progress is proven by the retarded or slow-learner and he or she is eventually able to be integrated in the normal classes, transfer is tried, and on some occasions he or she can continue quite well. The importance of
stressing success rather than failure is most effective with retarded individuals. Most school districts also provide special facilities for handicapped students. 82

4. Grouping in English Comprehensive Schools

Most English comprehensive schools face a dilemma of grouping for teaching purposes. This is due to the wide range of ability of their intake on the one hand, and the desire to give each pupil every opportunity of working to the full extent of his capacity and avoiding undue competitiveness on the other hand. However, different schools adopt different methods of grouping. The choice between streaming on the basis of rigid differentiation of ability and mixed ability grouping is a difficult decision. Homogeneous grouping, it is argued, may facilitate teaching process but runs against the principle of abolition of selectivity. There is also the difficulty of teaching mixed ability groups which is considered as an integral part of the comprehensive ideal and requires adequately trained teachers.

The majority of early comprehensive schools, established in the midst of the selective system, used streaming in recruiting their pupils whilst a few operated non-streaming methods. Pedley argues that

"In the early days of comprehensive schools it was indeed almost universal practice to group children on the basis of general ability in streams as indicated by their performance in eleven-plus examination or reports from primary schools."

83

Therefore, within the selective context of the English educational system and the wide freedom of schools, nearly every school has developed its individual methods. However, it is possible to identify several major types ranging from rigid streaming to genuine mixed ability. Griffith, for example, defines such types of grouping pupils for teaching purposes as

"streaming, parallel forms, subject setting, broad ability bands, mixed ability groups, vocational aspirations, subject classes and pupils' intentions as to age of leaving."

84

These various methods, however, may be used in different ways. For example, pupils may be rigidly streamed in the top of ability range, but in parallel classes below. Mixed ability classes may operate as genuine
ones for all the pupils and subjects, or as mixed ability classes for all subjects with remedial pupils separated, or mixed ability classes for all pupils and subjects except certain academic subjects, usually mathematics and foreign languages, to be taught in sets. Some of the popular methods of grouping are discussed as follows.

4.1 Streaming

Streaming has for long been a distinct feature of the English educational system. Although it was experienced in the older grammar school as well as in the public school, it was not until the 1930's that it became a widespread practice in the state-maintained schools. Streaming seeks to provide homogeneous classes, or roughly the same level of ability and to keep these classes stable for all the teaching or learning activities. The procedure involves the division of the pupils into series of forms, A B C... etc. graded according to an assessment of the pupils' intellectual ability. However, this has been adjusted to cope with the changes in the educational context, particularly the establishment of the comprehensive schools, the abolition of the eleven plus examination, and the introduction of the middle school as a unit of the comprehensive school or as a separate lower school. It follows that many schools prefer to use their own judgement in making their streaming.

Upon entering the school, the new intake spend their first two days taking a variety of tests principally in mathematics and English. These tests are internally designed by teachers who are to be the most concerned with the first year classes. The marks are totalled without discrimination between the marks of each subject. Then a place list is made out for the whole intake. If the intake, for example, is to be 120 pupils, the A class is made up from the first thirty in the overall placing, the B class of those placed thirty-first to sixtieth, the C class of those placed sixty-first to ninetieth, whilst the last thirty form the D stream. Thus, it is obvious that the A stream contains the most intelligent pupils and the D stream the least.

4.2 Setting

Setting is employed as a method of internal organisation for teaching purposes. In some schools it is combined with streaming to allow a less rigid method of grouping. The procedure of setting is mainly the regrouping of pupils in parallel streams into homogeneous ability groups for those subjects in the curriculum normally considered more difficult, such as
mathematics, foreign languages and science, since most teachers find it easier to teach such subjects in a homogeneous ability group than in a mixed ability group. 87

Thus, setting ensures that in addition to being in a form with pupils whose work on the average is comparable with his own, a pupil is taught certain subjects in homogeneous ability groups which may vary from one subject to another. Although theoretically this idea of subdividing is possible, it depends practically on the availability of sufficient teachers. However, an interesting innovation is taking place in this method in which setting would be used as a stage in the transition towards the non-streaming system. Here pupils of varying ability are grouped together, for social and administrative purposes, to be taught some subjects which are not usually considered as academic in character such as art, physical education, music and crafts. 88

4.3 Banding

The third method of grouping in comprehensive schools is the broad ability bands. This was first pioneered in the early fifties. Some comprehensive schools rejected the concept of the practice of streaming, due to its inconsistency with the comprehensive principle; on the other hand, these schools did not wish to operate the other extreme of non-streaming. The alternative was the broad ability banding as a stage in the transition towards non-streaming. 89

In essence, this method can be regarded as a modified form of streaming. It has certain advantages for the large comprehensive school in particular. The procedure is to divide the pupils into a few broad bands instead of many narrow streams. For example, instead of dividing a twelve form intake (i.e. 360 pupils) into twelve streamed classes graded from A to L, the intake is divided into two, three (usually) or four (rarely) broad bands of pupils. These divisions, however, are based on ability assessed according to some criteria.

The banding method may have various distribution. A school with twelve form-entry and three bands might be organised into three groups of four classes, or any other variant such as: an A band with three classes; a B band with five classes; and a C band with four classes. With these bands, various methods of grouping pupils are possible. Any particular band can either be graded in streams or arranged in parallel forms. The parallel forms seem to be the useful arrangement. In this case the pupils in each
band are distributed in classes each of which reflects the wide ability in the band as a whole. Therefore, the A band is similar to A stream but it also differs since it may have two, three, four or even five classes of similar make-up.

4.4 Mixed Ability Groups

Non-streaming or mixed ability grouping is a comparatively recent development. This aims at giving all pupils, regardless of their innate ability, an equal opportunity of sharing the best of the teacher, and of the available teaching facilities. It is claimed that, it can ensure the maximum progress of pupils regardless of the variety of abilities within a class. Conway states that

"The brightest pupils will make adequate progress unaffected by the slower progress of less able colleagues; on the other hand, their accomplishments will inspire the less competent, who will be motivated to greater efforts than would be likely if they had only less able pupils as their class companions."

The basic unit for teaching activities in this method is the class. But the class here differs from the class in streaming, setting or banding. The composition of the class usually reflects the distribution of ability in the school as a whole. Benn and Simon point out that theoretically each class

"contains an equal proportion of pupils of high, medium, and low intellectual ability as assessed according to a given criterion."

Though mixed ability grouping is normally equated with non-streaming, the latter has a broad connotation. Non-streaming allows grouping students by other criteria than of ability. For example, it may assess them from a given neighbourhood or mixing neighbourhoods, by forming friendship groups using sociometric tests, by alphabetical grouping, or by random sampling.

Mixed ability grouping ranges between a genuine form of mixed ability and a strict form. Three forms of mixed ability grouping can be distinguished. One is mixed ability with sets. This method is used by schools which have rejected the concept of streaming or banding as major principles of grouping and whose teaching staff of certain academic subjects prefer to form homogeneous groups for their subjects. In this type of mixed ability grouping, pupils are arranged in unstreamed classes for the majority of their
work, but are regrouped in sets for certain subjects, usually mathematics and foreign languages. Thus, the school retains its basically unstreamed character even if it runs a sort of streaming for part of its work. The second is mixed ability with separated remedial pupils. It is used by schools that are moving over towards non-streaming. In such a method, nearly all pupils except a group of the slowest learners are arranged in unstreamed classes for all subjects. Those pupils with special learning problems are separated and taught in special remedial classes for all or most of their work. It is argued that this case allows for the lowest learning children to be taught together at an appropriate pace, and with appropriate materials, by teachers either specifically trained to teach these children, or particularly interested in their problems.

The third method is the genuine mixed ability grouping. This intends to arrange all pupils, including the most backward, in unstreamed classes for all subjects. In schools operating such a method, the attention is given to the slow learning pupils without separating them into special classes. Therefore, schools utilising such a method of grouping represent an entire non-streaming system.

4.5 Remedial Groups

Remedial grouping is an important issue in the comprehensive context which connotes the arrangement for pupils with learning difficulties. Most of the established comprehensive schools have remedial departments responsible for teaching slow learners. There is remarkable variety in practice, teaching facilities, staffing, and the proportion of capitation grant allocated to the remedial departments. They also differ in size, for instance, some schools with 1000 pupils define 13 as remedial, while others of the same size classify 160 pupils. However, the usual size of the remedial department in some large 11-18 comprehensive schools with over 2000 pupils is nearly 230 pupils. The usual size in Inner London Education Authority schools varies from 30 to 90 pupils. Staffing differs, too, from 1 or 2 up to 6 or 8. The methods of teaching also vary. Some departments use small group teaching, while technological approaches such as games, programmed mathematics, team teaching, projector and television, and laboratories are used in others.

The remedial departments are organised according to two types of policy: segregation of the slow learning or their integration. However, differences
exist as to the degree of segregation or integration, depending on the character of schools and the attitudes of teachers. Streamed or banded schools segregate their slow learners in remedial groups. They consider this method as a necessary or a preferable action. Whilst the strict form of segregation inclines to social segregation, flexible forms intend to segregate the remedial pupils only for academic subjects, such as mathematics, French, history, geography, yet arranges them in groups with normal pupils for classes in crafts, physical education, music and arts. Ross and his collaborators find that

"in the remedial departments the schools concentrate on the younger rather than the older pupils and more boys and girls in their first and second year receive special tuition than in their third and fourth."

Unstreamed schools incline to integrate their slow learners fully with the mixed ability classes. The remedial pupils are taught with their more able colleagues for all, or most of, the subjects. In this case, the backward children are withdrawn as individuals or small groups for specific remedial work in a certain subject or subjects. This system of withdrawal is workable in most of unstreamed schools to avoid a substantial separation of any group of pupils. Some schools have modified this type by reducing the withdrawal to a minimum degree, and by making the remedial staff and other teachers of a particular subject-area of a particular year group working together as a team responsible for an area of work.

5. **Grouping in Swedish Comprehensive Schools**

Internal organisation for academic purposes in the Swedish schools has been remarkably changed since the 1950's. A fundamental principle of the reform has been to permit the greatest possible freedom of choice to the individual in the election of his kind of education and career. This norm has been institutionally implemented as to abolish the classification of pupils into parallel systems, to avoid the early differentiation, and to give the students the right to choose their own educational line themselves.

Differentiation is introduced late and gradually in the Swedish schools. In the 9-year compulsory comprehensive school, for example, there is no differentiation at all during the junior and middle levels. In the 7th and 9th grades 4 periods out of 35 are allocated for optional subjects. In the 8th grade the number is limited to 3 per week. The previous differentiation
of pupils into lines in the 9th grade came to an end recently. Differentiation, however, incorporates the principle of free choice of lines and elective subjects. In the integrated upper comprehensive secondary schools students are also differentiated into lines according to their own free choice.97

Grouping procedures in the Swedish comprehensive school as well as in the integrated upper secondary school are very simple. Neither selection nor streaming is used in differentiating the pupils. Although some lines in the upper comprehensive school require certain qualifications for admission, all pupils enjoy the possibility of a free choice of the lines regardless of the chosen options in the comprehensive school. In spite of the prohibition of streaming, there is some setting of English and mathematics from the age of 13 according to ability. However, the choice of the two levels of instruction in such subjects is made by parents, guided by advice of teachers.98 The different methods of grouping are discussed as follows.

5.1 Mixed Ability Grouping

When this form of grouping used in Sweden, the chronological age is considered the basic criterion of grouping. Yet some forms of tests based on ability are administered. For example, it is common to find that a school readiness test is given to the beginners in many municipalities in order to get some idea of the degree of development of the children before they begin school. Nevertheless, it is stressed that school readiness tests are not entrance examinations, nor are they compulsory. All children of seven years old, regardless of the results of such tests, are entitled to attend the 9-year compulsory school.99

Children in the lower level, grades 1 through 3, are heterogeneously grouped. Within such a level pupils keep the same class-mates. When pupils move up to the middle level, grades 4 through 6, they have to be regrouped owing to the varying density of classes in the two levels. The earlier lower stage class may be enlarged by the addition of a few pupils. Sometimes a complete lower stage class is to be broken up and its pupils redistributed among other classes. For example, if a year-group in the lower level encompassed 78 pupils, it would have been divided into four classes of, on average, 19 pupils each, whilst 78 pupils in the middle level are distributed into only three classes of 26 each.100

Due to the structure of common and optional subjects in the upper level, classes are reconstructed in accordance with the pupils' choice of subjects.
This works well in rural areas. Marklund and Soderberg argue that

"Generally speaking, classes can move up from the middle department without having to be reconstructed. This is necessary only when the upper department is centralised and drawn its pupils from several smaller school. This quite common in rural areas of Sweden."

Thus, no division is made on the grounds of marks or intelligence when pupils move up from the middle to the upper level. As far as possible, class-mates are placed in the same upper level class.

5.2 Lining

Lining in the Swedish schools is similar to tracking in the American schools. It was confined to the final grade of the 9-year grundskola. But it is a substantial grouping procedure within the integrated upper secondary schools.

At the comprehensive school nine lines of courses were available. These lines included five principle fields: the theoretical; general; technical; commercial; and domestic science and nursing. While the integrated upper secondary school provides more than twenty lines. These lines cover three major fields of studies: arts and social; economic and commercial; and technician and scientific. These three subject areas include 6, 3 and 13 lines respectively. The majority of these lines are a two-year course (17 out of 23 lines), while four lines are a three-year course, and one only is a four-year course. The majority of these lines are divided into sub-alternatives and variations. There are also a number of special courses of varying length. Some of these can be taken directly after the comprehensive school, while others are deferred until a more advanced stage.

In the ninth grade of the comprehensive school pupils were to be completely regrouped according to their free choice of lines. There was no specific qualification required for the allocation of the pupils to a particular line of study. Pupils chose freely their lines at the end of the eighth grade.

Having finished their 9-year comprehensive school, all students are entitled to attend the integrated upper secondary school. On entering such a school, the pupils have to choose their study line. However, there are certain qualifications required for the admission to the different areas of studies. Before 1969 these admission requirements were varied somewhat as between two-year lines and the three-year or four-year lines. According to the new comprehensive curriculum implemented in 1969, pupils with final awards from grade nine of the basic school are qualified for admission to the two-
or three-year lines of arts and social studies, as well as of economics and commercial subjects. Admission to the technical and natural science lines is conditional on the completion of the special mathematics course in the comprehensive school. 103

As has been stated, more than half of the pupils in the integrated upper secondary are to be found in the two-year vocational lines due to the increasing demand for places in such levels since 1971.

5.3 Free Choice

The free choice of lines and optional subjects has been fully introduced in Sweden. Parents and pupils are given the right to exercise their free choice. During the spring term, the pupils have to make their choice of the optional subjects or line or stream of study for the successive year.

Stressing the importance of the free choice process, Marklund and Soderberg assert that

"Choice is free. The parents, in consultation with the pupil, select the goal of studies the pupil will endeavour to reach. It is not the province of school to distribute pupils in different streams on the basis of school marks or other criteria. A pupil cannot, for example, be prevented from choosing or continuing a theoretical line of study through the school on the grounds of poor study results. No entrance examination or other barriers exist to choice of optional subjects or streams."

Yet, the choice made is not binding on the remainder of the comprehensive school courses. Nor does it affect the grouping in the integrated upper secondary school. If a pupil finds, for example, that he has made a wrong choice, which with satisfactory guidance and suitable information to the parents should be exceptional, he can be transferred to another line or take another optional subject. In other words, a pupil is no longer excluded from any lines of study for choosing a wrong subject or line. Nor can any choice made in the previous classes be decisive for the higher ones. 105

The free choice system has relatively encouraging results. The most salient are: the limited number of patently mistaken choices, the shifting of the teachers' role from carrying the task of sorting pupils into different study routes to taking charge of guiding both the parents and the students to choose the suitable line and subjects, and the increasing of the parents' influence over their children's studies. 106 One constraint affects the right of the free choice process. This applies on the allocation of a
particular pupil for special tuition when the assessment of his aptitudes and needs made by the school overrides the parents' desires.

5.4 Special Tuition

Comprehensive schools provide special tuition through classes of very small size. Large parts of these classes (e.g. two-thirds) are remedial in the orthodox sense. Some are ordinary with regard to academic content but provide an opportunity for the close observation of emotionally and socially maladjusted children, while others are designed for physically handicapped pupils. Recently, clinics manned by specialists have been set up at the large schools for pupils who require special help or treatment. Writing on special classes in parallel classes, Marklund and Soderberg state that in the latter case the pupil

"takes most of his lessons in the ordinary class, but leaves it during some lessons to be taught individually or with a small group by teachers specially trained for such work."

The number of pupils in the special classes varies, but rarely exceeds fifteen. This small number enables the teachers to devote more time to individual pupils than in an ordinary class, though the small number of pupils may make it difficult, however, to satisfy the desires of all special class pupils.

Since some parents do not acknowledge the value of the special tuition as a best means of treatment for their children, the allocation of pupils to such classes has been strictly regulated. However, the transfer of a pupil to a special class is principally made with the cooperation of parents, though the decision of the school board sometimes may run contrary to that of the parents. Marklund and Soderberg point out that

"The school board may decide against the wishes of the parents if the school is convinced that it is necessary in the interest of the pupil himself and that of the class that he be given some kind of special instruction. In such cases, the parents may appeal to the country board of education."

The decision of assigning a pupil to special tuition is made after a careful inquiry including both medical and psychological investigations, and conferences held between the teachers, who have taught the pupil, and his parents. Having taken this decision, the headmaster and the teacher have to follow carefully the pupil's progress in order, if possible, to transfer him again to an ordinary class.
6. Conclusion

One of the practical problems facing the comprehensive school administrators is whether or not to group students for teaching purposes. The foregoing analysis has comprised two major issues: research on streaming versus non-streaming, and their academic and social effects.

Having put the argument pro and con grouping, we were able to conclude that it is difficult to discern any clear-cut trend as to the advantages of the streaming or non-streaming system. Owing to the complexity of such an issue, no specific research we have been able to examine could cover more than one of the many aspects involved. In addition, the interpretation of findings was beset by many difficulties. These can be identified as: the varying of the prior importance in the view of researchers as regards some aspects of streaming and non-streaming, the dissatisfaction of the research technique to meet the criteria of consistent comparability, and the difficulty of selecting experimental and control samples on a strictly random basis. Given the above difficulties, the findings of research have not lent themselves to any specific hypotheses on the effects of different educational treatments. However, irrespective of the criticism, research findings in relation to academic effects seem to be in favour of streaming, due to its facilitating learning processes. As far as the social effects are concerned, the findings seem to yield, on the whole, evidence of a trend in favour of non-streaming.

The issue of streaming versus non-streaming has raised a specific dilemma in the comprehensive school system. Whilst the debate rages on academic grounds, it continues quietly on social ones. While streaming has emerged as a technique to reduce the range of abilities in classrooms for the purpose of an effective instruction, mixed ability grouping is thought to create a learning situation which enables the student to promote his abilities, interests and aptitudes.

There are different types of grouping, the most salient of which are: grading, tracking, teachability, and special grouping. Yet such patterns may be centred around either homogeneous or heterogeneous grouping.

All the countries under investigation use one form or another of grouping. All share the awareness of individual instruction. Remedial classes for under-achieved pupils and special classes or schools for handicapped students have been instituted. The focus of emphasis differs
among the three countries. In the United States, much attention has been
given to the gifted talent since the late fifties. American educationalists
have introduced special schools, honor courses, and advanced placement
programmes as approaches to promote the potentialities of the talented
youth. In Sweden, the focus has been concentrated on the process of free
choice for parents and students to select the line of study and the
optional courses. There have also been important and effective programmes
of guidance and consultation. In England, the emphasis swings between
streaming and non-streaming due, among other reasons, to the co-existence
of grammar and comprehensive schools.
REFERENCES


17. Halsall, E., op.cit, pp.16-27.

Griffiths, A., op.cit., p.29.
22. Ibid., pp.112-113.
27. Ibid., pp.67-73.
28. Ibid., pp.103-104.
30. Marklund, S., Comprehensive schools : Research strategy and its links with educational policy, Strasbourg, Documentation Centre for Education in Europe, 1073, p.34.
32. Ibid., p.250.
37. Tillman, R., Is ability grouping taking schools in the wrong direction? Yes, The Nation's Schools, Vol.73, No.4, April 1964, p.70.


43. Tillman, R., op.cit., p.70.


45. Tillman, R., op.cit. p.128.


51. Stonecipher, B.L., op.cit., p.77.

52. Tanner, D., Secondary education, op.cit., p.25.


54. Ibid., p.49.


60. Dumas, W. and Beckner, W., op.cit., p.200.


64. Ibid., p.320.


78. Ibid., p.351.


83. Pedley, R., The comprehensive school, op.cit., p.98.
85. Monks, T.G., Comprehensive education in England and Wales, op.cit., p.45.
88. Ibid.
89. Benn, C. and Simon B., op.cit., p.220.
90. Ibid.
91. Conway, E.S., op.cit, p.36.
92. Benn, C. and Simon B., Half way there, op.cit., p.221.
93. Ibid.
96. Ibid., p.90.
100. Ibid., p.98.
101. Ibid., p.103.
103. Ibid., p.22.
109. Ibid., p.87.
CHAPTER NINE

CURRICULUM THEORIES

1. Curriculum Definitions

2. Curriculum Theories
   2.1 Encyclopaedism
   2.2 Essentialism
   2.3 Pragmatism
   2.4 Polytechnism

3. Conclusion
The curriculum as an educational institution operates within two related matrices. The first comprises the educational institutions and the second includes other social institutions external of the school. Thus the curriculum is affected by numerous educational and social influences. Therefore, it has to respond to a wide variety of changes in philosophical, political, social, and economical aspects of a particular society. However, within the large diversity of practice in different parts of the world, there is a solid core of similarity stemming from the application of one curriculum theory or another. Since there is a close relation between philosophical thought and educational practice, a distinction between curriculum theories becomes imperative.

It has always been difficult to decide what to include under the label of curriculum theory. There is a profusion of the term ranging from applied psychology to several educational theories, and from cultural heritage to philosophical tenets regarding the nature of man, knowledge, and society. Various attempts have been made to approach curriculum theories, nevertheless, the field still suffers from a lack of accurate definition and from a lack of a common nomenclature.

Thus we shall try in this chapter to explore the difficulties of theorising the curriculum. First we debate the various definitions. Then we attempt to offer an outline to four theories based on Holmes' classification and argument.

1. Curriculum Definition

The term 'curriculum' has been given several meanings and a number of different definitions. During the early decades of the twentieth century the long-standing conception of curriculum, as the cumulative transmission of organised knowledge came to be challenged. The need for a radically new conception of curriculum was the inevitable result of a number of changes relating to the nature of knowledge, the conceptions of learning, the nature of society and the functions of the school. Not only have the definitions of curriculum undergone marked changes during
the first half of the twentieth century, but contemporary curriculum planners were also far from agreeing on how the term should be defined. The perennialist position as represented by Hutchins, holds that the curriculum should consist principally of the 'permanent studies' - the rules of grammar, reading, rhetoric and logic, and mathematics (for the elementary and secondary levels of schooling) and the greatest books of the Western world (beginning at the secondary level of schooling). The essentialist position exemplified by Bester, holds that the curriculum must consist essentially of disciplined study of five great areas - command of the mother tongue, and the systematic study of grammar, literature, and writing; mathematics; sciences; history; and foreign language. Schwab held the view that the school curriculum should be formulated according to 'the structure of disciplines'. He maintains that if we do not take the structures of the disciplines into account and make them integral to the curriculum, "these will be failure of learning or gross mis-learning by our students." Some educators went even further than Schwab in seeing the disciplines as the sole source of the curriculum. Passow has pointed out that

"The curriculum should consist entirely of knowledge which comes from the disciplines... Education should be conceived as a guided recapitulation of the processes of inquiry which gave rise to the fruitful bodies of organised knowledge comprising the established disciplines."

Closely related to Passow's conception of curriculum is Belth's definition. He considers the curriculum to be

"the increasingly wide range of possible modes of thinking about men's experience - not the conclusions, but the models from which conclusions derive, and in context of which these conclusions, these so-called truths, are grounded and validated."

The traditional conception of curriculum as merely a body of school subjects or subject matter came under the attack of progressive educators. As early as 1902, Dewey declared that the curriculum should serve to develop the child's present experience to a richer maturity. He wrote

"Abandon the notion of subject matter as something fixed and ready made in itself, outside the child's experience as something hard and fast... and we realise that the child and the curriculum are simply two limits which define a single process."
Just as two points define a straight line."

On the whole, Foshay, also Smith, Stanley and Shore have observed that since the late 1930's the term curriculum came to be defined as all the experiences a learner received under the guidance of the school. In 1935 a definition offered by Caswell and Campbell states that "the curriculum is composed of all experiences children have under the guidance of teachers." The recognition that pupils' learning is not limited to the formal course of study but is affected, directly and indirectly, by the total school environment called for a broad definition of curriculum as "guided school experiences". However, Spears has noted that such a broad definition of the curriculum "had broken loose from its academic moorings and moved on out into the total programme of activities that was to serve the individual learning while under the guidance of the school."

Nevertheless, curriculum writers continued to offer similarly broad definitions. For example, Tyler in 1956 viewed curriculum as "all of the learning of students which is planned by, and directed by the school to attain its educational goals."

He went on to point out that this inclusive definition encompasses educational objectives, all planned learning experiences (including extra class and learning activities at home insofar as they are planned and directed by the school to attain its aims), and the appraisal of student learning.

Another definition closer to Tyler's was offered by Kerr in the late sixties. He regards the curriculum as:

"All the learning which is planned or guided by the school, whether it is carried on in groups or individually, inside or outside the school."

However, such broad definitions, that see curriculum as planned learning experiences, were rejected by some educators who prefer the use of the term curriculum to denote a systematic arrangement of several subjects. As Richmond has observed, referring to England:

"To this day, the common tendency is to equate the curriculum with the syllabus... 'a course of study' or quite simply 'subjects'."
Tanner and his colleague have asserted the need for a definition of the curriculum conveying the full meaning of the term and specifying sufficiently the unique role of the school as an educating agency. They propose a tentative definition of the curriculum as:

"The planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge and experience, under the auspices of the school for the learner's continuous and willful growth in personal-social competence."

This definition regards knowledge, and the ways of acquiring it as dynamic. Consequently, the curriculum is not concerned merely with transmitting the cumulative tradition of knowledge, but also with the systematic reconstruction of knowledge in relation to the life experience of the learner. Moreover this definition recognises the appropriateness of curriculum to the learner's stage of growth and to the possible development and use of knowledge in future as well.

Changes in the concept of curriculum as exemplified by the various definitions, ranging from the more traditional to the more revolutionary, have been reflected in the succeeding editions of the Dictionary of Education. The 1959 edition, for example, offers the following definitions of curriculum.

"(1) a systematic group of courses or sequences of subjects required for graduation or certificate in a major field of study, for example, social studies curriculum, physical education curriculum.

(2) a general overall plan of the content or specific materials of instruction that the school would offer the student by way of qualifying him for graduation or certification or for entrance into a professional or vocational field;

(3) a group of courses and planned experiences which a student has under the guidance of the school or college."

The 1973 edition of the Dictionary of Education broadens the conception of curriculum significantly by adding to the earlier definitions the statement that curriculum:

"may refer to what is intended, as planned courses and other activities or intended opportunities or experiences, or to what was actualised for the learner, as in actual educational treatment or all experiences of the learner under the direction of the school."
The wide differences in the aforementioned definitions of curriculum reflect the various points from which curriculum is studied, conflicting educational philosophies, and changing social influences and demands on education. Each of these definitions raises the spectre of dualism – between thought and action, between subject matter and instruction, and between ends and means. Each of them represents partially the meaning of curriculum. However, a major distinction should be borne in mind between those definitions which assert the structure of knowledge as advocated by traditional educators, and those which emphasise the learner's experiences and interests as advocated by progressive educators. These can be related to either essentialism, encyclopaedism, or pragmatism as general curriculum theories.

2. Curriculum Theory

Theory has not played an important role in any of the recent curriculum changes because a coherent theoretical framework for guiding curriculum design is lacking. Most curriculum specialists have directed their interests towards improvement of the curriculum rather than attempting a theoretical classification of curricular phenomena. As a result, a curriculum position has often become confused with curriculum theory. However, renewed interest in curriculum theory has grown out of the curriculum reforms and extensions of research activities since the late 1950's.17

Unfortunately, the term 'theory' has been, and is, used in so many contexts in educational literature that there is some confusion about the implication of the word, the nature of the theories themselves, and the functions that are expected of them. The prime function of a theory, however, is to guide practice. For example, the job of scientific theory is to guide the practice of empirical research. In the physical sciences, the role of theory is to systematise existing knowledge and to set up conceptual relationships from which testable hypotheses may be drawn. Educational theory, according to Maccia, differs from scientific theory. It does not have the aims of generality and objectivity which are associated with theorising in the physical sciences. Moreover, it is not predominantly concerned with the development of hypotheses and universal laws which provide descriptions, explanations and reliable
predictions. In this sense, educational theory, it is argued, is regarded not so much as a set of logically-connected and verifiable hypotheses, but as a unified conceptual framework which can be used in guiding educational practice. To distinguish educational theory from scientific, Greenwood has counted the differences as follows:

"Scientific theory is descriptive, practice theory is prescriptive. Scientific theory consists of laws describing and explaining nature; practice theory consists of principles prescribing ways of controlling nature. The proposition that every organised group eventually develops a sub-culture of its own, is a scientific law. The proposition that every therapeutic plan must consider the sub-culture of the client is a principle of practice."

Educational theory, however, not only provides a rational practice, but a view of the ends towards which teaching and learning should be directed. Hence, educators can deal effectively and efficiently with the problems of curriculum planning, development and evaluation only insofar as there is a theory that gives direction to such fields. Unfortunately, relatively few writers have attempted to systematise a body of curriculum theory. Even recent attempts in curriculum theorising have tended to indulge in an analysis and examination of criteria and taxonomies of meanings, curriculum selection, and organisation, rather than considering theory structure. Wann has attributed the lack of actual theory construction to a preoccupation with traditional orientations; means and ends; applications of theory from other fields; a concern with theory-making itself; and a preoccupation with language in the Oxford manner.

Maccia is one of the few researchers who have worked on the problem of theorising in education in general and in curriculum in particular. Although she borrowed models from mathematics, she has stated her meaning of curriculum theorising in logical terms and went on to identify four kinds of curriculum theory as follows:

1. Formal curriculum theory which gives meaning to form and structure of the main themes of a particular discipline.

2. Event theory which sets out a group of propositions about the content of instruction, that is, how the component parts are inter-related and how they change.
3. Valuational theory which is regarded as speculation as to the objectives of the curriculum.

4. Praxiological theory which is the speculation as to the approximate means of achieving the curriculum objectives.

Each of these four theories can be used in the construction of a theory model from which sub-theories of the curriculum can be derived. The usefulness of ascribing either a general or middle range theory to the curriculum, according to Holmes is doubtful. He argues

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

However, it is recommended that if a comprehensive curriculum theory is built, it should take into account not only the learning and teaching methods, but also the nature of the knowledge to be learned, the nature of the social responsibility shared by the teacher and the student. Generally, Holmes maintains that curriculum theory is

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

For the purpose of comparing national curricula in a wide theoretical context, Holmes suggests four major curriculum theories which have considerable bearing on the selection of content and the choosing of teaching methods: essentialism, encyclopaedism, pragmatism and polytechnism. These four major theories are examined below within their philosophical components, followed by an examination of the curriculum theory applicable in the three countries under investigation.

2.1 Encyclopaedism

This theory has its roots in the pansophism of John Amos Comenius (1592-1670), and flourished in the proposals made by the French encyclopaedists. According to Holmes, it is historically associated with theories about the "potential reasonableness of all men" some of whom constitute an "aristocracy of talent". It is also associated with
political theories about democratic government and theories about the relative merits of the natural sciences compared with classical languages in the light of socio-economic changes. In general, Encyclopaedism was part of that intellectual movement of the 17th and 18th centuries in Europe commonly known as the Age of Reason, or the Age of Enlightenment (as especially applied to the eighteenth century).

The Encyclopaedists held the view that "every man should be wholly educated, rightly formed not only in one single matter or in a few or even in many, but in all things which perfect human nature. Man should be educated in all ways in order to be enlightened with true wisdom". This enlightenment liberates man from his dependence on revelation and gives him a strong faith in human reason. According to Ernst Cassirer:

"The basic idea underlying all tendencies of enlightenment was the conviction that human understanding is capable, by its own power and without any resource of supernatural assistance, of comprehending the system of the world and this new way of understanding the world will lead to a new way of mastering it. Enlightenment sought to gain universal recognition for this principle in the natural and intellectual sciences, in physics and in ethics, in the philosophies of religions, history, law and politics."

Thus, the encyclopaedists advocated the superiority of reason over revelation. They believed that religion kept the mind of man in ignorance, and therefore his happiness lay not in blindly accepting religious dogma but in developing his intellect to find the truth. They believed strongly in the possibility of progress towards a better world for mankind. Man can ameliorate the condition of his life through the proper use of his reason. Therefore, the general diffusion of knowledge and the development of reason were necessary to the progress of mankind.

Encyclopaedists were both "humanistic and humanitarian, attempting to free mankind from the bondage of superstition through the power of human reason. Faith in reason implies that man is capable of understanding the Universe. Once man is allowed to utilise his reason properly, he can discover the nature beneath the concealing corruption of religion and social structure."

The application of human reason to man's environment would result in the progress of mankind. Therefore, it is of great importance "to bring men to the knowledge of many things, so that they understand whatever can be perceived by the senses, reason and faith".
It was argued that "if men were to learn all things in all ways, then all men would be wise and the world would be full of order, light and peace. Thus education should enable each individual to rise out of the darkness of ignorance, so that all men could know their civic rights and could perform their civic duties". 30

Like Comenius, the encyclopaedists believed that every single aspect was in some way related to the whole. In other words, all things were organically related to one another because they had been created by one God. Hence everything should have its place in the common system of knowledge, and the object of knowledge is to understand the unity of all things, not to amass facts. As Sadler put it:

"encyclopaedic knowledge is not knowledge of every particular thing, but a unified understanding of the Universe, the self and of all the particular activities of God and man."
31

Believing in the power of knowledge, Comenius advocated the integration of human knowledge, and the possibility of making knowledge the possession of every man, rather than the specialisation of the few. He wanted all men to become pansophists i.e.:

"(i) Understanding the articulation of things, thoughts and words;

(ii) Understanding the aims, means and manner of carrying out all actions;

(iii) Ability to distinguish the essential from the accidental, the indifferent from the dangerous, in actions diverging from and converging on the goal. And hence able to observe digression of thought, words and deeds, both their own and others, and at all times and in all places to know how to turn them back to the right path."
32

Another active contributor to Encyclopaedism was Condorcet (1743-1794). He was a French mathematician, philosopher, politician and a famous figure of the Enlightenment. In his sketch for a historical picture of the progress of the human kind in 1794, Condorcet expressed his strong faith in the definite progress of mankind. He maintained that man can be saved if he is freed from the chains of superstition, miracles and ignorance. He argued:
"The time will therefore come when the sun will shine only on free men who know no other master but their reason; when tyrants and slaves, priests and their stupid or hypocritical instruments will exist only in the works of history and on the stage, and when we shall think of them only to pity their victims, and their dupes; to maintain ourselves in state of vigilance by thinking in their excesses, and to learn how to recognise and to destroy, by force of reason, the first seeds of tyranny and superstition should they even dare to appear against us."

Condorcet's philosophy of education was given in 'Bibliothèque de l'homme public' as well as in his 'Report on the state of Education before 1789'. Education, Condorcet held, was essential in a democratic society since ignorance would endanger liberty and equality and lead to anarchy and despotism. Hence instruction should be universal. Educational institutions should be devoted to the teaching of nothing but truth. Thereby they would be independent of all political authority and from the interference of public bodies. Liberty of thought is one of the rights of man and on it depends the social progress and perfection.

A third contributor to the development of Encyclopaedism was Jefferson through his scheme of diffusion of knowledge and his theory of government. During the eighteenth century, American thought came under the strong influence of the ideology of Europeans, notably Bacon, Newton, Locke, Voltaire and Condorcet. Jefferson accepted the superiority of reason over revelation, attempted to make religion a personal matter and thus helped to bring about separation of Church and the state. He advocated a mild form of deism. Believing in science and the progress of humanity, Jefferson's new rationalism was based on empirical science. According to Blau, he was:

"... preeminently practical in his interest and concern. A beautiful and ingenious systematic theory interested him only in so far as he could see in it the possibility of application to human life for the betterment of human beings."

Thus Jefferson believed in human reason; empirical science, freedom of inquiry and the progress of humanity. He was sure that man with the aid of reason could grasp and comprehend the truth rationally and act in accordance with it. Therefore education, freedom of speech, press, religion, thought and inquiry were necessary for man to accomplish his
intellectual development.\textsuperscript{37}

In the light of the aforementioned philosophical analysis, the encyclopaedic curriculum theory can be stated briefly, that all knowledge of the real world is useful and should be encompassed in the curriculum. In general, encyclopaedists affirm the importance of the modern languages, science and practical subjects as against classical languages and literary subjects. This theory had influenced American secondary curriculum in the nineteenth century (i.e. The Committee of Ten in 1890's). With the exception of England and Wales, it predominantly influenced the organisation of Curriculum content in the whole of North, East and Central Europe. As Holmes writes

"Encyclopaedism has until recently dominated curricula in most European countries including the USSR. 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 the classical languages and the natural sciences rather than literary studies."

The dilemma is that if encyclopaedic knowledge was beyond the capacity of ordinary people in the seventeenth century, how much more would it be difficult in the twentieth century which is characterised by the expansion of knowledge? Richmond has pointed out that the ideal of complete all-round knowledge cannot be realised, but that it is worth striving for. He concludes:

"Encyclopaedic education is neither practical nor desirable; pansophic teaching is both."

Holmes argues:

"The explosion of knowledge and specialised 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."
Holmes goes on to point out:

"Educationists in countries which have inherited an encyclopaedic curriculum are struggling to retain a broadly based education while reducing the number of subjects. A pattern of studies consisting of up to ten subjects usually includes 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."

However, Encyclopaedism is no longer widely accepted in its traditional form. A broadly based curriculum allowing for different emphases and options remains rather typical of the continental European pattern.

2.2 Essentialism

Essentialism as an educational philosophy was clearly defined in 1938 by William C. Bagley. It maintains that there are certain essentials that all men should know if they are to be considered educated. It holds that these essential elements of education should be selected from historical and contemporary knowledge. The identification and selection of subjects for inclusion in the curriculum are philosophically justified.

Essentialism is not linked formally to any philosophical tradition, but is compatible with a variety of philosophic outlooks. It includes tenets of both Idealism and Realism. Because of the different conceptions of these two philosophies as regards metaphysics (reality), epistemology (knowledge) and axiology (values), Essentialism does not constitute a united front as far as the nature of man and knowledge, the component of reality, and the learning processes are concerned.

Essentialism is also associated historically with political theories about the participation of individuals in the running of society, as well as with psychological theories about the nature of mind and intelligence. Holmes points out that

"In both the political and psychological theories there is more than a suggestion that not all men are equally rational or indeed able to participate in a political democracy."

Essentialists adhere to the psychological theory of mental discipline or faculty psychology in spite of the fact that it has been virtually
displaced as a result of Thorndike's research early in this century. Traditionally, this theory held the view that certain studies such as Latin, mathematics and other classical liberal studies are most suitable for training the mind. Regarding the learner as a mind to be disciplined, essentialists see the achievement of such a task by strengthening the mental faculties through rigorous exercise.

Essentialism is a conservative educational theory seeking to maintain and pass on to the new generation the convictions of the older generation. Brameld argues that:

"essentialism performs primarily the role of protecting the culture against the encroachments typified by progressivism."

Thus, essentialism stands for the re-instatement of the subject matter at the centre of the educational process. Essentialism according to Kneller, advocates:

"a less totally intellectual education, for it is concerned not so much with certain supposedly eternal truths as with the adjustment of the individual to his material and social environment."

Essentialists, as represented by Bestor, contend that the school's task lies in equipping students with intellectual powers. He argues that:

"concern with the personal problems of adolescents has grown so excessive as to push into the background what should be the school's central concern, the intellectual development of its students."

Hence, the task of the school, in general, is to distinguish the elements that make up the academic disciplines and explore them systematically through study of separate organised subject matter. Essentialists, therefore, affirm the mental discipline at the expense of the students' interests. According to Rickover:

"For all children, the educational process must be one of collecting factual knowledge to the limit of their absorptive capacity. Recreations, manual or clerical training, etiquette, and similar know-how have little effect on the mind itself and it is with the mind that the school must solely concern itself. The poorer a child's natural endowments, the more does he need to have his mind trained. To acquire such knowledge, fact upon fact, takes time and effort. Nothing can really make it 'fun'."
The essentialists, therefore, devote their efforts to distinguishing the essential and non-essential in school programmes, re-examining curricular matter and re-establishing the authority of teacher in the classroom. The teacher's role is to mediate between the world of the adult and the child's world because by himself the pupil cannot comprehend the nature and demands of adulthood. Students' abilities must therefore, be drawn out of them by skillful teachers. Kandel declared that

"The essentialist is no less interested than the progressive in the principle that learning cannot be successful unless it is based on the capacities, interests, and purpose of the learner, but he believes those interests and purposes must be made over by the skill of the teacher who is master of that 'logical organisation' called subjects and who understands the process of educational development."

Thus the teacher is given so much authority that essentialism places him at the centre of the educational universe and requires that he must be fully qualified intellectually and emotionally to manage efficiently any learning situation. Brickman writes:

"This teacher must have a liberal education, a scholarly knowledge of the field of learning, a deep understanding of the psychology of children and of the learning process, an ability to impart facts and ideals to the younger generation, an appreciation of the historical-philosophical foundations of education, and a serious devotion to his work."

In general, any society holding essentialist educational philosophy views the school as an agent performing a practical function of delivering just the 'essentials' as well as the basic skills free from politically and religiously tainted opinions and discussion. 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."

The curriculum organisation in accordance with this theory is based on a small number of essential subjects and on practical training leading to a useful life. As Kandel put it

"The curriculum must inevitably include that knowledge and information which will acquaint the pupil with the social heritage, introduce him to the world about him, and prepare him for the future."
Essentialism has influenced the curriculum in England and Wales as well as those countries that implemented the English system. As Holmes points out:

"it is within this tradition that curriculum innovation in England and Wales is still debated, and to a smaller extent in those countries which have followed the English pattern."

In the United States the debate between the traditionalists and progressives continues; each denounces the other as the enemy of the schools. Essentialists attack pragmatists on the basis that they have exaggerated the value of flexibility to the point where it has become a positive hindrance to effective social action. They criticise particularly the attention paid by progressivism to the freedom and interests of the child rather than to the demands of the subject matter itself. Holding the view that education ought to be based on certain well-established disciplines, Robert Hutchins, Arthur Bestor and Admiral Hyman Rockover attacked the proliferation of courses in the secondary schools, the stress on social adjustment and athletics, the establishment of an educational bureaucracy, owing to the belief that these elements denatured the curriculum. Moreover, these educators have continued to believe, as Kneller puts it, that:

"The pragmatic philosophy of Dewey, blocks the minds of school officials and parents and blinds the public to the true educational faith as they know it."

2.3 Pragmatism

This theory is an expression of pragmatic educational philosophy which is considered a unique American contribution to the philosophical scene. It is historically associated with various theories about the nature of human intelligence, reflective thinking processes in problem solving and democratic society. The pragmatic movement grew out of the conviction that there is an intimate relationship between thinking and doing. It is, indeed, related to the British empiricist tradition, which maintains that we can know only what our senses experience.

Pragmatism was developed primarily through three thinkers: Peirce, James and Dewey. However, these philosophers differ considerably in their views and methods. While Peirce's view was oriented through physics and mathematics, James's conception was influenced by personal, psychological
and religious considerations and Dewey's notion was effected by the social and biological nature of man.  

It was Peirce who coined the word pragmatism to describe his theory of logical analysis, or true definition exemplifying that words and ideas derive their meanings from some sort of action. He maintained that the scientific method was the most acceptable way of fixing the beliefs that constitute the end of inquiry. Such a method, it is argued, allows the investigator to retain integrity of belief because of its objective and self-corrective technique as well as its flexible and tentative character.  

James converted Peirce's theory of meaning into a theory of truth that sprang from his interpretation of the role of thinking. According to James, the function of thought is not to copy or imitate reality, but to form ideas in order to satisfy the individual's needs and interests. He maintained that: "Ideas (which themselves are but parts of our experience) become true in so far as they help us to get into satisfactory relation with other parts of our experience."  

James brought pragmatic meaning into harmony with his notion of the role of thinking and produced his famous statements which, it is said, shocked the philosophical community. He wrote: "The true is only the expedient in our way of thinking, just as the right is only the expedient in the way of our behaving."  

Truth, for James, is the name of whatever proves itself to be good in the way of belief, and good for definite given reasons. Hence, judgements about truth reflect the time, place and circumstances in which the judgement was made. James rejected the traditional correspondence theory of truth because of its static character and believed that truth is equated with dynamic verification process. Therefore true ideas can lead to successful plans of action, and the present truth is subject to future modification owing to the plurality of truth.  

Pragmatism was developed and reformulated through Dewey's critical efforts into a new philosophical theory which combined both the theory of logic and ethics, and bridged the most persistent of dualism in the modern thought - the separation of science and values and the divorce of knowledge and morality. Generally speaking, Dewey revealed his interests by moving away from preoccupation with the intellect's search for truth.
to a concern with the working out of patterns of integrated human activity. He combined his logical and psychological views to formulate a philosophy that measures man's significance in terms of effort rather than achievement and implies greater faith in the power of the individual to contribute to the upward evolution of mankind. 62

As regards knowledge, pragmatism maintains truth to be that which is functional. Knowledge is a transaction between man and his environment. That which is necessary to solve the problems of man becomes the knowledge of man. Based on experience and observations, knowledge is not seen by pragmatists as a concluded final form, but is considered a continuous process. Pragmatism does not accept reality as ultimate, nor does it accept knowledge as conclusive. It is suggested that rationalism is a part of the pragmatist system of acquiring knowledge. Pragmatism regards the mind to be active and exploratory, rather than passive and receptive. Hence man does not receive knowledge, but he makes it through his observation and experience. 63

As far as the nature of society is concerned, pragmatism supports democratic society. Since there are no absolute principles, values ought not to be imposed by a higher authority, but they ought to be agreed upon after a conscious discussion. Men should establish their own values in the same way that they establish the truth of their ideas.

Pragmatism was applied to education through the progressive educational movement which opposed the rigidity of traditional education. Taking the pragmatic view that change, no permanence, is the essence of reality, progressivism declares that education is always in the process of development. Thereby, educators should be ready to modify the curriculum in the light of changes in knowledge and in environment. The essence of education, for the progressivist, is not the adjustment to society, or to certain perennial criteria of goodness or truth or to the external world, but it is a continuous reconstruction of experience. As Dewey suggested:

"We thus reach a technical definition of education: it is that reconstruction or reorganisation of experience which adds to the meaning of experience, and which increases the ability to direct the course of subsequent experience."

64

Schools, according to the pragmatist, are regarded as social institutions teaching the values that advance human welfare and improve the way of life in society. Hence, they should be run democratically and provide a
curriculum that is judged to be active and related to the examined interests of children. Johnson and his collaborators argue that:

"A tenet of progressivism is that the schools become major societal institutions assigned the tasks of not only propagating, but also improving, the way of life in society. To this end, the progressive school is deemed a working model of democracy. Freedom is explicit in a democracy, so freedom must be explicit in our schools."

65

Pragmatism views the learner as an experiencing, thinking, exploring individual. It also holds the view that interests and curiosity principally motivate the pupil's learning, therefore, it is significant to relate what he learns to his own needs and interests. Consequently, instead of feeding the pupils exclusively with information selected for him by others, it is important to allow him to learn what he is personally curious about. Thus pragmatism exposes the pupil to the subject matter of social experiences, social studies, projects, problems and experiments which, when studied by the scientific method will result in functional knowledge from all subject matter areas. Since pragmatism believes that all things are in state of flux, there is no stress given to absolute knowledge. It follows that, the pupil's own needs and desires should determine what he has to learn. 66 Therefore, the pragmatist teacher should not direct, but assist and advise the learner. His role is to construct the learning situation around particular problems which are regarded as truly significant for the pupils, and are likely to lead them to a better understanding of their social and physical environment. Brameld points out that progressivism

"... wishes to widen the sphere of learning interest so as to embrace the entire communal experience of children and adults while at the same time paying close attention to the interests of the individual."

67

These tenets of pragmatism are considered the constituent of pragmatist curriculum theory. This theory, according to Holmes, rejects a view implicit in essentialism and encyclopaedism that there is a body of knowledge which can be conveniently divided up into subjects. Therefore, pragmatist curriculum theory suggests that the content of education should be organised in accordance with the near or far problems that students face or might face. 68 In this theory, considerable stress is placed on the processes of learning rather than on ends. Pragmatism favours the
scientific method of teaching and learning which helps the student to develop thinking rather than memorising facts.

Pragmatists suggest that learning through problem solving should replace inculcation of subject matter. Hence, flexibility is an important feature in pragmatist curriculum design. The theory places its emphasis on experimentation with no single body of content stressed more than any other. It also advocates a child-centred approach rather than a subject-centred approach of curriculum organisation. The basic problem with which educators wrestled was how to provide a distinct 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 complementary and essential parts of a whole. Believing that a preparation for life includes a vocational training, Dewey advocated that separate vocational high schools become integral parts of the city high schools; he wrote

"Just as in life the technological pursuits reach out and affect society on all its sides, so in the school corresponding studies need to be imbedded in a broad and deep matrix."

Since its existence, pragmatism has been the most influential educational view in the United States. The rise of democracy combined with the expansion of modern science and the need for men able to adjust themselves to the contemporary characteristics of the technological age and new life has required a new approach to the acquisition of knowledge. The American educators were motivated by the pragmatist ideas in the efforts to meet the newly-recognised responsibility of education for a democratic society. The Seven Cardinal Principles of education - health, command of fundamental processes (reading, writing, arithmetic and oral and written expression), worthy home membership, vocation, citizenship, worthy use of leisure, and moral character - which were proclaimed in 1917 by a committee set up by the National Education Association, were influenced to great extent, by Dewey's ideas of individual and societal development. Although these principles were major bases for curriculum development in the 1920's they continue to dominate curriculum debate in the United States and also influence the discussions of curriculum innovation elsewhere.

The social-centred philosophers stress that the child, the school, and education itself are shaped by the social and cultural forces. They
attack the individualism pattern of curriculum and call for a social educational programme. As a result a movement of curriculum reform was given considerable support by the federal Government. In spite of his enthusiasm for freedom, Brameld advocates the extension of federal influence in education. He suggests that it is

"completely practical to combine centralised authority and decentralised administration in a working synthesis."

He also maintains that a good Deweyan scheme is satisfactory for the elementary school curriculum, but at the secondary level, subject-based learning should lead to a

"high standard of literacy and mastery of vital contents... because these are the necessary tools of social power for people struggling to obtain the dominant goals demanded by our age."

Holmes points out that

"curriculum trends in the sixties were debated in the USA during the seventies in terms of manpower needs..., and represented a world-wide tendency during that decade for economists of education to see education and the curriculum as contributing significantly to economic growth."

In England, curriculum organisation was influenced, to a limited extent, by pragmatist curriculum theory. Holmes argues

"English interest in pragmatism was principally in terms of the possibilities it threw up for improving (and justifying) methods of teaching."

However, post-Sputnik trends in curriculum development in America have influenced curriculum reform in England particularly in the field of science education (i.e. Nuffield Science), in spite of the differences in their educational aims and in their initial conditions.

The impact of pragmatism on the Swedish curriculum organisation was negligible. Curriculum organisation in Sweden is based upon encyclopaedism, emphasising a more harmonious programme for all pupils in the basic schools and providing optional opportunities in the upper comprehensive schools.

2.4 Polytechnism

This curriculum theory involves the polytechnicalisation of the content of education. It suggests that "every aspect of school work should be seen
in the light of its relationship with the productive life of society."

The purpose of education, according to polytechnism, is to provide the basic knowledge of nature, human society and thought, combined with the intellectual achievements and practical skills relevant to these branches of knowledge that are essential to every individual regardless of his future career. Skatkin maintains that

"The mastery of these subjects forms the basis for a scientific outlook on life and helps to develop the individual cognitive powers and capabilities."

Polytechnical education, it is argued, contains several advantages. It gives the pupils a knowledge of the major branches of production and the scientific principles on which these depend. It also accustoms them to the handling of common tools of labour. Again, it helps to develop creative technical abilities and to inculcate a love and respect for manual and physical work. Furthermore, by providing a wide general technical background, polytechnical education allows the youth an opportunity to choose freely a suitable type of occupation, to master a variety of the tasks to be done in production and to play an active role in technical progress.

Research conducted by Soviet physiologists, and educationalists has shown that

"an intelligent combination of mental occupations with physical work has a beneficial effect on both the physical and the mental development of the pupil."

Research findings also suggest that physical work leading to the training of accomplishments and skills has a beneficial effect in widening the pupil's general experience. It is argued that since the knowledge acquired in class is applied in work process, the students' knowledge is concretised and deepened. During work, students feel the need for new knowledge which is essential to the accomplishment of some technical task. This in turn, heightens their interest in learning and stimulates them to seek for themselves the answers to questions raised. Manual work also plays a vital part in the moral upbringing of the students. Skatkin points out that

"As they enter into a variety of relationships with their fellow-students and with adults on the job, the children become accustomed to working as part of a team and uniting their personal interests with the interests of the community."
Moreover, polytechnical education gives an understanding of the crucial technological processes which enables the individual to change jobs with much more ease and confidence. It also helps the preparation of pupils for socially useful work, the intelligent choice of an occupation and for the independent mastery of knowledge.

The basic idea of polytechnism 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 has emerged because of the radical changes in production methods as well as the development of science. The use of automation has created new conditions in which workers will be forced to perform various functions and will be required to have different qualifications and knowledge from those demanded of them previously. In this age of scientific-technological revolution, a labourer will need to have the skills of a trained technician, or wide knowledge of the principles of science and technology and an acquaintance with all aspects of modern production. Therefore a combination between theory and practice or between instruction and productive labour has become inevitable. Differences of views on the best way of strengthening the ties between school and life have been debated elsewhere. But for ideological reasons this idea has gained a profound support and a complete implementation in the Soviet Union.

In the twentieth century, polytechnical education is a Soviet phenomenon. Ideologically, man's attitude toward work constitutes a vital basis or morality, and life itself centres round economic activities. So, Soviet educators regard the task of education to be the development by the individual to maximum of his abilities in order to fulfil his responsibilities as a Soviet citizen and promote the growth of a Communist society. To achieve this fundamental aim, pupils should acquire the correct attitudes towards work, the knowledge of production methods and the technical skills based upon theoretical principles. 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 bridge."

Marx thought well of Owen's experiment of combining instruction with
productive work on the basis of a high technical standard. The significance Marx attached to the combination of education with productive labour is indicated by his famous statement in *Capital*.

"As can be traced in the work of Robert Owen, the factory system gave birth to the embryo of education in the future era, when, for all children above a certain age, productive labour will be combined with study and gymnastics, not only as one of the means for increasing social production but also as the only means for the production of comprehensively developed people."

86

The idea of polytechnical education was further developed by Lenin. Like his predecessors Marx and Engels, Lenin viewed all aspects of culture and popular education in relation to the material conditions of social life. He suggested that the productive work of both children and adolescents should be combined with instruction in order to realise the rising generation's all-round development. Lenin pointed out that is was

"impossible to picture the future society without combining of the young; without productive work, instruction and education could not reach the level required by the technical standards of today and the state of scientific knowledge, nor could productive labour without parallel instruction and education."

87

Krupskaya gave a major exposition of Marxist ideas on the combination of productive work with instruction and on polytechnical education in her book 'Popular Education and Democracy', which introduced these concepts to educational literature. She recounted that Lenin closely followed the development of education, familiarised himself with the new ideas in Soviet pedagogics and made a significant contribution to the understanding of the essence and the necessity of polytechnical education. Krupskaya wrote:

"Ilich (Lenin) himself attached immense importance to it. He believed that polytechnical schooling would help create the basis for building a classless society, and he wanted this emphasised in my summary."

88

Lenin viewed polytechnical education as a guiding principle that determined the particular features of the goal, form and content of education. He emphasised repeatedly that only the polytechnical school can prepare the rising generation for building a new life. Zubov affirms that
"To Lenin, the principle of polytechnical education requires the maximum development of a person's ability to employ his knowledge activity in practice, to gain his bearings in the system of social production, and requires also the inculcation of a readiness and ability to participate in social production."

Thus, producing from the Marxist-Leninist conceptions of polytechnical education, a definition was worked out of the content of labour and polytechnical education in the soviet schools, and was pointed out by Krupskaya as

"polytechnism is not a separate teaching subject but should permeate every discipline, be reflected in the choice of subject matter whether in physics, chemistry, natural sciences or social science. These disciplines must be linked with each other, with practical activity and especially with labour instruction. Only thus can labour instruction be given a polytechnical character."

Polytechnism then is a complete system based on the study of technology in its different types considering its development and all its relations. It also covers the study of humanities with regard to their influence on the social forms of labour in particular and on the social life in general. It contributes to getting young people accustomed to work and serves as a basis for vocational training and for participation in decision-making concerning major problems of economy and production. Hence, polytechnism as a theory may both cut across and be incorporated in the aforementioned general curriculum theories.

Polytechnism is closely associated with the Marxist conceptions of man, work, knowledge and society. Marx advocated the active model of man. The activist aspect is clearly expressed in his philosophical premise that the initial creation of the world is by man. According to Marx, man could change his own nature by acting on the external world and changing it. Marxism sees man as shaping nature and, in turn, being shaped by it. That is to say, man does not exist merely within nature but shapes nature, and this act shapes man in a constant interaction between subject and object. Nature, for Marx, as Sarup indicates

"could not be separated from man, nor man from nature. Nature did not exist 'in itself' without human mediation. Nature that was unworked remained of potential value, awaiting realisation. Technology disclosed man's mode of dealing with nature."
Work for Marx, is an essentially human activity. It is man's specific attribute. Only men are uniquely capable of deliberate acting upon and changing the world. Unlike Adam Smith, who held the view that work is a coercive activity, Marx maintained that work is man's process of self-becoming and means of realising human spontaneity. He believed that work had the highest potential value. Moreover, he was content that work is coercive, not because of its nature, but because of the historical conditions under which it is performed. 93 Thus, for Marx, work becomes not the satisfaction of a need but only the means for satisfying other needs. Expressing Marx's view on work, Arnold Lazarus writes,

"Labour, he (Marx) said, should not be done for money alone; it should give true physical and spiritual satisfaction. At the same time, man as a social being fulfils himself most completely in what he does in company with others. Work, therefore, should be performed in common. It should have as its end the welfare of all, which includes that of every individual."

94

Generally, Marxists have argued that the separation between high-status (theoretical) knowledge and low-status (practical) knowledge serves the need of a class society. That is to say, in a capitalist society knowledge is kept in such a way that it entails non-possession by others. Hence, access to many subject areas is limited to a select few. This divorce between the types of knowledge inverts the relations between the human subject and the world of objects. Since 'class' at the present time, is largely based on knowledge, Marxists hold that the disappearance of class differences would depend partly upon the abandonment of the distinction between high- and low-status knowledge. 95

Many of these ideological conceptions have been reflected in curriculum organisation to secure the unity between instruction and socially useful work. Thus, polytechnic curriculum theory found its place in the Soviet educational system. The content, forms and methods used in the practical implementation of polytechnical education have always occupied the attention of Soviet educators. They have been far from satisfied with the results already achieved by their schools. Being aware of the quality of education, such distinguished pedagogical scholars as P.P. Blonsky, S.T. Shatski, A.S. Makarenko, and many others have made an important contribution to the development of the scientific principles underlying
the construction of the polytechnical school and helped to offer solutions to the many key pedagogical problems in the organisation of its work. 96

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

Polytechnism is mostly applicable in socialist educational systems. In China, for example, education has a close bearing on production, and theory is linked with practice. Moreover, education is no longer confined to the classroom, but primary and secondary schools, both in urban and rural areas, have set up close links with factories, people's communes, and army units in the neighbourhood. Furthermore, small factories and farms have been established in primary and secondary schools, and workers, peasants and soldiers have been invited to teach on a part-time basis. 97

Hsin Wen argues primary and secondary school students

"... not only learn book knowledge, but also learn industrial production, farm work and military affairs and criticise the bourgeoisie." 98

3. Conclusion

In spite of the difficulties associated with theorising in education in general and in curriculum in particular, it has been possible to categorise three general theories and one middle-range theory of curriculum. These theories are not mutually exclusive, but present a framework within which curricula arguments may take place. In all such theories, basic philosophical, sociological and psychological tenets are founded. They are production of some philosophers and thinkers who were, in turn, affected by their environment and their own upbringing. Therefore, the doctrine of the nature of man, knowledge and society differs because the latter is bound to be affected by the kind of experience which any particular philosopher has encountered.

These curriculum theories have significant influence on the organisation of the content, the practice of teaching and the treatment of
learners. They also guide the reform movements and inform educationalists faced with problems of adapting the content of education to changes in society and school systems. Although the changes or innovations in curriculum are limited within the frame-work of a particular theory, they are greater when an educational system moves from one curriculum theory to another. Though social changes affect curriculum reform less directly, they are of considerable importance. Nevertheless these social changes indirectly exert their pressures on the content of education.

As far as the countries under investigation are concerned, it has been indicated that they mainly apply three different theories. In the United States pragmatism has had a profound effect. Undoubtedly practice varies from one state to another. But the general trend is organizing the curriculum content on a child-centred basis and choosing the content of education in accordance with the prevailing social problems. This implied a break from essentialism and meant freedom for the child and an opportunity for him to express his individuality and creativity. Essentialism is the predominant curriculum theory in England. Thus, there is a fixed essential body of knowledge that the student must come to grips with through accepted ways of knowledge. Curriculum content is organized on a subject-centred approach and knowledge is the criterion of choosing the content. Traditionally concentration is directed to a small number of freely chosen subjects in the pre-university years of the secondary school. Identifying essential subjects has been shifted. During the nineteenth century, debates put the natural sciences in opposition to the classics. In the twentieth century, arts subjects competed with the natural sciences for a central place in grammar school curriculum. In the post-war era, disciplines have been justified and included in the curriculum on the grounds of their logical and internal structure. In Sweden, the encyclopaedist theory has long dominated the curriculum. Nevertheless, there is no longer an insistence on Greek as part of the curriculum. Curriculum is organized on a subject-centred approach and knowledge is the basic criterion for choosing the content. There is a large number of compulsory subjects to be studied, beside a few optional subjects.

However, there is a great difference between faith in curriculum theory and putting it into practice. The actual application of a particular curriculum theory guides curriculum innovation and requires certain procedures in implementation. Among the practical advantages of any curriculum theory is that of calling the attention of practitioners to
shortcomings and gaps in their activities. Because of such a great influence of the curriculum theory on the organisation of the content of education, it is meaningful to examine the criteria of choosing and the approaches of organising the curriculum content.
REFERENCES


24. Ibid.


29. Ibid., p.197.

30. Ibid., p.198.

31. Sadler, J.E., op.cit, p.60.


39. Richmond, W.K., op.cit, p.36.


41. Ibid.


45. Tanner, D., and Tanner, L., op.cit., p.121.


48. Bestor, A., op.cit., p.120.


59. Quoted in Ibid., pp.277-278.

60. Quoted by Ezorsky, G., op.cit., p.428.


Curtis, S.J. and Boultewood, M.E., op.cit., p.274.


71. Ibid., pp.8-16.


76. Holmes, B., Some general issues and proposed solutions in curriculum development, op.cit., p.28.
78. Holmes, Some general issues and proposed solutions in curriculum development, p.25.
80. Ibid., p.18.
81. Ibid., p.19.
82. Ibid., p.20.

93. Ibid., pp.116-117.


95. Sarup, M., op.cit, pp.139-143.


Holmes, B., Polytechnical education in the USSR, op.cit., p.3.


98. Wen, H., Primary and secondary education, Prospects, op.cit., p.486.
CHAPTER TEN

CURRICULUM ORGANISATION

1. Criteria for selection of Content
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CHAPTER TEN
CURRICULUM ORGANISATION

The intention in this chapter is devoted to the examination of the main criteria that could assist the curriculum-makers in choosing an appropriate content in the light of a given set of desirable objectives. This then will be followed by a discussion of the current patterns of curriculum organisation. Extra-curricula activities are also dealt with because of their important functions in comprehensive schools and within a wide concept of the school curriculum. Finally the organisation of the curriculum in the comprehensive schools in the countries under investigation will be examined.

1. Criteria for Selection of Content

The selection of content is neither so isolated nor so simple, due to the fact that mastery of a particular subject is not regarded as an end in itself. Such a fact implies that the student should not learn subject matter, but should learn from subject matter. Furthermore, some educationalists argue against the idea of separate disciplines and for the idea of unity of knowledge. In view of the rapid and constant changes in the fields of knowledge and technology it is usually recognised that there is far more to be learned than is possible during the period of schooling and some kind of selection has become imperative.1

Smith, Stanley and Shores, as progressive educationalists, have suggested five criteria for selecting a subject matter as: significance to an organised field of knowledge, survival, utility, interest to the learner, and growth. Nevertheless, they have argued that

"these are not criteria to be applied as standards for all subject matters by anyone engaged in content selection. They are not a set of standards at all... these are simply five different single criteria that have been used alone or in combination by different curriculum-workers in recent years."

2

Broudy, Smith and Burnett have indicated five categories of instruction: facts; descriptive and evaluative concepts; principles; norms and rules.
They have suggested that all such categories must be included in general education, and particular sections should be chosen according to the criterion of logical significance, which requires understanding of the logical structure of the disciplines.\(^3\)

However, these criteria in general are associated with the structure of knowledge, expansion, and child interest. Since these criteria are employed, to some extent, to help the curriculum maker in his approach to selecting the content, it is quite reasonable to find that they are not emphasised equally in a learning programme. It would also appear logical that the criteria selected are closely related to philosophical and theoretical orientations. While essentialists have stressed the importance of an organised field of knowledge, progressives have emphasised interest, polytechnicians have asserted utility and encyclopaedists have confirmed survival and coverage. Certain considerations are relevant to all the positions outlined.

(i) **Validity**

The first criterion is concerned with validity. It is necessary that content be valid. One aspect of validity implies a close connection between the content and the intended objectives. Thus the content is valid if it is possible for the stated goals to be achieved through its use. For example, if the chosen content for achieving the concept of the relationship between man's way of life and his environment does not show such a relationship, it is judged that the content is invalid.\(^4\) Another aspect of a validity is concerned with authenticity. The content is valid when it is acceptable in terms of the logic of the subject, as well as up-to-date facts. However, content is in danger of obsolescence, due to the explosion of knowledge. Not only the facts become obsolete, but the concepts, principles and theories may become obsolete too.\(^5\)

(ii) **Significance**

Another important consideration is directed towards the significance of the experiences chosen. Under this criterion, subject matter is included if it is thought to be essential to the mastery of the field to which it belongs. Hence the inclusion of any subject is a matter of its relative value.\(^6\) Curriculum experiences according to Taba, can be justified on two levels. Some experiences are significant in themselves. Such experiences provide the basic permanent knowledge that is necessary
for achieving the stated objectives of general education. Other
experiences receive their justification from constituting the necessary
background for understanding something else or for achieving some
other ends. 7

Applying the criterion of significance, it is important to draw
a distinction between general and basic learning, and the concrete
details through which such a criterion is achieved. Moreover, a
meaningful content requires even a choice of detail to be significant
by itself, in addition to its contribution to general learning. Yet
facts are the least significant or meaningful aspects of school subjects.
They are only important insofar as they contribute to basic ideas,
concepts and principles of subjects. 8

Thus the criterion of significance links with the matter of breadth
and depth in curriculum. Sometimes breadth of coverage and depth of
understanding appear to be contradictory realms. This is an apparent
phenomenon in considering the content as an accumulation of descriptive
facts rather than a disciplined way of seeing the important relationships
between facts and ideas. Therefore over-emphasis on coverage is likely
to cause insufficient attention to the development of intellectual
skills. Hence it is necessary that the content must realise an appropriate
balance between breadth and depth by selecting basic ideas, concepts and
principles and giving them sufficient time to be fully understood. 9

(iii) Utility

A third criterion for selecting curriculum content is related to
the usefulness of certain activities for living. Relating curriculum to
life has always been considered a main function of education. Yet such
a relationship in many school subjects and daily learning pursuits has
been practically imperceptible to both teachers and students. 10 It is
recognised that the relationship of curriculum to life-needs must be
more direct by selecting a sample of subject matter which is most useful
to the learner in solving his problems now and in the future.

As Wheeler has pointed out, the selection of content for preparing
students to a certain vocational career should contain enough items from
a given subject to enable the students to acquire the initial requirements.
However, if the content is chosen in terms of its life meaning and is
taught so as to give learners opportunities to make life applications,
learning experiences can be made both more meaningful and challenging without jeopardising what could be called permanent and general learning. 11

(iv) **Learnability**

Although it is obvious that curriculum content should be learnable by the student, there is too little attention given to the application of this criterion. One aspect of learnability is the adjustment of the curriculum content to the abilities of the pupils. It is recognised that such abilities must be taken into account at every point of the selection of content. If pupils are to learn certain facts, concepts and ideas, these latter must be introduced in appropriate forms to be especially favourable to learning. Thus content should be available in forms which are correspondingly appropriate to the pupils, and must encompass different activities in order to satisfy different abilities. 12

Applying the criterion of learnability, however, implies the adaptation of curriculum to the ability of the student either by modifying the scope of the content covered or by adjusting the pace of learning.

Considering the needs and interests of the learner in selecting and organising curriculum content has its supporters and opponents. Some advocates of the interest criterion have used it as a sole basis for selecting and organising both content and learning experience to the exclusion of all other criteria. Some objectors have completely rejected it. Both extremes, however, are unacceptable. To make up the secondary school curriculum entirely on the basis of pupils' interests is likely to be found restricting. To ignore such interests is to lose a strong motivation in maintaining effective learning. 13

Recent research in the fields of psychology, sociology and anthropology has helped educators to understand the function and scope of the needs and interests in educational programmes. It has also shown that the nature of needs and interests is too complex, and the range of pupils' interests is limited, and not an adequate basis for curriculum content. Needs representing psychological requirements are less focal to the curriculum than are the needs representing social demands, as Taba has maintained. 14

(v) **Consistency**

This criterion requires that content should be in tune with the
social and cultural realities of the age. Applied to the selection of content, the criterion of consistency with social realities implies further selection from the valid and significant knowledge. Analysis of culture and society has brought into focus many areas of problems which, presumably, provide the clues for curriculum makers to plan a significant content in a social sense.

This criterion introduces the problem of extending the boundaries of the current subjects into new areas of knowledge about the diversities of world cultures. Thus content must be selected, particularly in the arts and social studies, to develop the learner's perspective and knowledge concerning the world in which he lives.¹⁵

These criteria - validity, significance, utility, learnability, interest and consistency with social reality - are suggested for application to the selection of curriculum content. It may be stated that the most common way of tackling the problem of organising curriculum content is to decide first what pattern curriculum will be followed, then what subjects shall be taught in school. Ideally, content selection should satisfy all such criteria. No one criterion should be applied in isolation nor carried to an extreme, although under certain circumstances some criteria may carry more weight than others. These all can be relevant to encyclopaedism, essentialism, pragmatism and polytechnism.

2. Current Patterns of Content

On organising curriculum content, educators tend to emphasise one of two basic concerns. One group places more emphasis on the discipline of knowledge to be acquired. The other concerns itself more with the needs and interests of the learner. Alternatives of organisation have recently been exercised and have challenged the traditional curriculum. Yet these alternatives tend to be focussed on using two controversial patterns: a subject-centred (the subject curriculum) or a student-centred (the activity curriculum) schemes. Since the two schemes represent extremes in the continuum of curricular organisation, various patterns employing elements of both extremes have been worked out in organising the curriculum content.

However, a great deal of educational literature has been devoted to the differentiation and evaluation of the current patterns of
curriculum content. Smith, Stanley and Shores have intensively analysed the patterns of curriculum organisation on the basis of certain distinctive categories. They have distinguished three major patterns: the subject, the activity and the core curriculum. Yet they have pointed out certain variants within each category, the possible total of which exceeds ten patterns.

Herrick has suggested four common approaches to curriculum organisation: the subject, the broad-fields, the problems-of-living, and the needs approaches. He points the difference between these approaches as lying in what is considered most important and initial basis for selecting the content.

McKenzie has described five schemes for organisation as: subject, broad-fields, areas-of-living, the core and children's interests and needs. His conclusion is that the major theoretical difference lies between those who support the interests, concerns or experiences of the students as the organising centre, and those who believe that meaning and unity are inherent in the subject fields.

Unlike Herrick or Mackenzie, Burton had advocated a two-fold classification along slightly different lines: the 'assign-study-recite-test procedure' and the unit. He points out that these should not be equated with traditional and modern curricula, because it is the teacher who can make the first thoroughly modernised, or who turns the unit procedure into a traditional method. Burton makes it clear that problems and purposes are the centre of organising content.

Taba has distinguished five patterns: the subject organisation; the broad-fields; that based on social processes and life functions; the activity and the core curriculum. The use of social processes or life functions goes back in theory to Spencer's five significant life activities, and practised effectively in the Virginia State curriculum.

Goodlad has categorised the organisation of curriculum content into three patterns. The first is the single-subject scheme, the organising centres of which are selected to develop elements drawn from a single field. The other two patterns are the broad-field and core curriculum, that develop diverse organising elements.

Tanner has applied his classification to the whole formal programmes of study. He has differentiated such programmes into three comprehensive categories: general education; exploratory, special-interest, and
enrichment education; and specialised education. He asserts that:

"The classification of a given course into any of these three categories depends upon the function which it serves. Consequently, there can be no sharp lines of demarcation between the curriculum categories."

Thus, any course in a given subject, for example, may serve a general education function at one grade level, while serving a very different function at another grade level. Similarly, in one school a particular course might be studied as a vocational programme, whereas in another school the same subject is studied as an elective course to fulfil a special need or interest. Figure 20 shows the interrelationship of such an organisation in the total curriculum.

Such differentiation in the organisation of curriculum content may be attributed to the disagreement among curriculum planners about the elements which are to be included, as well as about the criteria of selection and organisation.

However, it may be said that such patterns tend to be either subject-centred, which employs broad-fields and separate courses for academic disciplines, or student-centred, which employs core and activity programmes. These different patterns which are illustrated by Figure 21 will be discussed next.

2.1 Subject-Centred Organisation

This is the oldest, and still the prevailing pattern of organising the curriculum content. Its history can be traced to the seven Liberal Arts of the ancient world. Such a pattern is based upon the organisation of the content into subjects of instruction. It is assumed that not only specific subjects cover the important areas of social heritage but also the mastery of them takes care of the full scope of education. Therefore, new educational tasks and refinements of knowledge take the form of adding new subjects. In its extreme form, the subject-centred organisation is designed in compartmentalised bodies of knowledge and each taught in complete isolation. Its less extreme form allows a certain degree of inter-relation among the subjects. It is the applicable organisation of both encyclopaedist and essentialist curriculum theories. For purposes of explanation, these two forms, the subject and the broad-fields curriculum are separately examined.
FIGURE 20.

RELATIONSHIP OF GENERAL EDUCATION TO THE TOTAL CURRICULUM

FIGURE 21

THE CURRICULUM CONE

(i) The Subject Curriculum

The subject curriculum has remained the most widely used curriculum design in secondary schools. Those who support and defend such a pattern argue that subjects constitute logical and effective methods of organising new knowledge and therefore an effective method of learning it. They say that the major disciplines may develop certain ways of critical thinking by utilising the scientific approach of instruction. The advocates of this approach believe that much of such criticism asserted by Smith and his collaborators, Dewey and Tanner, is the fault of the teacher and not the curriculum design. Nonetheless, the division of the subject curriculum into so many dissociated segments and the sharp boundary lines between subjects lead to the failure to grasp the interdependence of human knowledge and experience. However, it is argued that everything cannot be studied at once, nor can be all-inclusive. With the rapid explosion of knowledge there has to be an ordered segmented approach to study a subject effectively. There are also practical and administrative advantages concerning teachers' training, planning programmes of study in relation to college entrance requirements, and techniques of evaluation.

(ii) The Broad-fields Curriculum

Recognising the weakness of the subject curriculum, educators have developed many schemes to improve the articulation between subjects. Two such schemes have been practised before the appearance of the broad-fields curriculum. One is the correlated approach and the other the fused approach. The former 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. Correlation may be attempted by a single teacher who instructs in two or more courses, or it may be attempted by two or more teachers who cooperatively plan to help students to understand and appreciate the common interdisciplines between subjects. Correlation may be designated between two subjects in two different instructional fields, such as history and literature or science and mathematics, or it may be involved with two subjects in the same field such as history and geography. Evaluating the correlated approach, Tanner states that
"... although correlation represents an attempt to reduce or eliminate the isolationist and compartmentalised characteristics 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."

The second approach was the fusion of two or more closely related subjects into a new broader course. It represented a somewhat more advanced effort to correlate learning experiences. The subject matter content of the combined courses furnishes most of the study material. One of the earliest examples of fusion was combining 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 science fields into a general science course.

Theoretically, the fused approach should lead to the improvement of curriculum synthesis by offering greater opportunities for integration of learning. But practically, its success depends upon whether or not the teachers are willing to invest the time and effort required to reorganise two or more courses into one. The fused approach, however, has been popular, particularly in the lower secondary schools, where the purpose is to give students as broad an introduction as possible to all fields of learning.

The dissatisfaction with the correlated and fused approaches has led to a concerted effort to avoid such an unmanageable multiplicity of courses, and has brought about the broad-fields curriculum. Such a pattern is regarded as an attempt to synthesise an entire branch of learning into a common unity and overcome the compartmentalisation and atomisation of the subject curriculum. Although the broad-fields curriculum arose in American secondary schools and colleges in the second decade of the twentieth century, its early beginning was claimed in England. In the introduction of his publication "physiography", Huxley opposed "an omnium-gatherum of scraps of all sorts and undigested and unconnected information", and called for changes in the conventional subject curriculum. Huxley's ideas on curriculum reorganisation were remarkably advanced, not only from the standpoint of expressing the need for developing a meaningful unity out of many disparate subjects, but also in his attempt to develop a broad-field pattern from the living
conditions of a region.

The advocates of the broad-fields organisation put forward three major advantages. They argue that it permits a broader coverage and a greater integration of subjects, allows a remarkable elimination of factual details, and facilitates a more functional organisation of knowledge. The broad-fields curriculum is widely practised in general education. Nevertheless, while it has practically become a standard in the primary stage, it has only partially developed at secondary level. 32 The opponents of such a pattern argue that in many cases, the areas of knowledge have been superficially integrated and broadened in name only. They point out that the broad courses may turn into a passive overview of generalisations which offers little opportunities for active learning. Some progressive educators would argue that the subject matter in the broad-fields approach is not based on social problems, nor does it take into account the needs and interests of the adolescent. 33

2.2 Student-Centred Organisation

Although the broad-fields curriculum is considered as a step in the right direction of eliminating the traditional subject-boundaries in general education, it does not concern itself with the psychological needs of students, nor does it reduce subject matter to its lowest common denominator. Moreover, the passive-receptive role of the student in the tradition curriculum was soundly criticised by John Dewey and other educators. At the beginning of this century, Dewey called for learning as a process of inquiry, rather than a passive absorption of information. He wrote

"Excessive reliance upon others for data is to be deprecated. Most objectionable of all is the probability that others, the book or the teacher, will supply solutions ready-made, instead of giving material that the student has to adapt and apply to the question in hand for himself."

34

Supported by the results of research in the psychology of learning, some progressive educators have called for a pattern of organisation centred round life problems and students' needs and interests. Thus the criticism of the subject-centred organisation, combined with the concern for students' needs and interests, have aided in the development of the student-centred organisation.
While an extreme interpretation of the subject-centred curriculum has stressed that learning is most effective if it is rigorous, the student-centred curriculum has placed emphasis on the students' interests and appreciations for learning. This does not mean that the student-centred organisation is directed by fancies of the learner, but rather that the learning would be more successfully achieved if it is built upon the developed interests of the learner.

Nevertheless, the extreme form of such an organisation tends to consider the child as the sole centre of learning, whereas the less extreme form is organised around key social problems closely related to the needs and interests of adolescents. These two forms, the activity and the core curriculum are distinguished as follows.

(i) **Activity Curriculum**

This has come about to counteract the passivity and sterility of learning and the isolation from the needs and interests of children of the conventional curriculum. Although it is sometimes called a project or an experience curriculum, the term 'activity curriculum' seems to be classic. It is associated with Pragmatism. Such a curriculum is based on the interests and needs of the learners which constitute selectors of what to study. Taba argues that

"Theoretically, the activity curriculum centres in student interests, encompasses in an integrated fashion content from any field, provides for a learning dynamic in a natural setting, and incorporates both the purposes for learning and the application of what is learned."

35

The activity curriculum however, is quite different from all other patterns of curricular organisation because of three distinctive characteristics. The first of these is founded on the principle that interests and purposes of children determine the educational programme. This implies that subject matter is a means of fulfilling the purposes and aspirations of the individual or a social group. It rejects the traditional notion that interests and needs of children are merely aids in learning the subject matter. Knowledge instead, originates in action devoted to the realisation of purposes. A second distinctive characteristic is that common learnings come about as a result of individual interests. Instead of coming from organised fields of knowledge, as in the subject
curriculum, or from problems of social living, as in the core curriculum, the sources of learning are the experiences required by the interests and needs of children. The degree of similarity depends upon the extent to which these experiences are shared in common by the children. The third characteristic is that this curriculum is not planned in advance, but guidelines are established. This will help the students to choose alternatives intelligently as they proceed through the programme. Activities are cooperatively planned by students and teachers. But what they plan and pursue may or may not have any deliberate social direction. In such an organisation problem-solving becomes the major method for teaching. There develops little or no need for extra-curricular activities because all interests are accommodated within the regular programme.

The activity curriculum has been controversially debated and sometimes misunderstood, and has not been as acceptable to the public as has the subject-centred curriculum. Since its appearance, the activity organisation has been successfully used at the elementary level. Although it has never secured a foothold in the secondary curriculum the activity organisation has had some influence on such a programme. However, this lack of acceptance at the secondary school level is partly due to the subject orientation that secondary teachers and administrators have had, and partly because the public seems to prefer the traditional organisation and methodology of the subject-centred approach.

(ii) The Core Curriculum

This can be categorised under either the subject- or the activity-curriculum. Therefore it is associated with both essentialist curriculum theory when the core is the subject, and with pragmatism when the core is drawn from social problems.

The term 'core' however, involves different meanings and causes something of a confusion. Some use the term to describe an arrangement for correlating two subjects by having them taught by one teacher during a two-period block of time. Others use it to refer to a fused, or perhaps, a broad-fields approach. Some use it to denote an approach for developing social values and problem-solving. Others treat it as an emerging general education programme for all youth proceeding through schools. It can mean the unified or fused curriculum with one field
acting as the unifying centre. It can also mean broad, pre-planned problem areas, or broad units of work, or activities cooperatively planned by teacher and students without a basic curriculum structure. 39

For Taba, the core curriculum means that there is some unification of subject-matter by correlation around themes drawn from functions of living, or social contemporary problems or from the interests and needs of students. She has argued that

"in a great many cases the core program is not actually a curriculum design, but only a way of scheduling classes in larger blocks of time and with more than one teacher being assigned." 40

Showing the confusion of using the term core curriculum by indicating the several approaches employed in planning such an organisation, Wheeler points out that

"Core programmes range all the way from separate subjects rigidly organised, through the correlation of subjects to the emergent experience approach, while organisation may be on the basis of centres of interests, activities units of work, pupil experiences and life situations." 41

The core curriculum grew out of two widely different emphases in educational thought. The first was a reaction against the piecemeal learning promoted by the subject-centred organisation. The second was a recognition of the social role of public education in maintaining common values and common social perspectives. 42 Because of such varying emphases, different core curricula have emerged. One organisation has been based on the unification of the subject. An alternative has placed the social needs in the centre of the curriculum.

In the United States it is regarded as the most ambitious attempt to provide for integration, to serve the needs of students, and to promote activity learning and significant relationship between school and life. 43

One can identify two features of the core curriculum that distinguish it from all other patterns of curriculum organisation. One is the stress on social value. Considerable time is devoted in such an organisation to the study of the culture and its moral content. In contrast with England the core curriculum in the USA utilises the problem-solving approach. Some American educators reject the customary thinking of solving social problems by means of facts and descriptive principles without explicit
reference to the values involved. Instead, they make the value content of a social problem along with facts, descriptive principle and socio-economic conditions, the object of study. 44

Another distinctive characteristic of the core curriculum is that its structure is fixed by broad social problems, or by themes of social solving. In its present form, the core curriculum is a refinement and a simplification of the basic elements of the culture. Such elements are organised not in subject nor in interests but into social categories based on the major areas of social activities. Thus, a typical application of the core curriculum would be a study of the persistent themes of social living. The subject matter is not an isolated block of content, but rather it is used as a means to define and solve problems common to many or all students. Although the core curriculum takes into consideration the learners' interests, student interest is not the sole criterion for selecting and organising the learning experiences. 45

Opponents of the USA core curriculum argue that such an organisation leaves out some essential subjects. They believe that the core curriculum has neither added any distinctive features to, nor has it omitted any essential features from subject organisation. The content of the core curriculum is expressed in terms of organised fields of knowledge. Unifying the content of two or more subjects into a coherent course, though undoubtedly considered an improvement, is still regarded as a deviate form of the subject organisation influenced by course boundaries. One of the subjects involved in the unified course is often apt to dominate. In addition, the unified-course-core is divorced from social problems and, like other forms of subject-centred organisation, neglects social moral values. 46

The integrated core based on life problems which cross-cut the current subject divisions is hard to achieve within the specialist areas. Taba points out:

"Using content specialists as team members in planning the content presents difficulties also, because applying the knowledge of special fields to these new fields requires a re-orientation of focus which the specialists are not always willing or able to achieve."

To avoid these difficulties, attempts have been made to integrate learning around broader themes or social problems. However, the discovery of such problems with reasonable validity and significant scope for
learning experience represents a further difficulty.

The opponents of the core curriculum would also argue that both social-problem-core and unified core programmers required broad competence. A really good core teacher needs a breadth and depth of liberal and specialised education that is hard to find. This lack, together with the expensive teaching materials make it difficult to operate an adequate core organisation. Against this the advocates would argue that the core curriculum organisation has not yet received a fair trial.

3. Extra-Curricular Activities

The relationship of the extra curricular activity to the curriculum depends upon the accepted concept of the curriculum. If, for example, we take the point of view that the curriculum comprises all student experiences gained with the planned educational programme, then the distinction between curriculum and extra-curriculum activities tends to disappear.\(^{48}\) Extra-curricular activities in secondary schools sometimes provide many hazards and problems because of the lack of proper planning and preparation in conducting such activity programmes. Three major problematic issues associated with extra-curricular activities can be identified. These are: student participation, cost to student, and balance in programmes.

The first problem involves too much or too little participation. If youth needs are to be met through participation in extra-curricular activities, then such a participation must reach all of the students in a secondary school. However, students who are interested in many activities and are well accepted socially, often tend to dominate the activity programme. Others, usually those who lack the experience and the required expense, either do not participate or are rejected by the other participants. Studies of actual participation of students in different schools reveal diversified findings. Students do not participate in activities for several different reasons. Some youths may not need to take part in them; others may not be interested; still others cannot afford the expense, nor meet the competition or they may feel unwanted in activities. Frederick points out that students take part in particular activities at special times and do not participate in other activities because of several variables acting together or separately. Outstanding of these variables are activity schedule, place of residence, transportation schedule, cost of the activity, possessive or demanding parents, race, and religion.\(^{49}\)
According to Krug, however, both over-involvement and under-involvement of pupils are troublesome problems in conducting extra-curricular activities. Notwithstanding, it is possible that under-involvement is a more serious problem than over-involvement. Therefore, school administrators have attempted to encourage participation and stimulate student interest in extra curricula activities through utilising various artificial devices such as drives, contests, special recognition and awards. From the standpoint of the curriculum, the issue of pupil involvement in extra-curricular activities may be overcome or minimised by giving curricular status to many of the activities that have been considered worthy of regular school time.

As far as the financial resources are concerned, student activities are mainly financed by school appropriations, dues, assessments, fees, admissions and sales. Although authorities generally recommend that the school assumes responsibility for financing most or all phases of the activity programmes, it is a common practice for each student to pay his own cost. The extent of the hidden costs of participating in extra-curricular activities remains a major problem. This cost constitutes one of the significant hidden tuition costs of secondary education. Research in this field indicates that the costly nature of the student activities programme inhibits participation. It also reveals that students from marginal or submarginal-income families find it impossible to take part in the extra-curricular activities they would prefer. Students with limited resources will often be forced to affiliate with activities for economic reasons, rather than because they are interested in them. Therefore schools administrators have to face such a problem by establishing policies of fixing dues and fees which permit a large participation of the majority of school population.

The third problematic issue of extra-curricular activities is related to the type of overemphasis. Activity programmes are sometimes ill-balanced in relation to individual needs. They are less frequently planned, or adequately conducted, for students possessing lesser ability and/or interest. Generally speaking, students possessing talent receive much attention whilst those with lesser ability are either eliminated entirely or receive relatively little attention in minor parts of activities. Moreover, in a given school some activities receive unusual amounts of interest and support at the expense of other desirable activities (i.e. interscholastic athletics are given more attention than
other parts of the programme). Furthermore, significant differences also sometimes exist between the stated aims of activities and what actually occurs in practice (i.e. an activity may be designed to assist students in discovering and developing a particular interest, but be so operated that only those students who possess considerable interest and ability are permitted or encouraged to continue membership). These inconsistencies between the stated aims and the actual practice create serious problems in conducting extra-curricular activities. However, the establishment of well-defined purposes and well-balanced activity programmes helps in overcoming a great deal of over-emphasis problems.

Equally important is the internal social organisation of the school. It is worthwhile reporting the fact that the type of internal structure required by any comprehensive school is proportional to its size. Barker and Gump have compared records of extra-curricular activity participation in comprehensive schools of different size and found that students in small schools took part in more kinds of activities than did students in the larger schools. Furthermore they have found that a much larger proportion of the small school students held position of importance and responsibility. The development of large comprehensive schools has raised the necessity of reconsidering the pupil-teacher social relationship. Most comprehensive schools have recognised that the traditional social organisation of form-teacher type is not longer adequate for the increasing necessity for a wide programme of guidance satisfying the extensive range of individual differences in needs and interests. The type of internal social organisation was a debatable issue, particularly in England. One of the best alternatives to approach it was the breakdown of the large comprehensive school into manageable and homely units. The breakdown of the school into small social units is generally made through vertical divisions into houses comprising pupils of all ages an abilities, or by horizontal divisions into broad-band sectioning or into individual year system.

The house system is widely discussed in the comprehensive school literature. Many educationalists and sociologists have acknowledged it as a standard practice in comprehensive schools. The main idea behind this system is to reduce the size unit to which a pupil belongs, and to
ensure that each pupil is attached to one member of the staff during his whole school life. A great deal of help is also given to children with special difficulties, to overcome their problems. The procedure of such an organisation is to divide the school into smaller units maintaining a cross-section of the whole school in each unit. These units are called houses, or homerooms. Each house is looked after by a housemaster, assisted by several tutors from the teaching staff. The tutor is in charge of a group of twenty to thirty pupils within the house. However, the house system has not been able to stand as the sole internal social organisation. The variety of structure of the comprehensive school, the lack of the built purpose comprehensive school and the over-crowding of the staff have been influential forces adversely affecting the function of the house system.57

The horizontal sectioning type of internal social organisation has developed with the recent rise of the structure of the middle school. This form of organisation involves the division of the school into broad horizontal bands of middle-upper schools. Each band possesses its own social needs of the various age groups and provides opportunities for developing pupils' individuality.58

The year system is another form of the horizontal internal social organisation. It is a serious rival to both the house system and the broad band sectioning. The year system organisation operates effectively when the schools are smaller in size. This type is based on dividing the school into year-units with an appointed teacher as the head of each unit. In some schools the teachers accompany their forms year by year and the 'year-master' may progress through the school with his year group in order to achieve a continuity of care by the same teachers throughout the pupils' life at school. Other schools form a system of a specialising year system where pupils are placed in charge of teachers who prefer to deal with specified year groupings. The year-staff, however, are responsible for all aspects of discipline, welfare and social activities of all the pupils in the year-unit.59

However, the activity organisation adopted by the comprehensive schools are varied. A growing trend is to blend all these basic forms. No single method of organisation can be recommended as the best. Nonetheless, it can be argued that it is of first importance for the success of the extra-activity programme, to identify clearly certain values and purposes, to lighten the staff's teaching duties in order to undertake their pastoral duties adequately, and to administer the programme cooperatively.
The nature and scope of the curriculum are greatly complicated by the educational philosophy and the functions of the school in a given society. In other words, the normative pattern and the structural organisation that shape a certain educational system have a virtual impact on the organisation of the content. The question of whether the curriculum aims at improving the intellect or at developing the character of pupils has long been debated. The ability of the traditional curriculum to direct young people into socially necessary occupations was open to question. A notable divergence has occurred in the view of the separation between education for culture and the training for specific trade or manual work. The distinction between academic and vocational education is no longer an acceptable device in many countries.

The notion of liberal education as the province of a privileged class came to be regarded as untenable in modern democratic societies. Such societies upheld the ideal that all men are free and that all men have to share in the productive work of society. D. Tanner and L. Tanner argue

"The traditional concept of the liberal arts not only suffered from a social exclusiveness but from a knowledge exclusiveness favouring the literary studies. Science and technology not only helped destroy slavery but required a broader concept of the knowledge that all citizens of a free society must share in common".

Holmes has identified two aspects of the social context in which the curriculum in Western Europe is operating as the configuration of democratic institutions and the complexity of a technological society. Asserting the impact of the latter on the curriculum he states

"The complexity of modern technological society makes it necessary for the curriculum to help provide two things. First, a scientifically literate population - that is to say, one whose members can critically assess the scientific and social implications of scientific pronouncements ... The second task of the curriculum is to ensure that enough young people are educated for and encouraged to enter occupations that require very high scientific and technological training."

Thus general education becomes imperative. It has emerged to replace liberal education. Its advocates argue that general education provides
for a common universe, understanding and competence. Therefore, it necessitates a different outlook on knowledge from that of specialised education. This requires a curriculum which is not exclusively concerned with human heritage but also deals with prevailing problems of man and society. However, general education is not considered as an antidote for specialism, but as a means of uniting all citizens in the common cause of democracy, due to the fact that specialism is necessary to the functioning of the advanced technological society.

The curriculum content within a comprehensive system differs at the lower and upper secondary levels. However, agreement is reached that the curriculum content is to provide general education, preparation for higher education, and preparation for the labour market have been conflicting forces in determining the organisation of the curriculum content at the upper level. The ideal of the comprehensive school is to serve the educational needs of all its pupils whether terminating or continuing thereafter. Hence its curriculum comprises a programme of general education, a variety of optional courses, and orientation of vocational education, and sound extra-curricular activities. These four items are given different weight in the varying comprehensive school systems. Therefore the organisation of the curriculum content in the countries under study will be examined in accordance with those aspects.

4.1 American Comprehensive School Curriculum

Uniformity of the curriculum content hardly exists in American context, due to the great autonomy given to the local districts in administering their school systems. Uniformity is considered desirable and necessary insofar as school organisation enables pupils to transfer from one school system to another without loss of time. But standardisation in the organisation of the curriculum content is regarded as unprofitable. Nevertheless, public education has always been nationally considered as an important process of realising the ideal of equality of opportunity which has long commanded deep and widespread consent in American society.

The traditional high school curriculum was highly academic, with preparation for further study the dominant emphasis. However, during the twenties and the thirties a profound educational reform took place in the United States. This reform was characterised by the rise of the comprehensive secondary school, the growing heterogeneity of the student population, the diversification of secondary studies and the influence of progressive
education. These forces have led to a significant awareness and concern for general education as the unifying component of the curriculum of the comprehensive high school. Such a school was designed to provide:

1. a general education for all youth as citizens of a democratic society;
2. specialised programmes for vocational proficiency for those students entering the labour market;
3. specialised programmes of academic preparation for college; and
4. explanatory studies and experiences to meet the varying individual interests. 68

General education, as developed by the comprehensive high school, was conceived to provide each rising generation with the social power and insight necessary for tackling the problem of a common humanity. Notable efforts were made during the twentieth century to construct the content of the general educational programme.

The two key documents embodying the proposals of general education were *Education for All American Children*, issued in 1948, and *Education for All American Youth*, published in 1944 and revised eight years later under the additional title - *A Further Look*. According to the former proposal, curriculum was to be designed in terms of children's needs and democratic values, rather than through rigid subject disciplines.69 Many of the curriculum illustrations were built on the concept of the integrated curriculum or integrated-day which has come to be associated with the open classroom proposal of the late 1960's and early 1970's. All proposals presented in *Education for All American Children* were received with little debate because they reflected ideas and practices widely accepted in that era.

In contrast, *Education for All American Youth* proposed for the reconstruction of the secondary school curriculum in a markedly different direction from existing practice. According to this report, the curriculum was to be designed as a common learning programme providing for the fullest integration of learning experiences.70 This design was closely paralleled to the integrated core curriculum developed by the experimental schools of the Eight Year Study. The common learnings sequence was to extend from grades 7 through 14 (including the two years of the community college) in a continuous daily block of time. Therefore the curriculum in the common learnings was to be replanned and the entire curriculum
would be made relevant to the 'imperative need of youth'. These needs included democratic citizenship, health, family and social living, consumer economics, scientific understanding, aesthetics, leisure, vocational proficiency and ethical values. Figure 20 shows the relationship of the common learnings to the other areas of the curriculum. As proposed by the commission, the time allocated to the common learning programme constitutes half of the school day in grades 7 through 10 and one third in grades 11 and 12. Students begin to pursue some specialised learning, including vocational and college preparatory work, in grade 10 with one sixth of the school day. These studies are expanded in grades 11 and 12 to constitute one third of the school day. Pupils in grades 7 through 9 devote one third of the school day to personal interests or exploratory learning, against one sixth only in grades 10 through 12. The time allocated to health and physical education remains as constant as a sixth of the school day throughout all grades.

The proposal of curriculum reconstruction presented by \textit{Education for All American Youth} did not lead to any surge of curriculum reform. The common learning programme came under attack and yielded to the forces of specialism and pressures of the Cold War. Accordingly Bestor introduced a new proposal for secondary school curriculum. In his terms

"the fundamental secondary school programme should consist of continuous and systematic work in the five great areas of mathematics, science, history, English, and foreign languages and a sound minimum roster of courses for secondary fields."

Commissioned by the Carnegie Corporation, Conant issued his report in 1959, which included the following curriculum prescriptions:

1. The general education requirements for graduation for all students should comprise of four years of English; three or four years of social studies including two years of history, one devoted to American history, and a senior course of American problems or problems of American government; one year of mathematics in the ninth grade including algebra or general mathematics; and at least one year of science in the ninth or tenth grade including biology or general physical sciences. This minimum programme of academic subjects should account for more than half of every student's total studies.
2. Students should be grouped by ability, subject by subject, in all required subjects, and in elective courses enrolling students with a wide range of ability. Across broad groupings, however, should be avoided.

3. Academically talented students should take at least four years of mathematics, four years of English, four years of one foreign language, three years of science, and three or four years of social studies. This programme represents a total of 18 courses to be taken in four years, requiring a minimum of 15 hours of homework per week. A second foreign language might be added to this recommended minimum programme.

4. Specialised counsellors should be provided for highly gifted pupils, who should be encouraged to pursue advanced placement courses.

5. An academic inventory should be maintained, and possibly published annually, showing the programme completed by those students in the top 15 per cent in intellectual ability.

6. Diversified programmes for the development of vocational skills should be offered, but students should not be labelled as 'vocational' or college preparatory.

7. Homerooms should be heterogeneously grouped and each homegroup should be kept intact throughout the high school years.

8. All students should be encouraged to choose music and art.

9. A twelfth grade course on American problems, heterogeneously grouped, should be required of all students.

Established by the Kettering Foundation, the National Commission on the Reform of Secondary Education, which issued its report in 1973, has recommended that

1. Curriculum revision must grow from measurements of the degree to which students attain the stated goals and objectives.

2. Career education programmes should be initiated as integral to the curriculum

3. Alternative paths leading to the high school diploma should be developed.

4. The College Entrance Examination Board should institute a secondary level examination programme with tests being administered quarterly or monthly to assess student credits for work outside the classroom.
Thus the curriculum content in the American comprehensive high school has been wavering between the two curriculum theories: pragmatism and essentialism. Significant efforts were made to devise a new structure of the curriculum content to provide for a greater measure of relationship among areas of knowledge. The traditional subject was organised variously in terms of correlation, fusion and broad-fields. This type is always favoured by essentialists. Another alternative to the subject curriculum was the activity curriculum, which is advocated by pragmatists. The core curriculum was introduced as a compromise since it may be designed in either a subject or activity manner. All the patterns of curriculum organisation have, more or less, been exercised in the comprehensive school curriculum.

Description of the comprehensive high school curriculum can be examined in several ways. The method used here is based upon three types of educational opportunities advocated by Conant: general education for all students, preparing the college bound student and special provisions for terminal students. Courses and experience from all these three divisions can be included in the student's programme of studies. Figure 22 demonstrates the curriculum in an American city.

(i) **General Education**

Throughout the twentieth century, the comprehensive high school has struggled to develop its own curriculum in general education. The programme of general education comprises the major areas of the curriculum in which all students would be enrolled to enjoy a broad area of course work and activities. This part of the instructional programme is designed to develop the skills, attitudes, and knowledge required of all future citizens regardless of their particular station in life. General education is usually organised into experiences, called the required courses. Such courses include the areas of knowledge which are now considered more important.

Probably the most basic of all studies are those concerned with the English language arts. Reading, grammar, literature, speech and composition are usually part of the general education programme for at least five of the normal six years of secondary school. The social studies programme of general education often consists of studies in world history, American history, State history and citizenship. Consideration of contemporary American and world problems seems to be assuming its rightful place of
THE CURRICULUM IN AMERICAN CITY

<table>
<thead>
<tr>
<th>Periods per day</th>
<th>Early Secondary School</th>
<th>High School</th>
<th>Community College</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personal Interests</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Exploration of personal abilities and individual interest discovery of interests in art, music, science, languages, sports, crafts, home and family problems, and leisure activities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Vocational Preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Includes education for industrial, commercial, homemaking, service and other occupations leading to employment, apprenticeship or homemaking at the end of Grade XII, XIII or XIV; education for technical and semiprofessional occupations in community college, and the study of sciences, mathematics, social studies, literature and foreign languages in preparation for advanced study in community college, four-year college or university. May include a period of productive work under employment conditions, supervised by the school staff. Related to the study of economics and industrial and labour relations in &quot;Common Learnings.&quot;))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Methods, principles and facts needed by all students)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Common Learnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(A continuous course for all, planned to help students grow in competence as citizens of the community and the nation; in understanding of economic processes and of their rules as producers and consumers; in living together in family, school, and community; in appreciation of literature and arts; and in use of the English language. Guidance of individual students is a chief responsibility of &quot;Common Learnings&quot; teachers.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Health and Physical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Includes instruction in personal health and hygiene, health examinations and follow-up, games, sports, and other activities to promote physical fitness. Related to study of community health in &quot;Common Learnings.&quot;))</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Broken line indicates flexibility of scheduling.
** Heavy line marks the division between "differential studies" (above) and "common studies" (below).

importance in the general social studies curriculum. The study of mathematics is a basic ingredient of the general education programme of all schools. The modern approach, which stresses less rate memory on understanding of mathematical processes is now widely utilised. Science education has received more attention in the last few years. General science education is provided through one or more years of high school. Integration of all science fields into broad courses is the usual pattern needed and enjoyed by all students. In addition to these traditional academic courses, the general education programme comprises a wide area of non academic studies, such as fine arts, health and physical education, home living and industrial arts, consumer business, and driver education.  

(ii) Optional and Specialised Programmes  
Most of the school experiences regarded as essential for general education are also needed by those students planning the completion of their formal education beyond high school. However, in order to equip adequately those students for entrance and successful pursuit of higher education, additional learning opportunities are provided.

More advanced study in English language is needed for the college aspirations. Additional offerings in social studies are included in the college bound students. These may comprise advanced world and American history, geography, sociology and anthropology, economics, international relations, philosophy, and American problems. All students envisaging college are advised to include in their high school studies at least one year of study in more advanced mathematics. For those who are more talented in mathematics, and wish to specialise in this area, other types of advanced algebra, geometry, trigonometry, calculus must be made available. Opportunities for more advanced study in physical sciences are provided for students as general preparation and college specialisation. Foreign languages have traditionally been considered an essential part of college preparation. Two years of study in this field are a minimum requirement. The most common foreign languages taught in American high schools are Spanish, French and German. Less common foreign languages such as Russian, Chinese and Greek are included in some high school programmes. Latin is still offered in many schools. Many types of courses in the fine arts are available for those thinking about specialising in this field.
(iii) Vocational Orientation

The comprehensive high school is significant with its vocational and technical offerings for non-college bound students. Agricultural orientation was one of the first vocational programmes to achieve broad acceptance and support in the United States. The home economics programme has increasingly been required and extended to include offerings in cooks and restaurant managers, hotel workers, child-care specialists, consultants and sales personnel in home furnishing establishments, home decorators and others. Probably the fastest growing area of the curriculum is that related to the industrial arts and trades. The American comprehensive schools offer numerous types of programmes in industrial, trade and business instruction. The possibilities for curriculum expansion in such areas are limited by the human and financial resources available.

4.2 English Comprehensive School Curriculum

The introduction of a common school system has led to increasing the period of general education and raised the amount of communality in the curriculum. The impact of such forces in England has been reflected in a general tendency to raise the school leaving age and to develop a broad general curriculum incorporating the values and the subjects of the traditional academic courses. Holmes argues

"It is apparent that in the new post-war configurations of political power in post-war England it is more than ever necessary to pay attention ... to the training of students in the ability to make and take democratic decisions in the light of their national, as well as individual and group consequences. It is also necessary that students should be encouraged and trained to understand the wider implications of science and technology, and to understand as far as possible, the basic principles of the nation's economy and the dependence upon it of the nation's political position in the world. To achieve these purposes necessitates some reorganisation both of the secondary school structure and the curricula of the various schools."

The impact of pragmatist curriculum theory on the organisation of the curriculum content in England seems to be negligible. The Plowden Report noted that progressive education ideas had been slow in being put into practice. It added that although the ideas of Dewey and others were available in the literature, few teachers had given much time to the study
of such literature even in their college days. The main curriculum theory functioning and dominating the organisation of the curriculum content in England is the essentialism. Subject-centred approach is the predominant pattern of content organisation, though some approaches of integral studies have been devised. The Plowden Report regarded the integrated curriculum as a revolutionary change from the extremely traditional approach of dividing the curriculum into rigid subject disciplines.

"Throughout our discussion of the curriculum" stated the report

"We stress that children's learning does not fit into the subject categories."

After pointing out that even in secondary schools, experience has shown that

"teaching of rigidly defined subjects, often by specialist teachers, is far from suitable."

the report concluded that

"There is little place for the type of scheme which sets down exactly what ground should be covered and what skill should be acquired by each class in the school."

There are different patterns of organising the curriculum content. The difficulty of generalising in the field of curriculum is due to the significant freedom enjoyed by the head and the teacher in selecting and organising the curriculum content, especially in the lower grades of the comprehensive schools. The curriculum differs from one school to another according to the availability of resources in a particular school, and to the views held by the personnel of that school. Within such a traditional autonomy, the organisation of the curriculum content becomes a far more complex process, due to the fact that the English comprehensive school functions in three directions. First, it has to provide a wide variety of courses to meet the varying needs of the different abilities. Second, it has to offer courses of appropriate length to satisfy the various terminals of the pupils, since some would stay on till the age of 18 or 19, whereas others may stay only up to 16. Thirdly it has to provide courses for those who will sit for an external examination and others who will not. Pedley argues
"Because special interests and aptitudes develop as people grow up, a comprehensive school must offer a wide range of possible courses to meet the different needs of different pupils. No English comprehensive school is exactly like any other. Her Majesty's Inspectors of Schools may advise on curriculum and the internal organisation of a school, but they cannot dictate; and almost all local education authorities give much freedom to the head of the school in such matters."

However, one can identify general features which may characterise the organisation of the curriculum content in an English comprehensive school. It normally provides a foundation course of either two or three years for the age group of eleven to thirteen or fourteen. Then the comprehensive school increases the number and character of courses made available for pupils of thirteen to sixteen. In addition to the foundation subjects, the school provides other courses of special interest to meet the needs of the students planning to sit for an external examination, and those who are not aiming at a formal examination. Those who remain at school to the age of eighteen or nineteen are provided with specialised and advanced courses either in academic subjects for those who go on to colleges, or in practical subjects for those who will enter the world of work. It is somewhat difficult to describe the curriculum content in an English comprehensive school, following the same classification used in the case of the United States, due to the fact that all descriptions in the comprehensive literature follow the classification of describing a certain content for certain level of the school. However we will attempt herein, to follow our classification.

(i) General Education Programme

General education for all entrants at the same level is a rarity. However all children during their first three years in a comprehensive school, follow a core curriculum. Such a curriculum aims at providing a sound general education which ensures a wide range of essential subjects followed by all pupils. The core curriculum usually comprises: English, mathematics, science, history, geography, religion, art, music, handicraft, domestic science and physical education. Religion is the only subject in the curriculum which must be provided. One or two foreign languages are taken by some, but not all pupils. For example, all pupils, except the
less able, study French, while Latin is usually provided for the more able.\textsuperscript{85} However, Benn and Simon maintain that Latin is taught in the early years more generally only in those comprehensive schools developing from grammar schools.\textsuperscript{86} The survey conducted by the Association of Assistant Masters in 1967 found that three out of thirty schools surveyed introduced Latin in the first year, four in the second. The report noted that Latin is unlikely to be taught where the school does not stream or set its pupils. It is found that the teaching of Latin to a minority of pupils and the provision of a common curriculum are incompatible.

Throughout this general education programme, differentiation exists by virtue of differences in method, approach of syllabus, grouping, and relative proportions of time devoted to various subjects. Therefore many alternatives of programmes are provided. The following table shows possible study plans for the first three years of the comprehensive school. It also exemplifies the emphasis on the general education course.

\textbf{Table 10.1}

Possible Study Plans for the First Three Grades of an English Comprehensive School

<table>
<thead>
<tr>
<th>Subject</th>
<th>Types of Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td>1st foreign language</td>
<td>-</td>
</tr>
<tr>
<td>2nd foreign language</td>
<td>-</td>
</tr>
<tr>
<td>Mathematics</td>
<td>5</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
</tr>
<tr>
<td>Arts</td>
<td>2</td>
</tr>
<tr>
<td>Handicrafts</td>
<td>2</td>
</tr>
<tr>
<td>Common commerce</td>
<td>2</td>
</tr>
<tr>
<td>Religious Knowledge</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
</tr>
</tbody>
</table>

In schools where streaming is the dominant method of grouping, subjects of academic nature such as English, mathematics, science, foreign languages, history and geography are taught in ability sets. Pupils are rearranged in form groups for arts, music, crafts, religion and physical education. However, the introduction of a common course provided an impetus for structural organisation. It implied that no basic differentiation between groups of pupils would take place in schools operating such a course. Instead, these schools provide broadly similar and relevant educational experiences for all pupils. The common course has become a distinct feature of the comprehensive school curriculum. Its popularity is evident from the Been and Simon survey of 1968. They found that 80.5% of 605 English comprehensive schools surveyed had a common course for all pupils in the first year. 48% of these schools maintained such a course for three years, 30% for two years, and 18% for one year. Pupils are expected, through the general education programme designed for the lower section of the English comprehensive school, to become acquainted with the content of the essential subjects in a general way and to develop mentally, physically and emotionally to a certain extent.

(ii) Optional and Specialised Programmes

As children grow up, so their special aptitudes and interests emerge more clearly. Pursuing its policy of giving an education suited to the needs of each pupil, the comprehensive schools design a programme of optional subjects having two functions. It takes into account the needs of the pupils who will ultimately leave school at the statutory school-leaving age and those who will stay beyond this age.

The programme of optional subjects is further complicated by the process of choosing a particular course of grouping of subjects. This involves a variety of guidance procedures to ensure that correct choices are made by parents and pupils. Therefore each individual pupil and his parents are interviewed by the studies advisory board and the youth employment officer to be advised on suitable courses. Whatever procedures used, the choice made determines the character of the pupil's education. Accordingly, the English comprehensive schools use a variety of methods in organising the optional part of the curriculum. The ILEA 1966 survey stressed the need for a sophisticated form of organisation involving diversity and flexibility, in order to meet both the varying needs of pupils and to enable schools to react adequately to new situations and demands.
Examples given showed that schools had evolved from a form or course system towards greater flexibility and pupil choice of options. The institution of The Certificate of Secondary Education examination (CSE) with majority of modes under teachers control, helped the flexibility of curriculum organisation. The following table demonstrates the different procedures used in choosing the optional part of the curriculum. It shows that a great majority of schools have moved to a system of free choices of options by the pupils, together with a core of required subjects.

Table 10.2

<table>
<thead>
<tr>
<th>Curriculum Arrangements in the English Comprehensive Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum arrangements</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>1. Required subjects plus options</td>
</tr>
<tr>
<td>2. Complete course choices</td>
</tr>
<tr>
<td>3. Free choice from options group</td>
</tr>
<tr>
<td>4. Combinations of above systems</td>
</tr>
<tr>
<td>5. Other arrangements</td>
</tr>
<tr>
<td>6. Unknown</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Source: Benn, C., and Simon, B., Half way there, op.cit., p.536.

Broadly speaking, the courses offered by all schools may be classified as academic, commercial, or technical. However, an interesting variety of subdivisions exists within these groups. The blurring of lines between groups and individuals and the subtle and gradual differentiation is well exemplified in the types of courses offered and the arrangement made for organising the content. Each group of courses comprise the core subjects, in addition to the optional subjects. The former are compulsory. They may either be basic subjects, such as English and mathematics, or essential ingredients of a given course. Each pupil takes English, mathematics, religious education, 'careers' and physical education. These are the required basic core for all. Subjects are then arranged in five 'pools' being
offered in some cases only at '0' level GCE, in others only at CSE level, and in many cases at both levels. The pool from which choices are made is listed in Table 10.3.

**Table 10.3**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>History</td>
<td>Geography</td>
<td>Chemistry</td>
<td>Physics</td>
</tr>
<tr>
<td>Spanish</td>
<td>Typing</td>
<td>Chemistry</td>
<td>Physics</td>
<td>Biology</td>
</tr>
<tr>
<td>History</td>
<td>Tech. Drawing</td>
<td>Biology</td>
<td>General Science</td>
<td>General Science</td>
</tr>
<tr>
<td>Geography</td>
<td>Metal work</td>
<td>Typing</td>
<td>Economics</td>
<td>Art</td>
</tr>
<tr>
<td>Engineering</td>
<td>Scripture</td>
<td>Social Studies</td>
<td>Typing</td>
<td></td>
</tr>
<tr>
<td>Domestic Science</td>
<td>Art</td>
<td>Music</td>
<td>Accounts</td>
<td></td>
</tr>
<tr>
<td>Needlework</td>
<td>Technical drawing</td>
<td>Typing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catering</td>
<td>Domestic Science</td>
<td>Accounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodwork</td>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


At a London school for example, six courses with different biases are arranged: literary, science, engineering, commercial, art and general. Each course comprises relevant required subjects around which the pupils add their own choice from optional subjects provided for pupils planning for GCE and for CSE.

Arrangements for school leavers at 16 fall into three major groups. Some schools have specific departments in charge of the courses. Others develop special courses taught through the different subject departments. Furthermore, there are some schools which deliberately integrate such a group within the rest of the school. It has been argued that differentiation between courses for those staying on at school and those intending to leave at the earliest possible date is unwise. Therefore curriculum should be
designed for the whole school, meeting as far as possible the needs and interest of each pupil without committing him to leave at a particular stage. Many heads in the Benn and Simon survey agreed with this point of view and felt that

"the segregation of pupils implied by the organisation of specific 'terminal' courses is not justified within the comprehensive school."

With the raising of the school-leaving age, many of the terminal courses no longer have any relevance and there is a growing tendency towards integral courses.

The real specialised studies begin at the sixth form. Such a form is a new phenomenon in many respects in the comprehensive schools. It accepts all pupils remaining at school after the age of sixteen. One of the encouraging features of comprehensive school sixth forms is the variety of courses available. Such courses offer either a wide variety of combinations of GCE 'A' level subjects, or courses leading to 'O' level, or special courses with a distinct vocational bias. The Crowther report points out

"There are considerable and important variations in the degree of specialisation between one school and another, and between one field of specialisation and another."

Students usually spend three quarters of their time in studying a range of subjects a little wider than those offered by colleges. Each individual student builds up his own course from the variety of options offered. This will be determined both by his own interests and abilities and by career prospects. This, in turn, necessitates a significant programme of guidance to assist in selecting the correct choices.

The specialised programmes can be grouped into three categories: GCE 'A' level, 'O' level, and special vocational lines. Each group, under the direction of a tutor, may include students following each type of course and some students may need to have timetables made up of two parts. However, a student normally aims at three subjects taken at the end of two years. Moreover, he will pursue general studies and physical education together with a choice from non-examination subjects. This choice may extend to art, music, workshop practice, home economics or other subjects. The 'O' level courses in the sixth forms may be organised on the same general principles, offering five or six subjects with a wide measure of choice and leaving
(iii) Vocational Orientation

The great opportunity of the comprehensive school has been to develop vocational courses against the background of a programme of general education. The Newsom Report has enumerated the needs of such education, stating that it must be realistic, practical and vocational, and there must be a certain element of choice. The comprehensive school, however, can provide these principles for a range of abilities wider than was considered in the Newsom Report.

The large comprehensive school has a distinct advantage over others as far as creative practical work is concerned. The wide facilities of materials and the large number of staff possessing many specialised skills, make it possible for pupils to choose among varieties of creative activities and vocational subjects. Catering and commercial subjects have proved the most rewarding branches of vocational work, especially for girls. Courses in Art also provide sound vicational activities for those intending such careers as painting, wood sculpture, screen and fabric printing. Music is recognised as a practical subject in which one can measure solid vocational achievements. Other activities such as handicrafts and housecrafts are provided not only in their traditional types of metalwork and woodwork, but also in a new fashion including building construction and engineering. The comprehensive school also offers a variety of vocational programmes covering mechanical engineering and metal work. Most of the courses offered are related to the dominant type of occupations existing in the local community that the school serves. Therefore, in rural areas the school provides crafts related to the maintenance of agricultural machinery. In industrial areas, the school offers motor-engineering, or electrical engineering and telecommunications. Other certain vocational areas which are of special interest for girls are food trades, dressmaking and hairdressing.

Vocational education is given within the framework of general education in the early years of secondary education. However, specialised courses with a vocational bias are provided in the sixth form. There is often a demand for commercial training and the subjects provided including shorthand, typewriting, business principles, economics, language study etc. Another special demand is the technical course, which offers a variety of subjects relating to the main industry in the area. However, some of these vocational courses are designed in accordance with 'A' level
and equip the students with the qualification required for admission in technical educational institutions or further education colleges.

4.3 Swedish Comprehensive School Curriculum

The reorganisation of the Swedish educational system was presented as a means of achieving social reforms. It was based on certain assumptions about the possibility of bringing about social changes towards equality via changes in the school system. The explicit ideology was one of equal opportunity. At the same time, it was felt that the technological age and change in industry required a new school which could provide a larger number of the population with adequate qualifications for the labour market. Thus the basic comprehensive school and the integrated upper secondary school came into existence.

During the phase of implementation of the reform, at both the compulsory and secondary levels, an increasing amount of money was allocated to educational research and development. A large part of the funds for research was devoted to curriculum development. Hence, curriculum planning in Sweden depends upon scientific research and has increasingly become technologically oriented. However, the curriculum reform of 1969 was founded upon studies on the frequency of choices between different lines in the ninth grade and between the options in grades 7 and 8 in the basic comprehensive schools.100

The organisation of the curriculum content in the Swedish comprehensive schools seems to follow the Encyclopaedism curriculum theory, where students learn a wide range of subjects. The curriculum also is characterised by a strong emphasis on knowledge in traditional subjects. In spite of some statements that the school should give every child a right to develop according to his interests and abilities, the curriculum is strictly planned at the national level. Unlike the United States or England, the curriculum in Sweden prescribes what the pupils should learn. The teacher's task is to impart all the knowledge and skills in all students, according to their abilities. The teachers should be aware of giving all the children opportunities to develop in the areas prescribed by the curriculum.101

The aims and content of the basic comprehensive school are laid down in an official syllabus issued in 1969 (Lgr 69). This curriculum brought about the abolition of the differentiation in lines in grade nine, as well
as the simplification of the system of options in grades seven and eight, making the choice of options non-committal in future schooling. Moreover, English as a foreign language became compulsory from grade 3 to grade 9. Furthermore, certain other subjects were regrouped and changes in the number of hours devoted to various subjects were introduced.102 The official syllabus in force for the upper secondary schools dates from 1970 (Lgy 70). It lays down the objectives and the contents, lists the timetables, and gives general recommendations on the pursuit of studies line by line. The lines in the new gymnasium are grouped into three different categories: arts and social subjects, economics and commercial subjects, and scientific and technological subjects. Each category comprises two- and three-year lines and special courses, i.e. courses which have a more specialised study goal. One of the technical lines runs for four years, but may be terminated after the third year for students intending to enrol in an Institute of Technology.103

Curriculum content is presented chiefly in the form of the 'Laroplan', an official document issued by the National Board of Education. Describing this plan, Kallos and Lundgren write

"The plan not only contains a structured series of learning outcomes, but also clear specialisations as to subject divisions, number of hours per subject, and advice concerning methods of teaching." 104

The plan also defines the area of options opened for the teachers and the pupils. However, this area is further limited by unwritten rules. Apart from the rules and regulations defined in the 'Laroplan', similarities between classrooms at the level of teaching are significantly shaped by various influences such as textbooks and teacher recruitment and training. Thus teaching within the existing frames does not help the teachers to take into account the different needs of different students, particularly if those needs are based on conflicting interests.105 However, with such a uniformity, the description of the organisation of the curriculum content stems solely from the official syllabuses following the same classification used previously.

(i) General Education Programme

This is the dominant feature of the basic comprehensive schools. During the first six years the school offers the same courses to all pupils who are taught by class teachers, taking the whole range of subjects. As
from the senior level (grade 7 through 9) tuition is given by university
trained subject teachers, and elective courses are offered. 106 All
pupils in the basic comprehensive school learn Swedish, mathematics,
music, religion, physical education, and orientational subjects. The
latter include local studies at the junior level, which are divided into
history, geography, civics and nature study at the middle level. The
nature study gives way to biology, physics and chemistry at the senior
level. English and drawing are taught from the third grade. 107

At the upper secondary level, more than twenty lines, differing in
their theoretical and vocational orientation, are provided. They run for
two, three and four years. In the second grade of most lines, and where
appropriate in the third and fourth grades, there are several different
branches and variants with partly varying contents and study goals. It
follows that the upper secondary school is a highly differentiated school
type. However, a common course for all students in the first grade of
all lines is found. All lines give courses in Swedish, civics or job-
world orientation, history, mathematics, and physical education. Foreign
languages are allocated different times in the varying lines. English is
taught for all students in many lines. Other alternatives are German and
French, continued from the comprehensive schools, or a fresh start with
German, French, Russian or Spanish. 108 Two-thirds of the students'
school time is devoted to the common course in the first grade in the new
gymnasium. This time is reduced in the higher grades, giving more time
to optional and specialised subjects.

(ii) Optional Programme

Since the implementation of the new curriculum (Lgr 69) the elective
system at the senior level of the basic comprehensive school has been
simplified. The pupils, in addition to the common course, have the choice
of four options: art, technology, economy or a second foreign language
(German or French). It is up to the pupil himself and his parents to make
the choice of option. These elective subjects are scheduled for four
hours per week in grades 7 and 9, and three hours in grade 8. English and
mathematics, which are compulsory for all pupils, together with the
second foreign language, are taught at the senior level in two alternative
courses: one is general and the other advanced. Here again it is for
the children and their parents to choose between the courses. 109 The new
curriculum suggests that a step toward an undifferentiated senior level
should be taken by dropping such alternative courses in the longer run. Table 10.4 shows the study plan in the basic school.

The optional system is further complication in the integrated upper secondary school by the numerous specialised courses offered in the varying lines. Most lines are divided into branches, and some lines and branches are also sub-divided into variants. Figures 23, 24 and 25 demonstrate these variations within the lines structure of the different categories.

It may be noted that students start their specialised courses from the second year, except in a few cases within the two-year lines, whereas a student specialises in a sub-alternative or a certain variant from the first year. Some lines are directly vocational, while others provide theoretical courses for further studies at universities. Others again offer broader fields of activities, qualifying students for vocational careers or certain specialised professional colleges. In the vocationally oriented lines, the students may choose electives from subjects in the two-year theoretical lines. The most common electives are English, mathematics and drawing. However, most specialised courses follow on from comprehensive school. Others, known as 'higher specialised courses', are started in the integrated upper secondary school.

(iii) Vocational Orientation

Vocational courses are provided in the basic comprehensive school in the form of handicrafts, including sloyd, textile, woodwork and metalwork for all pupils beginning with grade 3. Vocational courses are also offered through domestic sciences in grade 8 and 9. Pupils in these grades are entitled to one teacher-assisted period per week for typing practice. There is no direct vocational training, as such, in the Swedish comprehensive school. Such a training, however, is taking place in the upper secondary schools.

As a result of the recent reforms of the secondary stage, the concept of upper secondary education is no longer restricted to theoretical studies mainly preparing for higher education. It includes more practical and vocational forms of education. The boundary between theoretical and practical education is no longer as hard and fast as it used to be. The latest reform of upper secondary schooling has brought about significant revisions in the organisation and the concept of vocational education. This change in emphasis is reflected in the Swedish terminology, in which
### TABLE 10.4

THE PLAN OF STUDY IN THE BASIC COMPREHENSIVE SCHOOL

<table>
<thead>
<tr>
<th>Subject</th>
<th>Junior Level</th>
<th>Middle Level</th>
<th>Senior Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3</td>
<td>4 5 6</td>
<td>7 8 9</td>
</tr>
<tr>
<td>Swedish</td>
<td>9 11 9</td>
<td>9 8 9</td>
<td>3 3 4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 4 5</td>
<td>5 5 5</td>
<td>4 4 4</td>
</tr>
<tr>
<td>English</td>
<td>- - 2</td>
<td>2 4 4</td>
<td>3 3 3</td>
</tr>
<tr>
<td>Music</td>
<td>1 1 2</td>
<td>2 2 1</td>
<td>2 - 1</td>
</tr>
<tr>
<td>Art (drawing)</td>
<td>- - -</td>
<td>2 2 2</td>
<td>2 2 1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1 2 3</td>
<td>3 3 3</td>
<td>3 3 3</td>
</tr>
<tr>
<td>Religious Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Civics)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(History)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Geography)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>5 6 7</td>
<td>8 8 8</td>
<td>10 10 10</td>
</tr>
<tr>
<td>Subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Study</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(Chemistry)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Physics)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Biology)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handicrafts</td>
<td>- - 2</td>
<td>3 3 3</td>
<td>2 2 1</td>
</tr>
<tr>
<td>Domestic Science</td>
<td>- - -</td>
<td>- - -</td>
<td>- 3 2</td>
</tr>
<tr>
<td>Optional Subjects</td>
<td>- - -</td>
<td>- - -</td>
<td>4 3 4</td>
</tr>
<tr>
<td>Freely chosen activity</td>
<td>- - -</td>
<td>- - -</td>
<td>2 2 2</td>
</tr>
<tr>
<td>Total periods per week</td>
<td>20 24 30</td>
<td>34 35 35</td>
<td>35 35 35</td>
</tr>
</tbody>
</table>

Source: The National Swedish Board of Education, Curriculum for the Comprehensive School, op. cit.
Figure 23: Arts and Social Study Routes in Sweden
Figure 24: Economic Study Routes


Special courses within this subject area include:

- Pensions (2 years)
- Pharmacy assistants (2 years)
- Decorators (2 years)

Common Instruction

Line

Economics

Line

Economics

Line

Economics

Year

1 2 3
<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing</th>
<th>Clothing</th>
<th>Men's Clothes</th>
<th>Women's Clothes</th>
<th>Food</th>
<th>Workshop</th>
<th>Motor Mechanics</th>
<th>Electrical Technology</th>
<th>Building &amp; Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

**FIGURE 12.5**

**TECHNICAL AND SCIENTIFIC ROUTES**
<table>
<thead>
<tr>
<th>Sector</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electro_Telecommunication Line</td>
<td>Electricians, telecommunication repairs, staff, telecommunication filters, office machinery repairs</td>
</tr>
<tr>
<td>Process Engineering Line</td>
<td>Chemistry, food processing, paper &amp; pulps, metallurgy, building materials</td>
</tr>
<tr>
<td>Forestry Line</td>
<td></td>
</tr>
<tr>
<td>Agricultural Line</td>
<td></td>
</tr>
<tr>
<td>Technical Line</td>
<td>Mechanical engineering, building, electro-technical, chemical sub-alternative</td>
</tr>
<tr>
<td>Scientific Line</td>
<td></td>
</tr>
<tr>
<td>Technology Line</td>
<td>Mechanical engineering, chemical sub-alternative, building with construction or housing construction variants, electro-technical, electro-power or telecommunication</td>
</tr>
</tbody>
</table>

Special courses in this sector include:
- Furriers (3 years)
- Ladies/Gentlemen hairdressers (3 years)
- Cartographers (1 year)

Source: Ibid. PP 8-9
'vocational education' has been superseded by 'vocationally oriented education' as means of vocational training and vocational education together.\textsuperscript{113}

A new organisation of study and vocational orientation (SYO) has started since 1973 in the Swedish school system, in accordance with the parliamentary decision of 1971. Under the new system, educational and vocational counsellors have been appointed. These counsellors have no teaching duties, their time being entirely devoted to advise on study and vocational orientation. The prominent emphasis in the SYO is placed upon orientation on working life, which has the tasks of preparing students for such. The study and vocational orientation not only aims at providing the basis for the individual pupil's educational and vocational choice, but also at introducing general background information on a working life as a whole.\textsuperscript{114} The school's orientation on working life occurs at both a theoretical and a practical level.\textsuperscript{115} Examples of a more theoretical orientation on working life are:

1. Studies within the subject 'working life orientation in certain two-year lines of the upper secondary school, where one hour per week is devoted to this subject.
2. Participation in the teaching by persons with experience of working life, e.g. school staff, gainfully employed parents, officials of employment services, representatives of the labour market parties and/or different occupational groups.
3. Study visits to various educational institutions, work places and employment offices.\textsuperscript{115}

Practical orientation on working life can be gained through actual experiences at different work places. In the basic comprehensive school this involves a minimum of three study visits to work places outside school for all pupils in grade 8, as well as two weeks practical experience for all pupils in grade 9, with the possibility of extending such experiences to four weeks. In the upper secondary school there are similar opportunities through the vocational orientation week. This is necessary for students in theoretical lines who are lacking practical job experiences.\textsuperscript{116}

5. Conclusion

The task of organising the content has been at the heart of the
curriculum debates of the past few decades. Educators and curriculum planners have devised certain criteria to judge the suitability of the content to satisfy the nature of the learner, the nature of knowledge and the nature of society. Paramount in these criteria are: validity, significance, reality, utility, learnability, interest and consistency.

Basically there are two patterns to organising the curriculum content, including a variety of formats: one is the subject-centred organisation, and the other is the student-centred pattern. While the former tends to be associated with secondary schools, the latter seems to be a distinctive phenomenon of primary education.

Each pattern has certain distinctive characteristics which lead to the distinguishable differences in their emphasis and concerns. The subject-centred organisation emphasises the discipline of knowledge. Content is selected without any reference to the needs, interests, or abilities of the learners. It divides knowledge into subjects. In its extreme form, each subject stands in complete isolation. However, efforts were made to move away from such a strict form and to furnish more closely-related learning experiences. This trend has brought about other formats of subject-centred organisation, such as the correlated, fused, and broad-fields curriculum.

In contrast with the subject-centred pattern, the student-centred organisation is based upon the experiences of the child during his growth and development. It takes into account the growth of the whole individual and places emphasis on the interests and needs of the learner. In its extreme form, the student selects his activity in accordance with his interests. The basis of content is what the learner wants to do, discarding the logic of knowledge discipline. Therefore, the essence of the content is its lack of plan. To avoid the dissatisfaction of such an extreme form of the student-centred organisation, and to overcome the defects of the subject-centred pattern, some educators present the core approach to the curricular organisation. The core curriculum implies the common materials and experiences which have come to be accepted as basic in the education of the learners on all educational levels. Though the term has a different meaning for different people, the essence of the content in the core curriculum is outlined to meet the social and personal problems, needs and interests of the learner, rather than based on one subject matter. Each pattern, however, has its pros and cons. This makes
the choosing of any pattern open to debate. The choice of a certain curriculum organisation is determined by the educational philosophy prevailing in a particular society and the curriculum theory adopted by personnel in the educational institutions.

The countries under investigation differ in their views. They adopt different curriculum theories. Therefore the focus of emphasis varies between the knowledge and the interests. Accordingly they organise the curriculum of their comprehensive schools in different patterns. However, the differences are not striking, since the emphasis is still on the knowledge. The subject-centred pattern is popular. A move towards integral studies, particularly in the social subjects, has recently taken place in England. The importance of general education or common learning has been increasingly stressed in all countries with variants in the time devoted to the general education against optional subjects. The curriculum of the comprehensive school is coloured by significant offerings of vocational programmes. Vocational orientation is stressed more in Sweden than in the United States and England. The curriculum content in the English comprehensive school is highly affected by the living traditions of the grammar school as well as the great influence of the external examination of GCE. In the United States such influence is largely associated with the requirements of graduation, while in Sweden the curriculum of the basic and upper comprehensive schools is free from such an influence.
REFERENCES


6. GB, Ministry of Education, 15 to 18, Vol.1, op.cit., p.265


14. Taba, H., Curriculum development, op.cit., p.287

15. Ibid., pp.272-275.


23. Ibid., p.320.


27. Tanner, D., Schools for youth, op.cit., pp.243-244.

28. Ibid., pp.244-245.


30. Taba, H., Curriculum development, op.cit., p.393.


35. Taba, H., Curriculum development, op.cit., p.401.


38. Ibid., pp.59-60.


42. Smith, B.O. et al, *op.cit.*, pp.311-312.


Benn, C. and Simon, B., op.cit., p.328.


Firth, G.C., op.cit., pp.128-129.


59. Conway, E.S., op.cit., p.40


71. Ibid., pp.233-235.
72. Ibid., p.237.
75. National Commission on the Reform of Secondary Education, The Reform
Education (England), Children and their primary schools, London, HMSO,
1957, pp.199-200.
82. Ibid., p.203.
83. Ibid., p.198.
85. Ibid.,
87. Incorporated Association of Assistant Masters in Secondary Schools,
  Holmes, M., The comprehensive school in action, London, Longmans, 1957,
p.25.
90. Inner London Education Authority, London comprehensive schools, 1966,
91. Ibid, pp.118-122.
92. Benn, C. and Simon, B., op.cit., p.263.
93. Ibid.
94. IAAM, Teaching in comprehensive schools, op.cit., p.80.


97. Ibid.


101. Ibid., pp.45-46.

102. Ibid., p.12.


The Swedish Institute, Primary and secondary education in Sweden, op.cit., p.3.


110. OECD, Policies for basic education, National policies statement, Sweden, op.cit., p.8.

111. The Swedish Institute, Primary and secondary education in Sweden, op.cit. p.3.


116. Ibid., p.4.
CHAPTER ELEVEN

CURRICULUM PROCESSES

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CHAPTER ELEVEN

CURRICULUM PROCESSES

Curriculum as an institution is a somewhat complex one. It operates through a significant interaction with other parts of the educational institutions. Its functions are greatly influenced by the many social, economic and political institutions within a particular society. Hence, each country has its own pattern of interacting personnel concerning curriculum policies.

Apart from the organisation of the content, the control of the curriculum is of special importance to all societies. This is due to the fact that the formation of the minds and character of pupils is one of the most exacting difficult tasks facing each community. As far as the formation and control of secondary school curriculum is concerned, different issues have been debated. This variegation arises as a response to the changing objectives and organisation of secondary education, to the interrelationship between secondary schools and other formal agencies of education, to the link between education and other socio-economic and political institutions, and to the influence of the academic and non-academic pressure groups. The adoption of a particular theory of education within a given administrative context implies certain models of organising and controlling the school curriculum. For example, the increasing acceptance and adoption of egalitarian theories have pressed the need for certain curricula more suited to the interests of the pupils. This has raised the question of whether or not it is desirable or possible to devise curricula to meet the needs of individual pupils. Some educators have considered different curricula for different groups of children. Rejecting such an arrangement, other educationalists have advocated a common curriculum with a wide range of programmes and specific attention to individual instruction. Consequently, this trend would give considerable autonomy to a teacher to decide the appropriate curriculum and exercise the proper methods of teaching. However, the aims to create a nation-wide homogeneity and cultural uniformity has meant greater powers to be ceded to personnel within the central authority to determine the curriculum. Bereday has pointed out that philosophy, sociology and history of education provide
support for one type of control over another. Holmes has suggested that

"On preparing a set of policies..., considerations should be given to three distinct, but related processes
a) policy formulation
b) policy adoption
c) policy implementation."

Thus the arena of debate in this chapter confines itself to policy formulation and policy adoption. The debate will be then focussed on the role of the producer and consumer groups in the decision-making of curriculum policies. The former group is identified as including general, local and institutional authorities, as well as the academic and non-academic pressure groups. The latter group is exemplified by parents, pupils and employers.

1. Process of Policy Formulation and Adoption

As far as curriculum is concerned, policy formulation is determined by certain normative statements which are strictly considered at all planning procedures. Holmes had demonstrated that

"In the formulation of policy these are 'almost invariably' normative elements. Statements of 'what ought to be the case may be regarded as aims, goals or objectives and may relate either to the well-being of society or the well-being of individuals."

He goes on to say that

"policy formulation either explicitly lay down, or imply, institutional arrangements designed to achieve stated aims or goals."

To draw a distinction between policy formulation and policy adoption processes, he argues that

"the processes of adoption are as important as the processes of formulation if, in the implementation of them, policies are to achieve stated aims."

The processes of formulating and adopting curriculum policies, though different from one society to another, are complex and have been consecrated by usage. Asserting the complexities of such processes, Bereday argues

"Ideologies are easier to identify than the men who formulate them. Always by way of rationalisation, the battle of control of curriculum is fought on the
basis of definable pedagogical principles. These may stem from philosophical considerations... other principles have their roots in politics."

The three countries composed in this study provide distinct interaction models and the sharing power of organisation and groups of people involved in designing curriculum policies. Although these countries share enough of a common heritage to make variations from the roots meaningful, each has derived the direction of its policies from a special group of men. The constitution of each group and their interaction have affected the school curriculum. Our intention in this chapter is to examine the decision-making of curriculum policies and the roles played by producer, pressure and consumer groups in the United States, England and Sweden.

2. Curriculum Process in the United States

The development of democratic ideals concerning the human nature has affected the pattern of educating individuals as persons who have within themselves a distinct personal identity and authority. Such a democratic atmosphere has had profound effects upon all aspects of the educational process. Hence, it is public opinion in the United States, or, at least, opinion of a significant section of the public, that brings about education legislations. Thus curriculum policy in the midst of such ideas is regarded as a democratic process that is, inevitably, shared by many.

Theoretically all the people determine what is taught in schools. But practically such a decision is taken by a large and heterogeneous proportion of the total population. However, only highly educated people play an active role in formulating curriculum policy. Nonetheless, they share power, in determining the school curriculum, on equal terms, with other groups. William Alexander has estimated such groups that have considerable influence on formulating and adopting curriculum policies as:

"colleges and universities; national professional organisations; textbook writers, test makers, and publishers; accrediting associations; legislatures, State Boards and departments of education; citizens and organised pressure groups; local boards of education; curriculum committees; and, of course, individual teachers and their pupils."

Like Alexander, though in different terms, Larsen and Toy have listed nine forces affecting the curriculum process. These are: State agencies, federal government, professional organisations, accrediting agencies, special
interest groups, business and labour groups, patriotic groups, racial and religious groups and the community itself. Applying political scientists' analysis to the curriculum process, Mackenzie points out that curriculum change can be achieved through direct action of administrative authority and through the political process of using resources, symbols, and conditions among influential groups, as well as by changing the teacher or by in-service education.\textsuperscript{13} In reviewing research in this area, Dodson categorises the forces influencing the curriculum as

1. social changes: population mobility, changing intercultural and inter-racial relations, and technological and industrial organisations;

2. ideological differences: religious, effects of the cold war, and educational philosophies; and

3. community power structure.\textsuperscript{14}

Classifying the makeup of the curriculum Bereday points out that in all school systems the curriculum reflects

"what the teachers were taught in colleges of education and in their frequent in-service training courses, what the administrators and publishers of textbooks consider workable and appealing, what the people, especially the boards of education they elect, consider desirable, and what various pressure groups can force the school to teach. Many struggles between the left and the right political wings, between religious believers and non-believers, and between young and old take place, while curriculum policy is being formulated."

\textsuperscript{15}

However, considerable shifts in the influential groups in curriculum policy-making have taken place in recent years. New groups have gained power. The public listen to a new class of experts, in addition to traditional power groups such as the taxpayer and chambers of commerce, professional associations, labour organisations or parent-teacher societies. Nevertheless so imperceptible is this change that both administrators and individual teachers have sometimes acted as though no change had occurred. Another swing has been in the direction of centralisation of control of curriculum. With the advent of the National Defence Education Act in 1958, and the National Science Foundations in 1959, the federal government exercised considerable influence in the academic fields.\textsuperscript{16}

Both influential groups and individuals, whether or not they make the
final decisions in the curriculum processes, can be categorised, in accordance with Holmes' classification, into producer, consumer and pressure groups. The roles of, and inter-relationships between, such groups are discussed as follows.

2.1 Producer Groups

These comprise national formal organisations, State agencies and local boards responsible for providing education.

Traditionally, the United States has had a decentralised system of education. Owing to the absence of a national authority over education, there has been no central direct control over curriculum content and policies. Curriculum decisions have been the function of State agencies and local school systems. Nonetheless, national organisations have recently played a remarkable role in formulating curriculum policy. National influences are exercised through the Federal Government funds, national professional and academic organisations, and private philanthropic foundations. Anderson argues that

"in recent years, not only has the federal government been changing its role in the influencing of curriculum improvement, but extra legal agencies at the national level have come directly into the picture. Proposals, moreover, have been made for a national curriculum."

The United States Office of Education has exercised a great deal of control over vocational courses in accordance with the Vocational Education Act of 1963. The very fact that funds were provided for some types of courses and not for others affected the direction of the curriculum. Due to the decision to provide funds for academic courses in secondary schools, the federal government has affected curriculum-making in the fields of science, mathematics, English, social studies and languages. Thus, national influence on curriculum policy has remarkably increased, though the desirability of such an involvement of the national government is a subject for debate.

The very great number of the national professional organisations and their diffuse activities has left considerable marks on curriculum decisions. Salient of these organisations are: the National Association for Supervision and Curriculum Development, the National Council of Teachers of Mathematics, the National Council of Teachers of English, National Science Teachers Association, National Council for the Social Studies, and
the American Vocational Association. The literature of such organisations is replete with surveys, research reports and recommendations. Through their conferences and committees, published year books, and regular periodicals and bulletins, the professional organisations have influenced their members over the years. Alexander argues

"The influence of such publications, and even of discussion in national and State conventions of these organisations, is undoubtedly a very great and, in general, a salutory one on the curriculum decisions reached in local school systems and schools."

On the other hand, there are some who contend that professional organisations have little influence on practice. Lieberman, for example, thinks that the teacher's organisations have been unable to carry out programmes for change in education, while Brickell is sceptical of the influence of the professional associations, because of their failure to understand the dynamics of instructional change.

The academic organisations also play a significant role in curriculum-making. Up to the 1950's, few of these organisations have been interested in the public school curriculum. The events of the fifties drew greater attention to the academic subjects, and since then many academic associations have been involved in updating subject content in the schools, and several programmes in mathematics and sciences have been put forward.

Recently private and philanthropic foundations have been reckoned curriculum-makers. By the 1950's these foundations began to exert a substantial influence on the American public school curriculum. In 1963, there were more than 15,000 such foundations with assets of about $12 billion. The Ford and the Carnegie Foundations have been especially interested in education. Ford Foundation funds, for example, have been available for television, team teaching and staff utilisation studies. Undoubtedly these funds have had a considerable effect on the school programme in these fields.

State agencies are exemplified by legislatures, state boards of education, accrediting associations, and colleges and universities. Statutorily, the States have the authority to establish curricula. This authority is exercised by the legislature authority. Thus state agencies have, in some form or another, exercised control over the curriculum. On demanding uniformity before the 1930's, the state legislatures were active in enacting curriculum prescriptions. However, after the 1950's these requirements were relaxed in some legislatures.
Latitude for differences to meet local needs and interest has resulted in wide variation in curriculum. Although the state is the legal curriculum maker, there are no central bureaus at the State level to furnish precise curriculum specifications to all local school districts and units. In some cases, however, the State boards of education decide upon curriculum content to the extent that they indicate certain subjects to be taught and prescribe the number of minutes per week for them. In other States, most of such decisions are left to the local school district. The Project on Instruction of the National Education Association, in an important report, has recommended that the State legislature "should not prescribe curriculum content or legislate specific courses" but should, instead, "set forth general goals for the schools, provide adequate financial support, and delegate board powers of implementation to the State and local educational authorities."

In the same report, the State educational agencies were recommended to "establish standards for public school instruction, provide adequate resources for their achievement, and give dynamic leadership to curriculum development, experimentation, and innovation in local schools."

The modern role of the State Department of Education, however, tends to be a facilitating one. Despite the fact that such departments have responsibility for enforcing state laws on education, they prefer to work cooperatively with local agencies concerning curriculum policy making.

Regional agencies, such as accrediting associations, work closely with State agencies. They exercise a profound influence on curriculum through regulations for secondary schools and through certifications that graduates of accredited schools are eligible for admission to colleges. Estimating such influence, Alexander has found that "As State departments of education took on more comprehensive functions, there has been some lessening of the influence, or at least of the rigidity of the standards, of the accrediting bodies. Nevertheless, these associations have definitely tended to make the curricula of secondary schools more alike throughout the nation."

These agencies, however, are changing their approach of evaluating, to that
of emphasis on experimentation. Conant has recommended that regional associations become merely advisory bodies to local school boards. So, such a move would lessen their influence on the secondary school curriculum.

The influence of higher education on secondary school curriculum is a general phenomenon. The influence of the colleges and universities is felt in many ways. It is exercised not only through teacher education, but also through consultation, curriculum centres and laboratories, conferences and publications. Probably the most significant effect that colleges and universities have on secondary school curriculum is made by individual professors and scholars. Another indirect influence on high school curricula has been exerted through college entrance requirements. Preparation for college, indeed, has been the dominant force in the determination of courses offered in high schools.

Local influence on curriculum decision exercised through local boards of education, local curriculum committees and individual teachers.

The local boards of education enjoy quite wide powers and authority over the school curriculum. They are a major key to the control of the curriculum. Nevertheless, their function is more related to policy adoption than policy formulation. Local boards also exercise considerable influence in curriculum decisions by challenging the recommendations of State curriculum committees, and by preventing the use of certain textbooks questioned by its members.

The curriculum committee is a standard feature of the organisation, both of local school systems and of individual schools. The use of curriculum committees in American cities and counties is best demonstrated by the following extract from a Denver Schools publication:

"When Denver first undertook its ongoing program of curriculum development, it was committed to teacher participation in the formulation of instruction policy. This participation is channelled largely through an organisation known as Committees on Instruction, which includes teacher representatives, administrators, and supervisory personnel ... the action taken by them would be binding upon all schools concerned, since all interests have been represented in the deliberations and in the formulation of policy."

Hence the individual teacher is the most important of the curriculum makers. At present in almost all school systems, teachers have some opportunity to take part in developing courses of study, in selecting
texts and other materials, and in determining curriculum policies. Those who take advantage of the opportunities play a greater role in curriculum decision-making. Apart from implementing curriculum activities, the teacher determines, in the final analysis, the type of course of study, the content and the role played by students. Anderson has demonstrated that

"In some schools, the teacher is given a great deal of freedom as a curriculum maker. He is considered as a mature person who can be trusted with an important charge. ... In other schools, the restrictions that prevent him from having any great latitude in moving towards curriculum improvement are legion."

However, it is required that a teacher may function effectively as a director of learning, a guidance worker, a member of the profession, a member of a school, and a member of the community. Though much research has been conducted concerning the prediction of the teacher's success in carrying out his responsibility, no reliable predictors have been found. Nevertheless, his influence at all levels, is considerable on determining the school curriculum policy.

2.2 Consumer Groups

The influence of such groups is felt through the roles played by pupils, parents and employers on deciding curriculum policy.

Given that effective learning is self-motivated, it is normally the pupil himself who makes the ultimate curriculum decisions. Not only does he have some voice in selecting his courses and classroom activities, but he is rarely forced into learning. In fact, this does not mean that curriculum decisions are entirely taken by boys and girls, but it does compel curriculum makers to take into consideration the desires and interests of students in the planning of the school curriculum. Thus, the democratic ideals imply that even curriculum decisions in classroom should be a cooperative process.

The ideal of making democracy more and more a reality in education has brought about the cooperation between educators and parents in the planning and deciding of the instructional programmes. Many parent-groups were organised and it was estimated that by the late 1950's there were more than one thousand system-wide citizen groups in the United States, most of them school-initiated, taking the format of parent-teacher associations (PTA). This trend of increasing teacher-parent partnership has developed from
both schools and parents. Katharine Taylor argues that

"As schools have become more aware of the values of
drawing parents in for joint planning, parents
themselves have become more and more aware of
their responsibility for their children's education
at school as well as at home, and their own
capacity to make significant contributions to
the planning of it."

36

The movement towards a closer relationship between parents and schools has been promoted by school administrators and the National Congress of Parents and Teachers on the national and the local levels of State, County and City. Thus many parents work with teachers, principals and supervisors on school committees of various kinds - drawing up educational objectives, charting out a better programme for children, and discussing curriculum policy in order to achieve the soundest education for their children. The wisdom of such practices is emphasised by Maurice Ahrens, who writes

"Curricula that are planned and developed without
full participation of all concerned - teachers,
parents and students - are usually ineffective.
Changes in approaches, content and methods take
place only when there are changes in the thinking
of those who are concerned."

37

Apart from being partners in the PTA, parents as citizens are also involved in the membership of other organised pressure groups. Thus, they exert their influence on curriculum decision in many ways.

Although their main purpose lies in different areas, the employers have a particular concern with education. They exercise their influence on curriculum policy formulation through a variety of pressure groups. Typical are the National Association of Manufacturers, the American Association of Railroads, and other organisations representing industry, business and labour unions. Much of their influence is exerted through publications, speakers, and cooperation with the school as demonstrated by the typical industry-school day. 38

2.3 Pressure Groups

Many various pressure groups in the United States are constantly seeking to affect curriculum decisions at the State and local levels. Therefore, the public school has become subject to a variety of criticisms and pressures from organised groups, enterprises, and individuals within the community. The curriculum is always the point in focus. Facing this
situation, many school administrators and teachers are apprehensive at the thought of pressure groups. These latter, however, exercise their influence upon public opinion through skillful use of the mass media. Hence they indirectly exert a real influence on school curricula. Patriotic groups, business groups and religious and ethnic groups, are the main examples. 39

A more recent phenomenon in American society is the super-patriotic organisation. It represents extreme conservatism. The John Birch Society, America for Americans, and Christian Crusade are typical. Their action, which affects education, is directed towards the censorship of textbooks, teaching the free enterprise system, Americanism, and teacher participation in the political movement against communism. Book censors have been active in many communities, especially in Florida, Texas and California. They have been successful in removing books from sale, purging libraries and distributing lists of objectionable books and authors. Moreover, this movement has a certain effect on the attitudes of teachers toward teaching controversial issues, and is seen by many as an evil force that tends to attract people to the far right. Fortunately some organisations, such as the National Council of Social Studies and the American Library Association have taken a courageous stand against book censorship. 40

The authors of publications affect the school curriculum on a large scale, since textbooks and tests do have a powerful influence in determining what is taught at every level and in every department of the schools. Textbooks are usually the only curriculum guide that teachers follow or choose to follow. However, variations do exist. Alexander has pointed out that

"One can find classrooms in which the textbook is followed page by page without deviation or addition of current materials, and one can also find classrooms in which no textbook is used."

Texts and tests used in schools are selected by local administrators, supervisors, teachers or communities; or by State authorities. However, the fact is that some textbooks used by school in Massachusetts, Iowa or Washington enjoy national influence. A study of educational change conducted by the New York State came to the conclusion that commercial organisations tend to have a unifying influence over the curriculum content and teaching methods throughout the country. 42

A national curriculum commission has been proposed for serious
deliberation by scholars in the field of education. Such a commission
aims at formulating objectives, keeping up-to-date on progress in
knowledge, and suggesting curriculum models. It also tends to coordinate
the efforts of national groups. The proponents of such a commission
feel that the lag between the findings of research and its impact on
curriculum could be reduced. However, others feel that such a commission
could lead to uniformity and lack of experimentation.

To conclude, it is clear that, despite the fact that teachers and
school administrators play a major role in the total curriculum processes,
State agencies, national organisations, parent-teacher associations,
business and industrial interests, and pressure groups also have their
influential impact on curriculum policy making.

3. Curriculum Process in England

The remarkable device that distinguishes English education is the
concentration on training character. The ideal of bringing up a gentleman
has never lost its vitality. Hence, English education is overwhelmingly
dedicated to teaching the right situational responses. Furthermore,
concerned with the stability of their society and institutions, the
English have regarded what is a classroom concern of teachers as a
national concern and priority. This has, among other reasons, produced
the decentralised control of education. The State in England does not
incline to monopolise the social organisations, nor does it stand aside
from the activities of voluntary bodies. As regards education, Parliament
defines, through legislation, either implicitly or explicitly, the roles
and duties of central and local authorities, teachers, parents and other
agencies. Nevertheless, the legal powers of the central and local
authorities concerning curriculum are somewhat intermingled. The 1944
Education Act gave the Secretary of State a residual responsibility,
with strictly limited direction, to carry it out, and left the responsibility
for the curriculum to local authorities and to governors and managers of
voluntary schools. Indeed it says no more than that all pupils shall
be afforded

"opportunities for education offering such
variety of instruction and training as may be
desirable in view of the different ages,
abilities and aptitudes, and of the different
periods for which they may be expected to
remain at school, including practical
instruction and training appropriate to their respective needs."

Practically, decision about the curriculum, however, are most taken by the teaching staff at the level of the individual school. Richmond notes that English schools

"have the fullest possible measure of responsibility for their own work, including responsibility for their own curricula and teaching methods, which should be evolved by their own staff to meet the needs of their own pupils,"

Nevertheless, it should be borne in mind that such a responsibility is not exclusive. Richmond points out

"It has inevitably to be exercised within a wider framework which takes account of the general interest of the community, both local and national, in the educational process."

Thus, although the apparent charge of teachers, it may be safe to argue that curriculum policy in England and Wales is formulated and adopted through responsibilities between producer, consumer and pressure groups.

3.1 Producer Groups

These comprise the national authority and its agencies, the local authority and its bodies, and the individual teachers.

Despite the fact that large areas of decisions concerning curriculum are left to teachers and professional opinion, the national authority is, by law, responsible for all aspects of education provided in whole or in part by the State. For this reason the Department of Education and Science has taken the lead in raising matters of national interest and created means for exploring and realising such concerns. Traditionally, the central authority does not prescribe what shall be taught in schools. This tradition of exercising no direct control over the curriculum could be attributed partly to the respect for the autonomy of local authorities, and partly to the classical fear of political indoctrination. However, the central authority exercises its influence on curriculum through two national bodies: Her Majesty's Inspectorate (HMI) and the Schools Council for Curriculum and Examinations.

The Inspectorate is recruited, not from professional civil servants, but, with few exceptions, from men and women who have had substantial experience of teaching in schools and other institutions. Its members are
appointed by the Queen-in-Council and allowed, by tradition, a collective independence. They seek to enter schools as counsellors rather than as judges. They do not enforce any preconceived patterns of curricula or methods of teaching, but advise local authorities, school and individual teachers on all matters concerning their work. The Inspectorate has successfully promoted certain developments in some curriculum areas through school visits, conferences, and in-service training courses. Furthermore, the Inspectorate has been more directly responsible for a succession of handbooks and pamphlets on aspects of curriculum content and teaching methods. Many of these have been devoted to the teaching of particular subjects, such as: Some Suggestions for Teachers of English, 1954, Music in Schools, 1956, Towards World History, 1967. However, the Inspectorate is not primarily a great innovator. Alan Barnes pointed out that its members "are better at assessing how effectively a chosen end is being pursued, or a chosen method followed, than at advising on what ends and methods should be chosen."

The Schools Council for Curriculum and Examination, established in 1964, represents teachers, local education authorities, and the DES. It aims at generating new approaches to the curriculum and bringing about the necessary administrative and academic changes in the examination system. The duties of the Schools Council were laid down in general terms by the Lockwood Working Party as to

"find ways and organise means of reviewing - and reforming - the school curriculum in England and Wales. ... The Council has to bring together those whose activities were independent yet complementary - a job of coordination. It has, also, to extend what had been begun elsewhere... in mathematics, science and modern languages..."

This, however, is only one aspect of the Council's work. The greater part of its energy so far has been devoted to initiating curriculum development in new fields. Such a task requires an active participation in decision-making on curriculum. Richmond points out:

"This has meant deciding priorities, estimating costs and finding funds, identifying the resources and people whom it can commission new work, ensuring that what is commissioned matches the priorities."

Thus, through its various steering subject sub-committees, the Schools
Council participates in formulating curriculum policy and in fostering curriculum development. However, the success of the Council in exercising its functions is debatable. 58

Each local Education Authority is constantly engaged in curriculum policy making. Such a responsibility is derived from the Memorandum No.25, issued by the Ministry of Education in 1945. It states that

"The Local Education Authority shall determine the general educational character of the school and its place in the local educational system. Subject thereto, the governors shall have the general direction of the conduct and curriculum of the school."

59

This statement confirms that curriculum matters are placed in the hands of the laymen. Despite the strong control of the headmasters of the internal organisation, management and discipline of schools, the governors are theoretically responsible for the curriculum. The Memorandum asserts that

"All proposals and reports affecting the conduct and curriculum of the school shall be submitted formally to the governors."

60

It is interesting to note that the governing bodies differ in composition due to the kind of schools. In maintained schools they consist of members of the education committee, together with members of local political parties and individuals co-opted or appointed because of their knowledge and interest in education. In other schools, the governing bodies comprise groups of responsible trustees appointed in accordance with the foundation deeds of the schools concerned. 61

However, in practice, governors are concerned more with matter of discipline than with the curriculum. The latter is often reserved for heads. Nonetheless, a clear distinction between the responsibilities of the governor and the head is rarely drawn. It is normally assumed that the heads control everything happening in schools and are accountable to the governors for their stewardship. Yet the procedure for making such an accountability on a regular and systematic basis does not always exist.

There is little evidence, according to Alan Barnes, to suggest that governing bodies act decisively. 62 While Becker and Maclure argue that

"Only an incident of exceptional local interest or sensitivity will prompt a governing or managing body to take any form of action on matters which are normally regarded as wholly within the professional direction of the head and his staff."
On the other hand, Alan Barnes confirms that

"LEA's are by tradition extremely reluctant
to confront either governors or heads on
curricular matters, preferring to pursue
their policies by applying indirect pressures."

Indeed, the personality of individual Chief Education Officers,
stimulated by their educational philosophy, has had a powerful effect on
the curriculum policy. Yet it is to be expected, due to the reorganisation
of local government areas and functions in the Local Government Act of
1972, that local education authorities will rely less on individual
dynamism and bring to the fore less charismatic leadership.

English schools have for long been remarkable for their independence
in curricular matters. They insist that the curriculum must be of their
own making. The head is regarded as the captain of the ship. Nevertheless,
he alone does not attempt to determine the curriculum policy. Individual
teachers take greater responsibility for the school curriculum policy.
Where two or more teachers are concerned with the same field, a senior
master takes charge of coordinating the work of his colleagues, consulting
other members of his department and drafting the curriculum schemes.
The individual teacher, however, is protected from undue pressure from a
visiting inspector. Asserting this trend Owen points out that

"members of the teaching profession in England
and Wales believe that they have to be free of
burdensome supervision. The reason for this
wish for freedom is not often stated in specific
form; a result is that the significance of
inspection, advice and supervision has been
gradually whittled down."

At present, it seems clear that anything approaching the degree of
autonomy enjoyed by educational institutions, and the teachers working
within them, can only be legitimate if professional organisations accept it.

3.2 Consumer Groups

These include three identifiable categories: the pupils, their parents
and leaders of industry and commerce. No reference has so far been made to
the position of these groups. Alan Barnes argues

"Though representatives of parents now frequently
sit on governing bodies, and though pupils are
here and there joining them as observers or full
members, there is no sign that representation of
this kind has, so far, had any curricular consequences."

Yet teachers often take into consideration the views of parents and pupils.

The Confederation of the British Industry is represented on the School Council. Again, many secondary school governing bodies include a representative of local industry. Recently, industrialists have expressed strong views about school curriculum. Their criticisms are taken into consideration. Thus, it is not surprising to find the Chairman of the Science Research Council arguing that industrial consumers of education should dominate the School Council and have a much greater influence on the curriculum policy than do the teachers. 69

3.3 Pressure Groups

Such groups are concerned with education and, if necessary, they take common action on proposed or current policy as regards school curriculum. The pressure groups comprise both academic and non-academic personnel.

Teachers organisations, among these groups, have paramount influence. The freedom and responsibility enjoyed by teachers have resulted in a wide range of associations organised on both a national and a regional basis. The most important of these are: the National Union of Teachers, the National Association of School Masters, and the Joint Four whose membership is comprised mainly of headmasters, headmistresses, assistant masters and assistant mistresses serving in grammar schools. There are also other particular subject-associations, such as the Mathematics Association, the Modern Languages Association, and the Science Masters Association. 70 All these organisations have a large membership and enjoy considerable prestige among teachers in both universities and schools. Their voice is respected by educators, administrators and laymen. They regularly publish journals as well as occasional monographs. They also hold annual conferences on a national and regional basis. 71 Such associations undoubtedly have an influential effect on the curriculum policy. They possess opportunities for making their influence felt at many points in the administrative structure. Nevertheless, their standing on any professional issue, as Baron has argued

"depends upon the pressures they can bring to bear, whether of a political or administrative kind, and not upon formally defined rights."

72

However, these associations play an active part in initiating subject-based innovation.
The religious institutions such as the Church of England, the Roman Catholic Church, the Methodist Church and other Protestant bodies constitute an influential pressure group. Their concern, of course, is focussed on the religious curricula. Historically, a number of religious organisations had anticipated the State in providing schools and other educational institutions. Although compulsory religious worship and instruction has been introduced to all the schools within the statutory system, religious education was to be undenominational and in accordance with an agreed syllabus. The provision for such a compulsory religious teaching was justified in terms of the Christian heritage, wishes of the majority of parents and an expedient gesture to the churches. However, no teacher, except in the case of voluntary aided schools or 'reserved' teachers, could be required to give religious education or should be penalised for not doing so. Parents, too, have the right to withdraw their children from religious worship or instruction. As far as curriculum policy is concerned, the religious bodies take the lead in formulating and adopting the religious curriculum. The content of agreed syllabuses is drawn up by area conferences of representatives of religious denominations, of the teachers, and of the local authorities.

Parent-teacher associations (PTA), though they have recently made considerable progress, are mainly concerned with the social functions of the schools. Baron points out that
"Whilst the curriculum may on occasion be discussed, it is not expected that parents should attempt to mould it or participate in its planning."

However, these associations, like many bodies concerned with social services, serve to keep the school staff in close touch with public opinion.

Teachers' Centres attached to college and faculties of education or LEA's exert a certain influence on curriculum policy. Like schools, they claim to be the main agencies of curriculum development. Through research conducted by scholars and professor of education, attendance of in-service courses, and holding meetings and seminars, teachers are trained to participate actively in making curriculum policy and exercise some sort of initiative development.

Publishers, due to the fact that the senior subject master (in most cases in consultation with other members of his department) selects the textbooks used in schools, are expected to practise a particular impact on curriculum planning. The production of textbooks and teaching materials is
entirely in the hands of independent publishing firms. Neither the DES nor LEAs produce their own textbooks or issue lists of approved books. Therefore, the publishers exercise their pressures on curricular matters. They take every opportunity to exhibit their publications concerning a particular subject and sometimes they demonstrate visual material as well. Thus they affect the choice of certain material available for a certain project.

The establishment of comprehensive schools in greater numbers, the abolition of selection tests and of other procedures for separating children according to their abilities, and the expansion of secondary education from elite to mass proportions have called for a considerable degree of curriculum replanning. These changes have, in turn, strained the traditional mechanism for the central control of the school curriculum. This trend is evident from a major speech at Ruskin College by James Callaghan, the former Prime Minister, that signalled a new approach to the public policy on the curriculum, with much more active intervention by the DES and HM Inspectorate. He indicated that it was a time for people other than the teachers and educational administrators to become involved in the discussion of standards, the curriculum and the connection between school and work. Thus it is a claim that calls for active participation of all groups, producers as well as consumers in all matters concerning curriculum.


The key issue to an understanding of Swedish educational policy-making rests with the articulation of social and political objectives together with the system of educational administration.

Swedish education, at all levels, is a national system with a high degree of standardisation. It is tightly controlled and directed by the central government through the National Board of Education (responsible for schools) and the Office of the Chancellor of the Universities (responsible for higher education). Thus, decisions of educational policy concerning aims, curricula, teachers, organisation and innovation are taken by the Government and the Riksdag. The bureaucratic processes of decision-making follow traditional procedures. The Parliament appoints various committees, the reports of which are to be officially published and sent for review to various interested groups, unions, and organisations.
These reviews, together with the committees reports, constitute the basis for the preparations of a proposal which is then to be presented to the Parliament. The coordination of this work lies in the hands of the Minister of Education.

The central initiated and controlled educational policy in Sweden is rooted in the centralised character of the Lutheran State Church that had dominated the early forms of mass education. However, over the years, Sweden made possible the gradual secularisation but the central control remains undiminished. Nevertheless the national policy is to give more power to regional and local authorities. The regional control and administration of all types of schools in a country is carried out by the County School Board. There are twenty-four county-school boards acting as a centre for the coordination and planning of municipal educational activities. They are also responsible for conducting educational psychology experimentation at the schools, arranging courses for training of teachers and promoting the inspection of the schools under their supervision. Local administration lies in the hands of the elected local municipalities. The large number of these municipalities (464 in 1971) with a relative small number of population (8 million) indicates the small size and the limited activities of such municipalities. Local administration of schools in each municipality is carried out by an elected School Board (Skolstyrelse). It is responsible for providing satisfactory education for children and youth in the municipality, issuing orders for schools within its jurisdiction, and ensuring that the work at schools is in accordance with regulations.

However, it would be wrong, in stressing the central aspects of the Swedish educational administration, to imply an authoritarianism which does not exist. Within the Swedish initial conditions, it is believed that a high degree of central control has facilitated the implementation of educational reform in terms of promoting egalitarian values and realising equality of opportunities. Lauglo points out that the most rapid educational change has occurred in Sweden, as compared with the slowest in Denmark, due to the bureaucratised central system in the former and to the local control and voluntarism in the latter. He adds that

"The hypothesis that central control (and other features of bureaucracy) is intrinsically inimical to reform, needs to be modified. The Scandinavian experience... suggests that bureaucracy sometimes can be a powerful lever for change in school
structure; though it may perhaps at the same
time inhibit change in role relations and
pedagogic styles within schools."
82

The Swedes are, in fact, devising ways of making their system less
centralised due to the increasing belief in the necessity of realising
the individual initiative.

The strong central control extends not only to matters of organisation
and of quantitative planning, but also to the qualitative planning of the
school curriculum. Furthermore, central control of the curriculum is, in
fact, an important aspect of bureaucracy in national systems of education.
Therefore various commissions which have been set up to carry through
major changes in organisation in Sweden have, as expected, planned the
whole programme of study as well as the necessary administrative changes. 83

As far as the processes of formulating and adopting curriculum policy
in Sweden are concerned, these decisions are taken by the National Board
of Education within the framework established by the Parliament. It was
pointed out that

"curricula are approved by the Crown, but the
Board of Education may be authorised to issue
curricula, and may also allow modifications to
the prescribed timetable."
84

Thus the curriculum is firmly controlled from the centre, though an
increasing discretion is being given to local authorities over optional
areas of the curriculum. It is interesting therefore to examine the
curriculum policy-making in Sweden within the categories of producer,
consumer and pressure groups.

4.1 Producer Groups

In contrast with the United States and England, the central authority
in Sweden holds the influential power in determining the curriculum policy.
Lauglo points out that

"In Sweden each type of school has a curriculum
issued by the central school administration,
specifying the time to be devoted to different
subjects, and giving recommendations of topics
to be covered in each subject."
85

Giving examples of the types of control of curriculum Maclure indicates
that there are countries like Sweden where
"curriculum is centrally controlled through the prescription of syllabuses and through handbooks of guidance for teachers which lay down principles and give examples of approved methods for carrying these out."

Thus, syllabuses for the various types of general school are applicable throughout the country with a high degree of uniformity. They are drawn up under the direct responsibility of the National Board of Education. Asserting this traditional feature, Orring points out that at all levels of Swedish education, there has been, and still is

"a strict demand on a uniform level of knowledge uniform in the sense that it must be the same for pupils all over the country, that it must contain the same items of knowledge, and that it shall be comparable in all parts of Sweden."

Hence, the curriculum policy is firmly formulated and adopted on a strong central authority directing and, if necessary, imposing change at the will of Parliament. The central authority takes further steps even in determining the teaching methods. Maclure argues that

"Where, in some systems, these matters might have been left to the discretion of local authorities or to the teachers themselves, Swedish centralisation requires that they be considered as a whole and at the centre."

The influential power of the central authority is not confined to the curriculum policy-making, but extended to textbooks. These have to be prepared to conform to the national curriculum. No textbooks may be adopted for general use in schools, except those that have been centrally approved. Such an approval is often based on the suitability of the content, typography and price. However, in spite of the new trend towards the relaxation of the central control over the textbooks, a strong central influence, according to Lauglo, will remain. He writes

"In Sweden, central approval of books will in the future be required in social studies and related fields. However, in return for liberalisation of control, a central consumer advice service for teaching materials is being established and a State-owned publishing house is expected to play an increasingly active part in textbook production."

Curriculum decision-makers have taken into consideration the findings of the empirical research in formulating and adopting the curriculum policy.
The importance of research findings in determining the school curriculum stems from the central strategy of shaping the educational policy. The influence of pedagogic research findings on curricula questions is evident from the decisions of teaching two rather than three foreign languages in the grundskola, teaching English in the third grade rather than the fifth, and postponing of differentiating pupils into different lines until the ninth grade.91

Educational research is mainly conducted at certain universities and teacher training colleges research institutes. In the last decade it has been chiefly carried out in association with various government committees working on different issues of education. In 1962, the National Board of Education established its own unit for research. The activities of this bureau are directed to initiate and support research work of special relevance for schools. It also coordinates the various research institutes.92

The new trend in pedagogic research in Sweden implies that research should play an important role in educational innovation. It takes a resolutely optimistic view of the extent to which curriculum planning can be placed on a scientific basis. Scientific analysis has been extended to various aspects of the curriculum to enable curriculum makers to take suitable decisions. Maclure points out that

"Most of the Royal Commissions, which planned the different phases of the reform of educational system, incorporated programmes of education, and social researchers, Swedish politicians and administrators have gone further than their counter-parts in most other countries to form close links between the research workers and the decision-makers."

93

Curriculum research, however, is a complicated issue. According to Husen and Boalt, empirical curriculum studies had not been carried out before the 1957 School Committee, except for some limited attempts. Yet the role of research in initiating or developing curricular change is a controversial issue. It is also possible that within the present central government structure, and limit of options open to various social forces, the findings of such research may incline to be coloured by political views. Kallos and Lundgren argue that

"In our society research is taking place within the limits of the existing social distribution of work. This means that research is a professional task carried out by an academically trained labour force
Apart from the wide powers of the central authority in determining the curriculum policy, local education authorities at country districts and municipalities have recently been delegated some power to adopt minor modifications in the comprehensive school curriculum. They are also allowed some freedom to try out textbooks other than those listed. Moreover, Swedish policy-makers have been more appreciative of the trends that schools have to work out their own solutions. This de-bureaucratic trend has been felt since the late 1960's. It reflects a growing support for the belief in participatory democracy; that individuals should have a direct voice in running the institutions of which they are members. The Government Bill on Working Conditions in Swedish Schools, issued in 1976, proposed new forms of decision-making for democratising schools such as: class committee, work unit conference, local management committee, and pupil welfare committee. Such a proposal aims at decentralising decision-making in the school system. It also aims at giving the locally elected representatives wider opportunities for influence over school activities and a greater responsibility for them. This, in turn, is expected to affect the decision-making in curriculum.

Within the high degree of specification of national curriculum, teachers, at all levels, have a very limited autonomy, if any, in formulating and adopting curriculum policy. Nevertheless, they have much greater freedom in implementing the specified courses. They are free to teach the prescribed materials. Head teachers in higher levels have the right to select textbooks to be used. In spite of the fact that teachers are represented on committees of various kinds, the ordinary teacher feels that decisions of any importance are beyond his reach and that he cannot influence the process. However, the bureaucratic atmosphere makes the teachers more dependent on the central authorities. Dalin has pointed out that teachers in Sweden are rather hesitant in making use of the greater freedom given by recent national curricula. Except for their limited autonomy in testing, teachers tend to turn to the central authority for guidelines. They have grown so used through the years to decisions being taken by the centre. They, however, feel that politicians acquire increasing power in, and the control of, the educational processes, whereas they themselves and their
head teachers have to conform to what is decided by those politicians.

4.2 **Consumer Groups**

The major field in which students, parents and representatives of employers and workers organisations have a respected and heard voice in determining curriculum policy is that concerning working life. This is due to the social norms which regard education and the labour market as being interdependent. The need for cooperation between school and working life has become more and more pronounced with the passing of years. Hence, a constant process of interaction between education and the labour market is imperative, and the programmes of instruction should be continuously geared to society and working life. Education authorities, several parliamentary commissions, students organisations, parents' associations, have, on their several occasions, stressed the necessity of organised and efficient cooperation between curriculum and the labour market. From this has emerged the positive participation of the consumer group in directing the curriculum decisions. Therefore, the instruction provided in many subjects, (e.g., working life orientation, social studies, and civics), as well as purely vocational subjects has been focussed on working life.

Parents are represented on school boards, though the function of such boards are, to a great extent, supervisory in nature. However, attempts are made to decentralise the decision-making within the schools by giving a voice to representatives of parents and pupils. Various official reports have also stressed the importance of involving pupils in planning classroom activities. On the whole, with the exception of curriculum matters concerning vocational careers, the consumer group plays an insignificant part in determining curriculum policy.

4.3 **Pressure Groups**

Within the strategy of central control over all aspects of education, little can be said about the influence of pressure groups on curriculum policy.

On considering curriculum development as a technical issue, academic, psychological and educational experts at universities and colleges of education play an influential role in curriculum policy-making. But such an influence is exercised through parliamentary commissions and nationally organised research, in their capacity as subject matter specialists.
Teachers are organised to a high degree within national unions, such as: the National Association of Teachers and the National Association of Secondary School Teachers. Such institutions exert their influence on the school curriculum by putting forward suggestions to the National Board of Education, and through their representatives in the Royal Committees on educational reform. \textsuperscript{102}

With the rapid secularisation of Sweden, religious groups exert a negligible influence on curriculum. According to legislation passed in 1950, and the religious freedom law of 1951, all requirements of teaching religion have been removed. Finally, in 1958, the Church was deprived of overseeing the instruction of religion in the gymnasium. Thus, teaching religion has become objective and gives

"factual knowledge on the meaning and contents of various creeds without trying to influence the pupils to embrace a certain creed." \textsuperscript{103}

Publishers too, exercise no role in determining curriculum policy. Instead, they are obliged to steer a considered course to ensure approval of the production. \textsuperscript{104}

The participation of the pressure group, the consumer and the producer group other than the National Board of Education in curriculum matters are positive as far as revision of the curriculum is concerned. Methods of revision are organised by the Department of General Education (U.A.) where there are working groups and committees concerned with curriculum in each type of school. As soon as a new curriculum is brought into operation, it is the task of the relevant group to set about the evaluation of the working of the curriculum in the light of the stated objectives and to prepare proposals for revision. The working group has had to take into consideration any changes in demand from the employers, trade unions, universities, and from the pupils themselves and their parents. \textsuperscript{105}

Identifying the source of influence on the revisions of the curriculum, Kallos and Lundgren have counted three groups

"The demands on the school of the labour market, the general objectives of the school laid down by the Parliament, and the results of evaluations of the inner work of the schools." \textsuperscript{106}

To sum up, bureaucracy gives the Swedish system stability. The rules and regulations are clear-cut and identical throughout the country. Nonetheless, bureaucracy is a serious constraint on local curriculum development and local initiative. The political considerations are felt as
another constraint. Curriculum policy is formulated by the Parliament and adopted by the National Board of Education. Proposals presented to the Parliament for decision are carefully prepared by committees. On these are represented teachers, parents, pupils, employers and various organisations. Every decision is taken in a very democratic way. Consequently curriculum decisions are preceded by a series of consultations with the intention that producer, consumer and pressure groups, in a representative way at least, should have their voice heard.

5. Comparative View

The distribution of power in determining the curriculum policy among producer, consumer and pressure groups differs in the three countries under investigation.

As far as the influence of the producer group on curriculum decisions is concerned, it may be noticed that the national authority together with the Riksdag in Sweden have the dominant power in formulating and adopting the curriculum policy. The situation in the United States is quite different. The USA Government is based on a system of checks and balances. Thus, the State's right of control of school curriculum is safeguarded. Hence it is the State agencies who play such a dominant role in determining the curriculum policy. Unlike Sweden or the United States, the governors of secondary schools in England and the teachers, particularly the head teachers, are entirely in charge of decision-making on curriculum.

In Sweden there is a centrally issued curriculum for each type of school. In contrast, curriculum in the United States varies from State to State or from one school district to another. Such a diversity exists, to a considerable extent in England where curriculum differs from school to school and even within a given school, it varies from year to year. Such variations are due to the composition of the staff, the allocation of resources, and the design of the school buildings.

Teachers in Sweden are left with limited responsibility of deciding curriculum matters. Even with the new trends toward de-bureaucratization which permits teachers relative freedom in curriculum matters, they still look to central authorities for guidance. American teachers enjoy a significant freedom within States' legislatures in determining school curriculum policy, through sound representation on curriculum committees and local boards of education. In contrast, in England, curriculum
decisions are traditionally the responsibility of heads of schools and their teaching staff. Although curriculum matters have been the responsibilities of the governors since the end of the second world war, the fact is that governing bodies have exercised very little real power in this area, the matter being left largely to teachers, and notably to the head teachers, with perhaps some residual power remaining with the local education officer in extremes. Even in this last case, some local education authorities are barely active in this respect. Thus teachers in England enjoy greater autonomy with regard to curriculum decisions than is the case in the United States and Sweden.

However, neither the autonomy of English teachers nor the freedom of the American district system is absolute. There is always a limitation on such freedom. The influence of the national authority through Her Majesty's Inspectorate and the Schools Council for Curriculum and Examination is felt in England. In the USA, the positive role of the Federal Government has also increased during the cold war era in imposing certain curriculum policy through grants and Federal funds. Moreover, the necessity of a national curriculum has recently been debated in both the United States and England.

As regards the participation of the consumer group in determining curriculum policy, it is notable that parents and students themselves have exercised much greater influence on curriculum matters in the United States than in Sweden and England. Although parents share with teachers the membership of teacher-parent associations in the three countries, the influence of PTA in the United States is greatly felt and their voice has been taken into consideration.

Remarkable, in respect of the determination of the curriculum, is the greater influence exercised by the employer group in Sweden as compared with the United States and England and Wales. In Sweden the National Labour Market Board (AMS), trade unions and employers' associations have an influential say in determining curriculum policies that concern the link between the school and working life. Such groups fully participate in the educational process and cooperate in various ways with the National Board of Education in deciding and planning programmes that prepare students for their vocational career in accordance with the needs of society. In England, the employer group is represented on the Schools Council by the Confederation of British Industry. However, the fact remains that industry does not subsume all consumers and does not totally absorb the output of the school. The role played by the employer group in the United States is
hard to delineate and identify. Such a group participates in curriculum decisions with other representatives of laymen and experts on various committees and boards.

With regard to the influence of the pressure groups in formulating and adopting certain curriculum policy, the United States comes to the fore of the other two countries under study. In the United States there is a greater sensitivity to pressure groups including patriotic, religious, political, academic and professional organisations. Within the high degree of school independence and teacher autonomy that prevails in England, and the significant bureaucracy and national control in Sweden, the influence of such pressure groups on curriculum decision-making is relatively little. Nevertheless, suggestions concerning the revision or development of curriculum matters made by such groups are taken into consideration by the local authority in England and Wales and by the central authority in Sweden.

This comparative view may, however, throw some light on the relatively limited similarities and on the largely existing differences in the processes of formulating and adopting the secondary school curriculum between the three countries under comparison owing to the differentiation of political, socio-economic norms and institutions prevailing in each society.

6. Conclusion

The broad concept of curriculum has caused the curriculum maker to be concerned not only with subject matter, but also with the concepts, understanding and generalisations appropriate to educational experiences which are being provided for the students. Therefore curriculum planning becomes a continuous process. Ideally such a process must be shared by many groups such as: the producer group, including educational administrators and supervisory staff at national and local levels, and teachers; the consumer group, comprising parents, students and employers; and the pressure groups encompassing different interest organisations and associations. This ideal process in determining the curriculum policy keeps pace with the growing trend towards the democratising of the secondary school and the greater socio-economic changes taking place in society.

Some countries, however, make decision concerning the school curriculum at the central national level, while others let the local communities or
schools determine their own variations in education programmes. It is generally considered desirable to permit local participation and involvement in curriculum decision-making. Nonetheless, countries cannot allow individual committees to determine completely the curriculum policy, owing to the fact that state-wide objectives are necessary to tie national policy to education programmes. Yet it is recognised that a highly centralised national system of education tends to be an instrument of authoritarian uniformity, rather than creative change. Conversely, it is acknowledged that decentralised systems allowing free play to the interactions between man and his environment, would encourage innovation and reform in education.

The important feature of local control is the high motivation found in community groups which are permitted to make important decisions about their curricula whether or not those decisions are progressive.

It is generally agreed that some balance must be achieved between central and local sales played in formulating and adopting the curriculum policy in order to ensure adequate uniformity to reach society's goals while at the same time promoting sufficient variation to accommodate local needs.
REFERENCES


3. Ibid., pp.283-284.


6. Ibid.

7. Ibid.

8. Ibid., p.128.


17. Ibid., pp.72-73.

18. Ibid., p.73.

19. Ibid., p.74


21. Ibid., p.291


27. Ibid., p.124.


34. Ibid., p.60.


39. Ibid., pp.64-65.

40. Ibid., pp.66-67.


42. Ibid., p.290.


44. Baron, G., Society, Schools and progress in England, op.cit., p.64.


46. Education Act 1944, section 23.
47. Ibid., section 8.
49. Ibid.
51. Ibid., p.20.
60. Ibid.
63. Becker, T. and MacIure, S., op.cit., p.35.
64. Barnes, A., op.cit., p.18.
68. Barnes, A., op.cit., p.23.
69. Ibid., pp.23-24.
<table>
<thead>
<tr>
<th>Number</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>Evans, K., The development and structure of the English educational system, op.cit., pp.100-101.</td>
</tr>
<tr>
<td>75</td>
<td>Baron, G., The pattern of administration and the curriculum - UK, op.cit., p.360.</td>
</tr>
<tr>
<td>76</td>
<td>Owen, J.G., op.cit., pp.72-75.</td>
</tr>
<tr>
<td>77</td>
<td>Baron, G., The pattern of administration and the curriculum - UK, op.cit., p.357.</td>
</tr>
<tr>
<td>78</td>
<td>Becker, T. and Maclure, S., op.cit., p.117.</td>
</tr>
<tr>
<td>80</td>
<td>UNESCO, World survey of education - V educational policy, legislation and administration, op.cit., p.1085.</td>
</tr>
<tr>
<td>82</td>
<td>Ibid., pp.76-77.</td>
</tr>
<tr>
<td>83</td>
<td>Maclure, S., op.cit., p.11.</td>
</tr>
<tr>
<td>84</td>
<td>UNESCO, World survey of education: V-educational policy, legislation and administration, op.cit., p.1089.</td>
</tr>
<tr>
<td>85</td>
<td>Lauglo, J., op.cit., p.78.</td>
</tr>
<tr>
<td>88</td>
<td>Maclure, S., op.cit., p.12.</td>
</tr>
<tr>
<td>90</td>
<td>Lauglo, J., op.cit., p.79.</td>
</tr>
<tr>
<td>92</td>
<td>UNESCO, World survey of education, V-Educational policy, legislation and administration, op.cit., p.1089.</td>
</tr>
<tr>
<td>93</td>
<td>Maclure, S., op.cit., p.29.</td>
</tr>
</tbody>
</table>


100. Lauglo, J., op.cit., p.90.


103. Ibid., p.118.

104. Lauglo, J., op.cit., p.79.


PART FIVE
OUTCOMES AND PREDICTIONS

This comparative study would suggest that the Egyptian problem of an inadequate response of the educational system to the national development plans could be eliminated either by introducing a comprehensive school system or by developing an appropriate technical education.

However, as the educational and technological levels rise, diversification in general, industrial, agricultural and commercial education will, as the comparative evidence has adduced, largely come to be deferred until the post-secondary stage. Accordingly, secondary education is becoming mainly merged into a single form of school. It has been widely recognised that training in specific technical skills is better accomplished after general education than by specialized training at secondary school level. The particular skills learned in schools are frequently at odds with specific skills required in a particular industrial situation. Hence a good general education, as well as a significant knowledge of science and technology are needed to make possible the adaptation to work and to future job skill changes. This necessitates some reorganisation both of secondary school structure and the curricula of the various schools.

Given that the overriding objectives of the Egyptian society are the realisation of social justice, solidarity, and modernization; and given that the predominant normative pattern towards manual work has hindered any anticipated progress in technical education, the adoption of a policy of reorganising the educational system along comprehensive lines would be inevitable. This will be discussed in Chapter Twelve.
CHAPTER TWELVE

PROPOSED SOLUTIONS AND THEIR WORKABILITY

1. A Proposed Model for Comprehensive Schooling
   1.1 Structure
   1.2 Selection and Examinations
   1.3 Grouping
   1.4 Principles of Curriculum Organisations
   1.5 Curriculum Context

2. Workability of the Solution
   2.1 Internal Educational arena
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      ii) Institutional Constraints
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      iii) Environmental Constraints

3. An Alternative Solution and its Workability

4. Conclusion

5. References
SOLUTIONS AND THEIR WORKABILITY

In this chapter, we propose to project the reorganisation of secondary education on comprehensive lines and choice of model and curriculum to be associated with it as a proposed solution to the Egyptian problem under investigation. While the development of technical education, based on an unbolted connection between it and general education, would serve as an alternative solution. Then an attempt is made to examine the workability of both the proposed and alternative solutions within the Egyptian initial conditions.

1. A Proposed Model of Comprehensive Schooling

This model is orientated to Egyptian society in the light of the aforementioned comparative analysis. It covers four major organisational aspects: structure, selection, grouping and curriculum. These aspects are determined by the typical characteristics of the comprehensive school. The proposed model aims at sketching an educational reform that could provide universal, suitable and adequate educational opportunities. Such a reform also aims at bringing up creative and adaptable individuals able to cope with the socialist and economic phenomena of Egyptian society. Although these aims are not antithetical to the stated aims of the country, as expressed by the National Committee for the Reform of Education in Egypt, the nature and character of the model proposed contrasts with the present situation and the proposed reform as well. The five aspects of our model are outlined herein as follows.

1.1 Structure

To begin with, there is no unique form of organising the comprehensive school. The comparative evidence suggests that several models of structural organisation are favourable. Therefore many patterns can be projected insofar as they do not contrast with the basic characteristics of the comprehensive school, but satisfy the widely accepted criteria of organisation. These criteria emphasize that organisation should be suited to the functions served, flexible and responsive to new demands, and adequate for all groups and for all ages.
Thus, our model proposes three alternative formats for the reorganisation of the Egyptian educational system along comprehensive lines. These formats are demonstrated by Figure 26. The first scheme consists of an 8-year basic comprehensive school, enrolling all children aged six to fourteen, and a 4-year comprehensive secondary school admitting all boys and girls aged fourteen to eighteen, who plan to stay at school beyond the statutory leaving age. While the former provides general education with vocational orientation, the latter provides variations of lines and tracks, particularly in the last two years.

The second scheme includes a 9-year basic comprehensive school, enrolling all pupils aged six to fifteen, and a 3-year upper comprehensive school attended by all students aged fifteen to eighteen, who wish to continue their education after the compulsory schooling. The first school provides general education together with vocational programmes, whilst the upper school differentiates the students into different specialization in academic and vocational fields.

The third scheme of the proposed structural organisation comprises of a 6-year primary school for children aged six to twelve, a 4-year junior comprehensive school enrolling all boys and girls aged twelve to sixteen, and a 2-year senior comprehensive school, or sixth-forms, for students aged sixteen to eighteen who have the ability and the desire to continue their further education. The primary school operates in similar manner to the existing one. It provides for a unified curriculum for all children, and stresses the activity learning programmes. The junior comprehensive school provides general education which emphasizes practical, technical, and recreation subjects, whereas the senior comprehensive school provides different variants of specialization.

The choice of any of these schemes should be made on the basis of psychological, demographic, and educational considerations. The choice can be left to each educational directorate to decide which pattern of organisation is more suitable to meet the local community needs. This can be practised effectively if the Egyptian educational system takes further steps towards decentralisation. However, within the present
FIGURE 26

STRUCTURAL ORGANISATION OF EGYPTIAN COMPREHENSIVE SCHOOL SYSTEM

4-YEAR COMP. SECONDARY SCHOOL

3-YEAR COMP. SECONDARY

2-YEAR SENIOR COMP. SCH.

8-YEAR BASIC COMPREHENSIVE SCHOOL

9-YEAR BASIC COMPREHENSIVE SCHOOL

4-YEAR JUNIOR COMP. SCHOOL

6-YEAR PRIMARY SCHOOL

FORM 1

FORM 2

FORM 3
educational administration, the choice can be left entirely to the central authorities to decide what particular patterns of organization should be established to provide comprehensive schools sufficient in number and equipment to afford for all pupils a variety of instructions and training in view of their different ages, abilities and aptitudes. This choice must be done on the basis of educational research conducted to find out the relative merits of such schemes or other different schemes of comprehensive school.

The 8-4 scheme is advocated for educational considerations. Grades 7 and 8 are to be removed from the preparatory to the primary stage, whilst grade 9 is returned to the secondary stage. Thus the preparatory stage is to be abolished. The 8-year basic comprehensive school would provide for both primary and preparatory education in eight years of schooling instead of nine. This would save the expenditure of one year schooling. This revenue can be used in speeding up the achievement of universal basic comprehensive education. The establishment of an 8-year school would make it possible to achieve equal educational opportunities between rural and urban areas. It also helps the realisation of significant and smooth articulation between primary and lower secondary education. The 8-4 scheme would benefit from the experimentation of the unified school. With more or less adaptations, the curricula and other aspects of administration that have been utilized in the unified school may be applied in the 8-year basic comprehensive school. The 4-year comprehensive secondary school would make use of the existing buildings and staff of the secondary schools. Special equipment would be required to enable the general secondary schools to provide a variety of courses. However, the shortcomings of this scheme are associated with the distribution of school population. Some local communities are less populated than others, therefore the running of such a scheme in all communities would be economically unwise. To approach such a problem, we suggest that one school may serve a group of sparsely populated communities, in addition to the supply of means of transportation, or at least paying the fares, to the pupils who walk more than two or four miles to the basic and upper comprehensive school respectively.

The 9-3 scheme is proposed to keep in accordance with the intention
of extending compulsory schooling to the age of fifteen. The 9-year comprehensive school should be a homogeneous unit replacing primary and preparatory schooling. It may be constructed in three levels of three grades each. This division should be regarded as a practical organisational and administrative procedure. For demographic considerations, some rural areas would not have a complete nine-year school. In this case, the senior level of the comprehensive basic school will serve more than one area. The 9-3 scheme would facilitate the articulation between primary and secondary education. It also helps to achieve a better distribution of educational provision between rural and urban areas. Few changes are required at the upper secondary education. The division between technical and academic schools would be abolished, and both types of education are to be provided under one roof. Thus the 3-year upper comprehensive school would make use of the existing buildings and staff of the secondary stage. The shortcomings of this scheme can stem from the running of the schools in a similar manner to the existing system. This will hinder the principles of the comprehensive schooling. To avoid this, we suggest that the scheme should, as far as possible, have its complete 9-year school unit.

The 6-4-2 scheme is proposed in accordance with psychological considerations. Many psychologists have pointed out that the early adolescents have their own unique needs and characteristics. Accordingly, they advocate that there should be special schools for such an age group. Thus the 4-year junior comprehensive school would play an intermediate role between primary education with common learning activities, and the senior secondary education providing for specialized activities. The existing system of primary education with its buildings, staff and administrative authorities would facilitate the implementation of such a scheme. Grade 10 is to be removed from the general and technical secondary schools to the preparatory school, which will operate as a junior comprehensive school comprising grades 7 through 10. This scheme would also make use of the existing buildings of the preparatory schools. The secondary school buildings require some adaptations and particular equipment to cope with the variety of academic and technical specialization which should be provided for the different students. The shortcomings of this scheme may stem from the break at 12, which may cause a high
proportion of dropout and hinder the articulation between the primary and secondary stages. The junior comprehensive school has to face the problem of organising different programmes for those who would leave at the age of fifteen, and for those who would stay on. This scheme, however, would be very suitable in the long run, when the school-leaving age rises to 16.

1.2 Selection and Examinations

The anticipated extension of compulsory schooling to the age of fifteen implies that there should be no need for the selection between primary and lower secondary education. Accordingly, the examination for the Primary Education Certificate, which takes place at the age of eleven plus as a means of selective procedure, should be abolished.

Moreover, given that comprehensive education is accepted as a policy for the reorganisation of the Egyptian secondary schools, this also implies that no further selection should take place between lower and upper secondary schools. Thus, the selective function of the examination for the Preparatory Education Certificate should be abandoned. This is due to the fact that within a comprehensive school system there is no longer need for the selection of pupils for different types of secondary schools.

Instead of such selective procedures, other administrative devices would be essential to allocate pupils to the lower and upper secondary schools. Such procedures are meant to bring about a smooth articulation between primary and secondary education. In the light of the comparative analysis, we suggest two procedures maintaining an easy transfer between educational levels. These are: the catchment-area and the feeder-schools methods.

Two types of catchment-areas can be used as methods of allocation. The first is the geographical type, which is naturally associated with rural districts or small towns. Thus all pupils in a given geographical area are to be transferred to the only existing comprehensive school in the area. The second type is the catchment-areas drawn by the educational authorities. This method should be used in large towns, where more than one comprehensive school exists. Such a drawn catchment-area should be
regularly reviewed in accordance with the population density.

The feeder-school procedure is meant to link a certain number of primary, basic or junior comprehensive schools to a particular upper comprehensive school. Thus all pupils from a given primary school will move up together to a given linked comprehensive school. The application of such a method will be of significant importance in large districts and cities. It would make the allocation procedures much more flexible and correspond to the shift in school population, by adding or subtracting one feeder-school.

A combination of the two methods can also be used in the allocation of primary students to junior and upper comprehensive schools, as well as in the transfer of the students from the basic to the upper comprehensive schools within the proposed structural schemes.

The principles of allocation should be that every pupil has the right of access to his neighbourhood school. Also, every applicant to a school other than his neighbourhood school has an equal claim; in choosing from an excess of external applicants, national and local criteria of 'social mix' must be satisfied.

Despite their defects, examinations remain a valuable and necessary part of any school system. An examination shows the pupil where he stands, and provides him with an incentive to continue raising his standard of attainment. However, the pressure for an uncompetitive egalitarian society has resulted in an increasing opposition to examinations, and in a tendency toward the utilization of other means of evaluation. The function of examinations have also been challenged. Within an egalitarian educational system, little stress is given to the selective function of examinations. Instead, much more emphasis is placed on their role in diagnosis, guidance and feedback. The external and centralized examinations prevailing in a selective system tend to be decentralized and internally conducted in a comprehensive school system. This has encouraged the teachers to develop and employ a variety of devices and means of evaluation to assign both the pupils' achievement and behaviour.

Bearing in mind such characteristics and functions of examinations in the comprehensive school system, we call for change of the existing Egyptian examinations by substituting with ones of diagnostic and prognostic functions. Thus we propose an outline of a new examination
system consistent with the aims and functions of the comprehensive school system. This new scheme involves: continuous assessments; objective tests for achievement and diagnosis, an internal examination, and external examination conducted at the end of the secondary stage. The new system of examination should not entirely concentrate on the assessment of achievement, but it must be directed to the evaluation of the development of the personality. The different items of this proposal can be presented as follows.

1. **Continuous Assessments**

Examinations should not occur only at the end of a term or a school-year. They must be an integral part of the total teaching-learning process. Therefore an adequate examination system should involve devices of continuous assessments. Such assessments would help the pupils to know their strengths and weaknesses and to see measurable progress as a reward for their efforts. Continuous assessments would also help the teachers to do some intensive self-evaluation as regards their teaching methods and approaches. Since most evaluative techniques are plagued by limitations, teachers should employ multiple measures in their assessments. Observations of pupils' involvement in the learning activities, despite their subjective nature, are regarded as a potential source of feedback, as well as a popular technique in the continuous assessment of the pupils' work. It is advisable to observe each individual's performance and record the results from time to time. Other techniques including oral, practical, and non-standardized or standardized tests should be used in such a process.

ii. **Objective Tests**

Objective examinations include such forms as: multiple-choice, true-false, sentence-completion, matching and the like. Such examinations include both teacher-made tests and standardized achievement tests. These tests must constitute a major part of any examination. Since the majority of the Egyptian teachers, particularly at the primary level, lack the ability and experience of designing objective examinations, it is necessary to devise standardized tests by experts at the national or regional levels, and to train the teachers to use such tests. The comparative analysis shows that the standardized
tests are widely utilized because of their value in allowing schools or classes to compare their results with a national sample used in establishing norms for the test. Accordingly we suggest that objective tests should be used in both internally and externally conducted examinations.

iii. Internal Examinations

Since the assessment of the pupils' work is essential to the school, we suggest that there must be internal examinations conducted by the school. Our proposal provides for two of these examinations taking place at the end of grades 6 and 10 in the first scheme, 7 and 10 in the second, and grades 8 and 11 in the third scheme of the three alternatives proposed for structural organisation. Forty per cent of the total marks of any subject should be allocated to such internal examinations, whilst the remaining sixty per cent are to be devoted to the teachers' continuous assessments. This implies that a system of automatic promotion during the compulsory schooling stage should be implemented. This also implies that the terms 'failure and success' should be abolished. The pupil can only repeat a grade, because of his unsatisfactory achievement, if his parents agree. This system, however, requires a well-designed programme of guidance, and a wide use of diagnostic tests to tackle any backwardness problems at an early stage.

iv. External Examinations

We advocate that only one external examination be conducted at the end of the upper secondary school. However, our proposal, for the present situation, includes two such examinations. The first occurs at the end of grade 8, 9, or 10 in the three schemes respectively, as demonstrated by Figure 27. This external examination should be conducted by the educational directorates at the governorate level. Pupils should sit for a maximum of only eight subjects. These comprise both compulsory and optional subjects. Any pupil who passes successfully at least four subjects should obtain a Certificate of Compulsory Education (CCE). The second external examination is to take place at the end of the twelfth grade. This examination must be regionally conducted by the newly established examining boards. Such boards should include members
FIGURE 27

Assessment and Examinations in the Proposed
Comprehensive School System

- Diagnostic Tests
- Internal Examinations
- External Examinations
of the university in the region, educational administrators and teachers. Pupils are to sit for a maximum of four subjects. These subjects are probably determined by the requirements of university admission, for those students planning for higher education or by special trade requirements, for those entering the labour market. Any pupil who passes two subjects will obtain his General Education Certificate (GCE).

I.3 Grouping

The unselective character of the comprehensive school implies that the component of a class within such a school should be constituted of a mixture of social classes and levels of ability as are found in society. This necessitates that mixed ability should be the main method of grouping in a comprehensive school. However, homogeneous grouping may partially be exercised as a means of creating suitable conditions for facilitating learning and meeting individual differences. Bearing in mind that the advocates of comprehensive school believe in diversity as a technique for stimulating educational experiences, and put much emphasis on the personal and social development of pupils, the heterogeneous grouping becomes the most favourable method.

On proposing some grouping procedures to be applied within the models of comprehensive education for Egypt, we take into consideration that all students need to be challenged, stimulated and provided with opportunities for work with many other students who have different backgrounds, abilities, interests and competences. Thus we suggest that both homogeneous and heterogeneous grouping should be utilized to meet all the varying needs of pupils. Therefore, our proposal for grouping inside the proposed model of the comprehensive school includes three major procedures: tracking, heterogeneous and banding grouping and remedial classes.

Tracking should be utilized in the upper comprehensive secondary school, particularly in grades 10 through 12, where students are to be differentiated into tracks or lines. We suggest that tracking should be based on free choice exercised by pupils and their parents. This
should be the predominant method of grouping in the long run. However, for the time being, allocation to different lines or tracks can be based on the assessment of abilities and aptitudes of pupils, in order to achieve somewhat a balance between the interests of the students and the needs of society. Tracking requires a significant programme of guidance helping to reach a correct choice and to avoid mis-allocation. However, it is necessary that tracking should not preclude the possibility of transfer from one track to another.

Bearing in mind the personal and social effects of streaming, we advocate heterogeneous grouping to be applied in the basic and junior comprehensive school. This can be achieved by a random procedure such as the alphabetical order of the student's name, or by an intential procedure such as the assessment of pupils' abilities and the distribution of the pupils into classes having roughly the same mean and range of ability. Heterogeneous grouping requires certain changes in the methods of teaching, and stresses the individual learning. This also needs certain adaptations in teacher training both at the pre- and in-service levels to cope with the requirements of the teaching-learning process in heterogenous classes.

Because the majority of Egyptian teachers lack an effective experience of teaching heterogenous groups, and the inconsistency of streaming with the principles of comprehensive education, we suggest that a broad ability banding as a method of grouping is used in the stage of transition towards non-streaming. This implies that pupils are to be divided into a few broad bands instead of many narrow streams. These bands, however, are formed in accordance with homogenous grouping, which is based on ability assessment.

Since the comprehensive school is geared to all pupils, however much they deviate from the average, remedial classes become an emerging necessity to provide suitable learning activity for a group of pupils who require special treatment. Paramount in such a group are the retarded pupils, who are unable to attain a standard of achievement comparable with their level of ability. These students should
be taught in small classes by specially qualified staff who have the capacity to work sympathetically with such students. Retarded students should only be separated in remedial classes in learning academic subjects, and should be grouped with other normal students in social activities. Different methods of teaching should be employed, aiming at relating the study to the particular needs and to the immediate interests of these pupils. When any one of such a group achieves enough progress enabling him to cope with the standard of the normal class, he should be integrated with other pupils. Another group which needs special treatment is the handicapped. Whether physically, mentally or socially handicapped pupils, they should be provided with relative learning activities within the remedial classes.

The comprehensive school should also be concerned with the talented pupils. Special programmes should be designed for such a group including advanced placement programmes, and/or honour classes. This provides those capable students with a chance to achieve a college credit while they are still in the secondary stage. This can be applied only to students in final grades in the upper comprehensive school.

1.4 Principles of Curriculum Organisation

A number of sources and influences whereby the school develops its objectives and curriculum can be identified. They are mainly related to the nature of society, the nature of knowledge and the nature of the learner. These sources must be borne in mind on considering the curriculum organisation in the Egyptian comprehensive school.

The curriculum as an institution must largely respond to any change in the normative and institutional component of the educational system. Thus, accepting a wide definition of the curriculum implies that changes in social, economic, political and demographic features of society should be reflected in, or promoted by, the school curriculum. The awareness of expanding educational opportunities, the necessity of extending the compulsory schooling,
the demands for increasing the opportunities of access to secondary education, and the requirements of the labour market are predominant features of contemporary Egyptian society. These phenomena have great influence on the curriculum organisation for the proposed comprehensive school system. For example, equality of opportunity is more closely bound up than ever before with the concept of individualization. The labour market, within the advanced technology, has demanded a higher level of technical and professional training. This also produces a decrease in employment opportunities for unskilled and undereducated youth. Therefore a long period of general education which integrates academic and vocational subjects has become imperative. Thus, one principle is to make curriculum relevant to life.

Curriculum organisation is influenced profoundly by the larger world of knowledge. The acquisition of knowledge, particularly in the physical sciences and mathematics which has increased with unprecedented speed, makes the decision of what is to be learned a difficult problem. Human knowledge and new job-skills are growing so rapidly that students can hope to profit only from a general education with emphasis upon learning how to learn. This has resulted in a trend toward the minimization of the importance of the content in favour of process. Such a change of outlook implies a transfer of attention from the assimilation of factual information to be memorized to a selective structure of knowledge. However, the comparative analysis has demonstrated that specialization and fragmentation have had their concomitant effects on the curriculum organisation. The influence of the subject-matter specialists has been pervasive. Therefore, sufficient attention must be given to the needed interrelationships of studies, and the relevance of the curriculum to the life of the learner and the problems of society.

The educator's conception of the learner has direct bearing on the formulation of educational objectives and content. Although such a conception is influenced by the findings of psychological research, it is entirely formed by the educational philosophy.
However, we tend to regard the learner as an autonomously thinking and socially responsible individual who is capable of controlling his destiny. Moreover, we believe that the learner's concept of himself, his past experiences and his needs, feelings and values have significant effects on the learning process. Therefore, we contend that if the curriculum experiences cannot be placed in some patterns considering the personal perceptual processes, there is a real doubt about the validity of the curriculum. Hence, the curriculum of the Egyptian comprehensive school must provide a wide variety of learning experiences which could meet and satisfy the wide range of abilities and varying needs of the pupils.

The Egyptian curriculum planners should take into account all the pros and cons of the different patterns of content on approaching the task of designing a curriculum content for the proposed comprehensive school. Two alternative curriculum policies can be adopted. The first puts the emphasis on the needs of individuals and society, and imposes the organisation of the content in accordance with pragmatism and polytechnism. The second stresses the structure of knowledge and imposes the adoption of essentialist curriculum theory. Thus polytechnical education would be introduced into the curriculum as a subject-matter. Due to her initial conditions, in the near future, Egypt can successfully adopt and implement the second policy.

The comparative evidence would suggest three possible alternatives to be considered in organising such a curriculum content. First, there can be a single programme for all the pupils in the school all the time. Second, there can be a multiple programme of exclusive tracks or courses (eg. academic, technical, commercial, nursing etc.). Third, there can be a common core curriculum for all pupils with a system of options, thus providing for a variety of learning experiences within the main fields of knowledge. We are prepared to advocate the third alternative for several reasons. First, being closely related to the community, the comprehensive school should provide its students with experiences qualifying them either for further education or vocational careers.
Thus its curriculum must be largely responsive to the individual and societal needs. Second, students develop rapidly and become more capable of coping with abstract knowledge. Third, individual differences emerge clearly among adolescents. Thus one series of experiences through the school, as suggested by the first alternative, will not be equally satisfactory for all students. On the other hand, there are many similarities among students which call for common educational experiences. Therefore, a multiple programme of the second alternative would deprive some students from sharing their common interests with other students. Considering the fact that adolescents are both similar and different implies that a need for a curriculum which will provide many different experiences, is arranged that each pupil can select optional subjects suitable to his needs and interests, in addition to a common programme for all students.

Thus our proposal for the organisation of the curriculum content for the Egyptian comprehensive school comprises of three elements: a common curriculum, optional subjects, and polytechnical courses. The Egyptian Curriculum Planning Committees must keep in mind that these elements are functioning to provide an appropriate content which meets the needs of the students, and helps the development of a generation capable of shouldering its responsibilities in the successive stages of life. The content should combine theoretical and practical studies, so that practice may become one of the principal bases of education, with both a scientific significance and a relation to work and production in the environment. Since it is not the purpose of this study to initiate a complete design of the curriculum content, our intention is to put forward some principles which may serve as guidelines for curriculum planners.

i. Common Curriculum

A well-balanced content of a comprehensive school should include, as one of its main ingredients, a unified curriculum to meet the needs of all youth of society. This curriculum provides for a
common learning, or a general education programme, including such essential subjects as religion, Arabic language, mathematics, physical sciences, social studies, art, handicrafts and physical education. The time allocated to such a common course should be greater in the lower grades than in the upper, where much time must be devoted to polytechnical and specialized courses. However, the intention should be directed to the extension of the period of general education to the age of fifteen or sixteen to cover the lower cycle of secondary education. This implies the postponement of the stage of differentiation into tracks or lines, to begin with the last two grades of the upper cycle, in agreement with the international tendency in this field.

Plans should be made to depart from the conventional curriculum organisation. At the lower grades (I to 4), the child-centred pattern can be one possible approach of organisation. The curriculum is to be thought of in terms of activity and experience rather than of knowledge to be acquired and facts to be stored. Other content designs which deviate from conventional practice in curriculum organisation include systematic correlation of subjects, fused and unified fields of knowledge, and a core curriculum. These patterns of organisation are significant at the upper levels (grade 5 to 9), whereas instruction should be oriented to problems of youth and society, an integration of subject matter from all pertinent fields, thus resulting in much more meaningful learning than the separate subject-courses do.

ii. Optional Subjects

If the common curriculum is made up of subjects that all boys and girls should have a chance to learn, optional subjects are provided for pupils who may want to study them for their particular reasons. A broad offering of optional subjects should be provided to meet the individual differences, and to give each pupil a chance to develop in the way that suits him best. Therefore, the students should have the opportunity to elect courses in which they have special interests, or for which they have a particular need.
The subject option is to be introduced gradually in addition to the common curriculum. This system would serve to help avoiding the overcrowding of the curriculum. While pupils in grade 1 through 6 study the same common curriculum, two optional subjects can be introduced in grades 7 and 8. Students may choose from foreign languages, technology, economics, creational arts. As pupils grow up, their special aptitudes and interests emerge more apparently. Then they can drop one or more courses and concentrate on a relatively small number of subjects. Thus, the time allocated to some subjects in the common curriculum is reduced, to others increased. However, eight courses seem to be a reasonable number to be taught in grades 9 and 10. Arabic language, religion, and physical education can be included in the curriculum as the basis for a common course, while the pupils choose the remaining five subjects from a specially designed pool of optional subjects.

The optional courses may include subjects of academic or vocational nature. Some options may be provided in advanced or ordinary levels. The principle that governs the process of optional subjects should be the free choice. It should be up to the pupil himself and his parents to make the choice of options.

Foreign languages in Egypt is of special interest. English and French are the most popular. Arrangements should be made in the near future to introduce English as a compulsory subject, to begin with grade 5 to grade 10. This is partly because the majority of the students learn such a subject as a first foreign language, and partly due to the increasing importance of English in the fields of trade, research and technology. French, German, Italian may be taught as second foreign languages in grades 8 through 10. Pupils can continue with their choice of foreign languages in the final stage of the upper comprehensive school or they may drop such a subject.

The final grades of the upper secondary school should be the specialized stage. Students in grades 11 and 12 are to be differentiated into tracks, lines or routes. These grades can be organised to a similar design as the English sixth-form, or as lines as
in the new gymnasium. Curriculum organisation in these grades should be designed in accordance with specialized education, which determines the pupils' future education or vocational careers, and helps to prepare youth for their individual roles in life. Therefore a large variety of specialized courses must be offered.

iii. Polytechnical Subjects

One of the distinctive characters of the comprehensive school is the provision of a wide range of vocational opportunities. The Swedish experiment provides a paramount example of the significant concern given to vocational orientated subjects in the integrated secondary school. In general, vocational education should be an essential part of the curriculum in the final grades of secondary education, although some educational planners advocate that in the future all vocational education must be deferred beyond the secondary stage.

The Egyptian comprehensive school should be designed to help youth to be well prepared for the world of work. The final grades should be devoted largely to vocational preparation. Throughout the comprehensive system, the curriculum should be designed to weld the theoretical studies with practical and applied aspects, particularly in science and mathematics. Pupils should also be trained in practical work to acquire manual aptitudes so that they would easily veer towards practical life.

Polytechnical education should gradually be introduced to the comprehensive school curriculum until it becomes the dominant characteristic of such a curriculum. For the time being, it should be offered as a subject in the common curriculum, namely handicrafts. This may include wood-work, metalwork, domestic sciences, artistic work etc. The optional courses in grades 7 through 10 can comprise a large variety of technical and vocational subjects such as technical drawing, electricity, communication, wiring, carpentry, needle-work, commercial art, radio and television repairing and so forth. Intention in the final grades is to offer a specialized vocational training which equips the pupils with
qualifications required for success either in attending a higher technical institution or college, or entering the world of work.

Curriculum planners should keep in mind that polytechnical education requires close relations between schools and production centres. Barriers between them should be demolished. Opportunities must be given to the students to get in touch with working life and to try their hands at practical work. Working visits to factories, production places and service centres should be provided for students in grades II and I2 for some weeks per year to get some training in the sort of work they will pursue on appointment.

1.5 Curriculum Context

The comparative evidence as stated in Chapter eleven would suggest that the curriculum context is determined to a great extent, by the interaction between the community, school, and the teachers. Each of them exerts a certain influence on the curriculum decision making. However, their roles in the curriculum control differ due to the types of educational administration, as well as the relative power of particular groups in the society.

Accepting the comprehensive school ideals implies that the formulation and adoption of the curriculum policy should involve a broad participation of the different groups of society. The participants can be classified as producer, consumer and pressure groups. Our proposal calls for the increasing partnership of the central and local education authorities and the consumer groups on deciding the curriculum policy. It also calls for the increasing freedom of teachers, and taking into consideration the reasonable and relative demands of the pressure groups. The participation of all these groups has been negligible in formulating and adopting the curriculum policy.

We suggest that the curriculum decision making should not be entirely exercised by the national education authority. There must be an effective role for the educational directorate in
deciding the curriculum policy to meet the varying needs of the different local communities. The role of the consumer groups, particularly the employers, should be increased. Representatives of the industry, business and labour unions should be appointed in the curriculum committees, and should be encouraged to exercise their constructive criticism and to advise on the curriculum policy. Parent-teacher associations should have an effective role in the planning of the educational programme.

We also suggest that teachers should take greater responsibility for the school curriculum policy. They should be protected from undue pressure from visiting supervisors. They also should be given much more freedom in deciding the teaching-learning activities. Teachers should be represented in significant proportions on the curriculum committees at the local and national levels. The teacher syndicate should also be encouraged to play its role in the curriculum policy.

Furthermore, we advocate that the rational demand of the pressure groups must be taken into account in formulating and adopting the curriculum policy. National or local pressure groups should have a respectable voice in the curricula matters. Laymen and other organised groups should have an increasing role in the making of major curriculum decisions. This is desirable due to the fact that the greater involvement of the community in decision-making, the more they understand and support educational innovations.

The curriculum policy must be decided in the light of general educational policies; objectives of education in the stage served by the intended curriculum, the abilities, aptitudes and educational needs of the pupils whom the curriculum is designed to serve, and the requirements of the development plans. In order not to be behind the times, a comparative study of the parallel curricula in other countries is required. It is also necessary to take into account the recommendations of educational conferences dealing with the curriculum under consideration.
Thus, we have presented an outline for a model to reorganise the Egyptian educational system along comprehensive lines. This model necessitates many changes taking place in the present system. It also affects much personnel and many institutions inside and outside the educational system. It may also produce desirable social effects. As Holmes has put it:

"Within a comprehensive school system opportunities of achieving a greater degree of social education seem possible"

An attempt follows to examine the workability of such a comprehensive school system as a proposed solution to the problem under study.

2. Workability of the Solution

It is widely recognised that education does not operate in a vacuum. It is an integrated part of a community in a given place at a given time. Not only does education contribute, positively or negatively, to the welfare of the society, but it is also largely influenced by its normative, institutional and environmental patterns. Thus, the introduction of an educational innovation, such as a comprehensive school system, would operate in a successful or failure manner due to the degree of assistance given, or resistance raised by different persons, institutions or physical resources. Sources of constraints to the practicability of the proposed solution in this study are examined within internal and external educational arenas.

2.1 Internal Educational Arena

Educational innovation may face some constraints from persons and institutions within the educational system itself. The resistance will be less if administrators, and teachers feel that the project is their own - not one devised and operated by outsiders. The resistance will also be less if the project clearly has wholehearted support from top officials of the system.
However, we may predict that the implementation of a comprehensive school system in Egypt will be effected by certain normative, institutional and environmental constraints functioning within the educational system. These constraints may be as follows.

1. **Normative Constraints**

   (a) **Attitudes towards central administration**

   A major constraint which is expected to hinder the practicability of reorganising secondary education on comprehensive lines exists in the conflict attitudes of the administrative authority toward power. Due to its inherited tradition of centralization, the administrative machinery had inclined to concentrate in its hands almost everything related to education. Thus through insistence upon conformity, the Ministry of Education has erased the individuality of schools, teachers and pupils. Geographical considerations, combined with the traditional respect for the power of the person occupying the role of master or ruler, are mainly responsible for the pattern of centralization in Egypt rather than ideological doctrine. Galt, for example, remarked that

   "Egyptian education presents no compelling philosophy like Fascism or Communism to warrant perpetuation of such a centralized machine for indoctrination. In Egypt the educational wheels of indoctrination are all set up, but there is no natural ideology to be indoctrinated. The wheels grind on for their own sake."

   This, however, has affected the attitudes and the behaviour of the administrators of the educational zones. They have continuously complained about their relationships with the Ministry. When the Ministry denied any responsibility they complained that the Ministry was restricting their functions. On the other hand, when they were given more responsibility they complained because they were not given the necessary authority to manage manpower or financial resources.

   The conflict of attitudes towards power is not confined to persons at the local and central authority. It also exists between
personnel in the different departments at the same levels. Manned by an army of directors-general, advisory committees, technical advisors, inspectors and numerous sub-committees, these departments tend to maintain their status and authority. Since the implementation of comprehensive education implies the fusibility of the departments of primary, preparatory, general secondary and technical secondary education, it is expected that personnel in such departments, motivated by maintaining their traditional power in decision-making, will resist such a fusibility. Hence, one may predict that under the prevailing attitudes towards keeping power and concentrating authority in few hands, the workability of the proposed solution is unlikely to achieve an appropriate success. Moreover, one may expect that such attitudes toward authority contrasts with the acceptance of the implementation of comprehensive education in the secondary level in its orthodox character. We are convinced that after forty years the following statement written by Taha Hussein in 1938 is still applicable. He pointed out

"We can effect no important alteration in our educational system without first reorganising the central administration of the Ministry of Education."

(b) Teachers' Attitudes

Another constraint lies within the attitudes of teachers towards the type of secondary schools. It is expected that teachers' attitudes towards comprehensive schooling will vary from one group to another due to their different values, and status. Therefore, one may predict that Egyptian general secondary school teachers, as elsewhere, will not favour the introduction of comprehensive school reform. Moreover, teachers of academic subjects will vigorously resist any reform which might destroy or damage their prestigious status acquired from teaching in academic schools. On the other hand, teachers of practical subjects, or those who teach academic subjects in technical schools will be in favour of implementing a comprehensive organisation. Primary teachers on the whole will advocate a 9-year or 8-year
scheme of organisation due to the fact that both schemes will add more prestige to their present conditions. However, lack of research into the attitudes of Egyptian teachers towards the type of knowledge or the type of school, as well as the operating system of recruiting and employing teachers by the central authority, has reflected little, if any, literature concerning this aspect. Dessouki, for example, has demonstrated that some subject-matter like mathematics, physics, foreign languages have attracted many more candidates from the faculties of education to enroll in corresponding departments because they will gain, from private coaching, more than other teachers of other subjects. This indicates that the attraction of certain subjects is associated with economic considerations. Thus, if comprehensive schools are introduced it is expected that the struggle among teachers for teaching academic subjects, particularly for the top classes, will come to the front.

(c) Attitudes towards the Allocation of Resources

A further constraint is functioning as a result of the attitudes of personnel in the educational administration system towards allotting financial resources to the different educational stages. Undoubtedly money is an absolutely crucial input of any educational system and financial policy is a determinant variable in education growth. The fact that public money is involved and a large sum spent in education raises contradictions of educational finance and economic equilibrium. At the same time it gives rise to a traditional economic argument of whether education is a consumption or an investment. A central assumption widely shared by educators and economists is that education is a good investment in national development. It is argued that the educational system will produce the quality and quantity of human resources required for economic development, and the economy will, in turn, make good use of these resources. However, the opponents raise doubts about the educational productivity and the value of investment in it when an educational system in a given
society turns out the wrong kinds of manpower or produces the required stock of skills and knowledge but the economy does not probably absorb it. Thus we hold the belief that the product of education outlays carries joint features of consumption and investment. Therefore the share of resources allocated to education ought not to be entirely regarded as an investment outlay.

Egypt, with its slow rate of economic growth, faces a critical dilemma. For Egypt, it is necessary to improve her educational performance in order to accelerate economic growth. But equally it is difficult to increase her investment in education until and unless her economy grows. Being affected by the state of war, the policy of the general budgetary expenditures was determined in a priority manner. During this time the 'social services' sector of the government budget has proliferated rapidly, leaving little room for essential development investment. After the war, food and housing problems have been dramatically pushed into the foreground and demanded due attention. Consequently Egypt finds it is more difficult to enlarge the share of its resources allocated to education. However, the setting of priorities implies that educational leaders have to master not only their own field but also the language of economists as well, in order to be better qualified for the defence of their own proposals in the annual budget.

One can identify some typical norms which direct the attitudes of personnel in the administrative machinery towards the financial policy. A major norm is that asking for more than needed because of receiving somewhat less than required. As one official in a governorate outside Cairo told Hyde that

"If he needs fifteen million, he asks for twenty, knowing that what he will get will be nearer to what he needs."

Another typical norm affecting the finance of education is the attitude towards giving significant proportions of revenue to universities and higher education. This attitude creates a critical conflict in the policy of developing public education. It is also
responsible for the delay of reaching a full absorption of the compulsory schooling-age children, and the high percentage of illiteracy in the country.

A third typical norm, which has worked out for long to direct the Ministry of Education on deciding its policy of priority, is that of allocating more funds for academic than for technical education. This is partly because the cost of various types of education differs greatly, and partly because the enrolment of academic schools increases rapidly. This norm has also been associated with the inherent attitudes of the public towards manual work and technical education in general. However, the recent priority policy has been the concentration on technical education, so as to enroll in ten years' time 70% of all secondary school population, instead of the present 52% technical and 48% general education. 9

If these norms continue to determine the financial policy of the Ministry of Education, one could predict that they will constitute a major constraint affecting the implementation of any educational innovation.

ii. Institutional Constraints

There are different educational institutions which, as we expect, may raise certain types of constraints varying in degree and effect, to the workability of a comprehensive school system in Egypt. Most salient of these institutions are the administrative machinery, institution of teachers education, the sex-type of school, women's education and the allocation of revenues.

(a) Administrative Machinery

The control and administration of any educational system is a crucial function. The power relationships between the national, regional, and local levels in the statutory control and administration of educational institutions are very sophisticated and determine educational policies and practice. Several studies directed attention to the relationships between educational innovations
and the type of administration. They also illustrated the role of the central, local and individual school administrative patterns in facilitating conditions or lifting constraints for the formulation, adoption and implementation of a successful educational change.  

Having been of useful value in any stage of the 'problem approach', the Parsonian model of formal organisation is applied here in analysing the contextual features of the administration of education in Egypt to help the prediction of constraining or facilitating the workability of the proposed solution. The formal organisation model suggested by Parsons, according to Holmes, seems to be flexible and comprehensive in its application and allows more sophisticated comparisons than those based on a centralized/decentralized dichotomy. It asserts that there are levels of interaction in formal organisation. First, within organisations, there is interaction among individuals and groups and between levels both downwards and upwards. Second, between organisations there is interaction among individuals and groups between national, regional and local levels of organisations. The third interaction is between any of the levels of organisation and other social sub-systems.

Following Parson's model, one can identify three levels of organisations responsible for the control of education. Within each level one also can identify three groups representing the public interest, managerial and technical levels responsible for the formulation, adoption and implementation of a particular educational policy as demonstrated by Figure 28.

The public interest group at the national level is represented by the President, the People's Assembly, the political parties, Minister of Education and his deputies. Although the President of the Republic exercises the executive authority, he can also promulgate laws by decrees, if the people's assembly is not in session. The President also has the right to appoint and dismiss ministers including, of course, the Minister of Education. Thus, on practising his constitutional role, the President
### Formal Organisation Of Administration Of Education In Egypt

<table>
<thead>
<tr>
<th>National</th>
<th>Local</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- The President</td>
<td>1- Popular Council for the governorate</td>
<td>1- School Board</td>
</tr>
<tr>
<td>2- People's Assembly</td>
<td>2- L.A.C.E.G.</td>
<td>2- Principal</td>
</tr>
<tr>
<td>3- Political Parties</td>
<td>3- Local Councils.</td>
<td>2- Vice-Principal</td>
</tr>
<tr>
<td>4- Minister of Education</td>
<td>4- Director-general of the Educational zone</td>
<td>3- Head Teachers</td>
</tr>
<tr>
<td>5- Minister's Deputies</td>
<td>5- Deputy-Director</td>
<td></td>
</tr>
<tr>
<td>6- N.C.E.S.R.T.</td>
<td>6- Assistant Directors of Educational Stages</td>
<td></td>
</tr>
<tr>
<td>7- M.E.S.R.M.</td>
<td>7- Local Inspectors</td>
<td></td>
</tr>
<tr>
<td>8- C.A.C.G.E.</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>9- Directors-general of Departments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10- General Inspectors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers by virtue of appointment</td>
<td></td>
<td>Teachers by virtue of tasks and duties</td>
</tr>
</tbody>
</table>
represents public interest, and has vital talks in formulating education policies. The People's Assembly is composed of elected members representing the successful candidates of the different political parties. It exercises the legislative authority of the country. Through its committee on education, the People's Assembly formulates educational policies and exerts its effort to improve the provision of education. Political parties are a very recent phenomenon in post-revolutionary Egypt. They have started in 1975 with three parties representing the right, the left and the moderate. By mid-1978, two of these parties were replaced and one was frozen. However, education has not been a political issue and is never mentioned in any manifesto. The previous political organisation, the Arab Socialist Union has held the responsibility of safeguarding the public interest in all fields including education.

The Minister of Education is appointed either from the elected members of the People's Assembly or from outside. He holds the ultimate authority over the Ministry, appoints or recommends appointments, and promotes its high officials. The Minister has the right to draft education laws and regulations concerning the internal organisation of the Ministry. Any alterations in syllabuses, purchasing the rights of textbooks authorships, and the organisation of general examinations are his absolute authority. However, there is interaction with his powers exercised by the President of the Republic, by the People's Assembly, by the different advisory councils and by the ad hoc committees which include educators and other professionals from outside the formal organisation of the Ministry.

The Ministry's deputies are appointed by the President on the recommendation of the Minister. They participate in decision-making and undertake the responsibility of outlining certain policies and the management of their respective departments.

Such a group of public interest is responsible for the formulation of educational policies. The introduction of comprehensive education is supposed to be discussed and agreed upon, then formu-
formulated as an experimental or as a nationwide policy. The conflict, however, arises because many vital issues are formulated without appropriate discussions by the partners concerned.

The managerial group at the national level is represented by the National Council for Education, Scientific Research and Technology (NCESRT), the Ministerial Committee on Education, Scientific Research and Manpower (MCESRM), the Central Advisory Council for General Education (CACGE), the Directors-General of departments and the Ministry's general inspectors.

The 'NCESRT' was established in 1974 for designing long-term national policies and suggesting the general policy for developing education. It is also responsible for studying the possibilities of International cooperation and exchange of experiences in those areas. Moreover, the Council follows up and evaluates the designed plans with the purpose of developing future policies. The Council has been formed from leaders in the field of education, experts in its various specialisations, and leaders who have gained public reputation for their superior abilities and efficient contributions over a long period of time at home and abroad.15

The 'MCESRM' was set up in 1974, comprising ministers concerned with education, scientific research and manpower. The members discuss their plans, project new policies, study the national plans for research and for distribution of manpower, and approve plans of cooperation and exchange of experience on scientific basis.16

The Central Advisory Council for General Education was established in 1969. It is chaired by the Minister of Education and comprises: one of the university presidents selected by the Supreme Council of Universities, the Ministry's deputies for general education and for central services and foreign relations, the Dean of Ain Shams Faculty of Education, the president of the Teachers Syndicate, and a representative of the General Union of Secondary School Students. The Council is to undertake all matters concerned with general education policies, particularly those regarding structure and organisation, selection and admission, curricula and syllabuses, school buildings and the care of gifted and handicapped students.17
The Directors-General of the different departments of the Ministry of Education and the general inspectors supervise various departments to ensure the operation of education provision according to the national policy. In addition, they help in outlining the policies through preparing the required data. 18

Although the Managerial level is responsible for the adoption of educational policy in Egypt, the personnel at this level, due to their duties, participate in formulating, or at least in outlining, such policies. The interaction between public interest personnel and managerial personnel is exercised both sides downwards and upwards. The technical personnel at the national level are the teachers by virtue of appointment.

Decentralization and delegation of power from ministers to governorate and local council levels have not been achieved. Until complete transformation takes place, personnel at the national level will continue to exert more than the advisory and technical assistance which is expected to be its ultimate sphere of action. However, one can identify the following groups and individuals at the local level representing public interest, and managerial personnel.

The public interest personnel at the local level are represented by the Popular Council for the Governorate (PCG), the local Advisory Committee for Education at the Governorate (LACEG), and the Local Councils and their rules are examined as follows.

The Popular Councils were established in 1975 in accordance with the latest amendments of the local government system. These represent local parliaments. In theory, they have statutory rights over the executive authority at the local level and report their remarks to the People's Assembly. They are also entitled to suggest and recommend certain policies in different fields including education, in order to satisfy particular concerns in their areas. 19

The local advisory committees for education at the governorates are headed by the respective governors. The directors-general of education are appointed as vice-presidents. They comprise: the assistant directors-general for primary, preparatory and secondary education, a representative of teacher-parent associations selected by the governor,
and a representative of the general student union for secondary schools. In addition, other government officials and several laymen representing the local community and interested in education serve as members. Each committee is responsible for suggesting plans for the development of education to the need of its area, making full use of local financial resources in educational schemes, and recommending some adaptation in curricula and the beginning and the ending of the school year. 20

The local government system provides for provincial and town or village councils. The responsibility of each council is limited to a particular stage or set of stages of education. The provincial councils, for example, are responsible for secondary schools, except the experimental ones, which are managed directly from the Ministry, teacher training institutions, as well as all types of schools in towns and villages which do not have local councils. While a town council is responsible for preparatory and primary schools in the area of the town, a village council is responsible only for primary schools in the village or villages in its area. 21 However, the local councils have to plan for the development of education in their areas, to carry out the implementation of the prescribed curricula, to regulate vacation periods according to their local conditions, to establish and equip school libraries and clubs, and to provide facilities for all matters related to the school health services.

The personnel of the public interest at the local level, however, exercise their function within the limited power given to such individuals and groups. It seems rather difficult to say how far the personnel can influence the decisions taken at the national level. However, it is expected that they will not be influential, but their contribution to the process of decision making is most likely. Bearing in mind that all decisions taken at the local level are not final, but are subject to the approval of the central authorities, one can safely conclude that the role of such personnel is more related to the adoption than to the formulation of educational policies.

The managerial group at the local level is represented by the directors-general of the educational zones, their deputies, the assistant directors of educational stages and local supervisors. Their
roles are discussed as follows.

The director-general of each educational zone is a high official appointed by the Ministry of Education. He is recruited from the officials of the technical cadre who were primarily trained as teachers and have previous experience in administration. He is in charge of the execution of the educational plans. He also recommends certain ideas and suggests the necessary demands for developing education quantitatively and qualitatively in his zone.

The deputy director helps the director-general in the management of the educational zone. He is also a high official appointed by the Minister of Education. He is usually recruited from the assistant directors, holding a direct responsibility of personnel affairs and private education. He is to study the new developments in education and draw up the necessary schemes to bring them to the attention of the director-general of the zone.

The assistant directors of the educational stages and the supervisors adopt and carry out the educational plan. They also decide on ordinary day-to-day matters. All of them, paradoxically, are responsible for making sure that careful attention has been paid to the pupil's record cards and individual reports, that the schools make use of them in educational guidance, and that attention has been given to backward as well as gifted pupils. They also have responsibility towards school buildings and the evaluation of school activities.

Personnel within this managerial level seem to enjoy little freedom. They adopt the national policy, and much less initiative is left to them for adopting new policies. Moreover, there seems to be some overlap and duplication in the function among such groups which raise, in most cases, an explicit conflict.

Except universities which enjoy certain autonomy, all public educational institutions have no chance to formulate or adopt its own policies. This impeded their initiatives and led to the conformity even in the methods of teaching. Hyde, for example, points out that "An Egyptian American who broadcast his comments on 'Egyptian Education' while attending a conference on 'Egypt in the Year Two Thousand' found that educational institutions were lacking individual personalities."
Thus, such a standardization of so many aspects of the educational provision, particularly at the lower level of education has hindered the creativity of pupils, teachers and schools.

However, the public interest at the institutional level is represented by the school board. It is worthwhile mentioning that not all schools have their own boards. These exist only in large schools and specially in secondary schools. It is unnecessary to examine the functions of the managerial personnel at the institutional level that are represented by the Principal, Vice principal and Headteachers, nor the functions of the teachers who represent the technical personnel at the same level.

The Egyptian administration of education seems to hinder the implementation of comprehensive education. The major constraints lie in the overlap and duplication in the distribution of power and authority between personnel at the national, local and institutional levels. For example, while the personnel at the local level will be under the administrative control of the Governor, the ministries will direct their technical activities. It is also apparent that all personnel at the local level would assume their responsibility within the general policy of education and the regulation of the Ministry. The aforementioned analysis would suggest that the authority given to the directors-general of the educational zones is not adequate for their tasks. Though they enjoy in some matters greater powers, their authority in many other matters, especially financial, is limited. Although the comparative evidence would suggest that a centralized system, such as in Sweden, or a decentralized system, such as in the USA, would help facilitating the implementation of comprehensive school system on a national scale. The conflict between national and local authority, when the latter has power, would slow down such a task. In Egypt, it is likely that in case of the acceptance of the proposed solution, and the adoption of comprehensive education, the schools will not enjoy a reasonable degree of freedom which would facilitate its successful working.

(b) Institutions of Teacher Education

Teachers, within any educational policy, are the force that has the
capability of interpreting ideas and converting them, through practice, into a tangible reality. Thus there is a close relationship between the adopted educational policy and the system of teacher education as far as the acceptance or resistance of implementing an educational innovation is concerned. Hence, one may expect that the shortcomings of the present system of teacher education in Egypt represent a major constraint to the practicability of introducing a typical pattern of comprehensive education because of qualitative and quantitative considerations. While the former is examined here, the latter phenomenon will be discussed later with the environmental constraints.

The standard of proficiency required for teaching at all levels of general and technical education is determined by the Ministry of Education. In its view, each educational stage requires, in principle, a particular type of teacher. But in practice, we find at each educational level, different categories of teachers, ranging from the adequate to the lowest professional standards. According to the 1957 regulations, teachers are classified under three categories. First, the suitability qualified, i.e. those who have received a pre-service academic and professional education. Secondly, the insufficiently qualified who need in-service training. This category includes two groups of teachers: those who received an academic education almost equal to the required standards, but have no professional training; and teachers who have received professional training, but whose academic standard is below the required for the stage in which they teach. Thirdly, the unqualified are those whose qualifications cannot be classified under the first two categories and should not continue teaching.

The basic required qualification for secondary school teachers is the graduation of a faculty of education or of any other faculty or equivalent higher institution in addition to teacher training. Priority in recruitment is given first to teachers who have already taught in the preparatory stage and then to new teachers holding the same qualifications. The acceptable professional standard of teachers in preparatory schools does not seem to be different from that of secondary. However, the regulations regarding the standard of efficiency, have not been strictly followed in the employment of teachers. For instance, because of an acute shortage in such subjects as languages, mathematics, science and
arts, graduates without professional training and undergraduates were employed. These are considered to be below an adequate professional standard. While the former requires in-service training the latter requires replacement. On the other hand, teachers of primary education form the most heterogeneous group of teachers in Egypt. Their professional qualifications vary widely. The qualified primary school teacher is one who has completed a course in one of the primary teacher training institutes attached to the Ministry of Education. The position of professional standards of teachers in primary, preparatory and secondary education during the last decade is shown by table I2.1.

Generally, such professional standards led to a growing dissatisfaction with the quality of teachers in all educational stages all over the country. Hyde, for example, has pointed out that, teachers at primary level have been "the natural target for complaints of the defects of an educational system. They are accused of ignorance, stupidity, lack of sensitivity, and professional failure, by parents, administrators, and the public at large."

Similar attacks, but on the quality of teachers at preparatory and secondary levels, were addressed by Boktor. His criticism was based on the findings of a questionnaire distributed among graduates of faculties of education, inspectors, and other personnel in education. Most noteworthy of the shortcomings of the teacher education system in Egypt were:
- the weakness in foreign language which eliminated the benefit of reading up-to-date reference books in subject matter and education as well;
- the lack of experience and practice in using teaching aids;
- the gap between the course offered in teacher training institutions and corresponding courses in preparatory and secondary schools which resulted in some overlapping and un linkage between courses offered;
- the short time devoted to teaching practice which led to the neglect of training in different teaching methods necessarily required for efficient teaching.

These shortcomings were confirmed by Syzliowicz who writes
### TABLE 12.1

**COMPOSITION OF THE TEACHER CADRE 1963-64 to 1973-74**

<table>
<thead>
<tr>
<th>School Year</th>
<th>Total No. of Teachers</th>
<th>Primary Education</th>
<th>Preparatory Education</th>
<th>Secondary Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of qualified</td>
<td>% qualified</td>
<td>No. of qualified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qualified</td>
<td></td>
<td>qualified</td>
</tr>
<tr>
<td>1963 - 64</td>
<td>80,949</td>
<td>63,255</td>
<td>78.1</td>
<td>18,186</td>
</tr>
<tr>
<td>1964 - 65</td>
<td>84,153</td>
<td>67,038</td>
<td>79.7</td>
<td>19,716</td>
</tr>
<tr>
<td>1965 - 66</td>
<td>86,291</td>
<td>70,006</td>
<td>81.3</td>
<td>21,628</td>
</tr>
<tr>
<td>1966 - 67</td>
<td>86,101</td>
<td>70,701</td>
<td>82.1</td>
<td>24,003</td>
</tr>
<tr>
<td>1967 - 68</td>
<td>87,874</td>
<td>72,516</td>
<td>82.5</td>
<td>26,720</td>
</tr>
<tr>
<td>1968 - 69</td>
<td>86,452</td>
<td>72,462</td>
<td>83.2</td>
<td>26,642</td>
</tr>
<tr>
<td>1970 - 71</td>
<td>98,736</td>
<td>83,503</td>
<td>84.6</td>
<td>27,891</td>
</tr>
<tr>
<td>1972 - 73</td>
<td>97,375</td>
<td>82,569</td>
<td>84.8</td>
<td>28,755</td>
</tr>
<tr>
<td>1973 - 74</td>
<td>93,502</td>
<td>-</td>
<td>-</td>
<td>28,916</td>
</tr>
</tbody>
</table>

Source: Helmi, M.K., Education in Egypt, op.cit., pp.30-31
"Most teacher training institutions are still highly traditional in orientation. The approach remains quite authoritarian with an emphasis upon rote learning, memorization, and preparing for examinations rather than professional preparations; hence the average graduate is clearly not the kind of teacher who can inspire and stimulate students."

This criticism is partly due to the large variety of institutions engaged in preparing teachers. The diversity of such institutions has met opposition, since it affects the standards of teachers and hinders the intellectual entity. On the whole the diversified types of teacher training may affect negatively their professional solidarity. As Holmes points out,

"the growth of a dual system of teacher training in Europe weakened professional solidarity in many ways."

Egyptian educators are aware of the important role of teachers in implementing educational innovation. They have expressed their dissatisfaction of the quality of teachers on several occasions and called for revising teacher training institutions. Kotb, for example, is convinced that

"... attention should be paid to the education of teachers in primary schools, because they are entrusted with the bringing up of majority of the succeeding enlightened generations ... attention should also be paid to the education of secondary school teachers."

Moreover, the significance of teacher education to the task of development has been summarized in a UNESCO report as follows:

"If pupils should be trained to develop initiative, resourcefulness and sense of social responsibility, the teacher must be trained with methods which will make them capable of educating the pupils that way. Otherwise they will not be able to impart or communicate the qualities so highly needed in a developing society. Most training schools and colleges seem to be conducted on the lecturer method, on 'listening, recording and reproducing', on 'receiving instructions and obeying' and 'memorizing', but if a positive, active and creative generation is required, then teachers will have to be trained differently."

If the Egyptian educational system is to take full advantage of the proposed solution, it needs, above all, broad-minded teachers who see themselves as friends and counsellors rather than as circus-masters, who rely
on timely advice and encouragement rather than the superficial incentives of the whip and the carrot. One constraint, however, is associated with the inadequacy of teachers institutions, under their present conditions, to supply the proposed comprehensive schools with the right quality of teachers who concern themselves less with the assessment of a child's inborn ability and more with nourishing all diverse talents that children have. So there is an urgent need to supply an adequate number of qualified teachers to replace those with heterogeneous qualifications. It is also essential to train teachers to be capable of teaching integrated courses and mixed ability groups. Moreover, such a need for qualified teachers represents an acute problem in the field of technical and vocational subjects. Not only are few qualified teachers available, but industry competes successfully for their services by offering wages and fringe benefits.

Considerable efforts are to be made to provide the adequate number of teachers for the proposed comprehensive education, as well as equip them with such a technical and vocational training and enhance their efficiency to increase their teaching capacity in order to cope with various responsibilities of teachers in comprehensive schools.

(c) The Sex-type of School

Another institutional constraint within the educational arena exists in the dominance of one single-sex type of school. It is widely acknowledged that the implementation of co-education schools serves at least two purposes: economic and psychological. For example, it would, in the first place, save large amounts of money by avoiding duality in buildings, teachers and equipment. In the second place, it would help the youth of both sexes to have a more natural social and emotional growth and lay a foundation of sound mental hygiene and mutual respect between the two sexes. However, co-education in Egypt does not enjoy wide acceptance, especially in adolescent age. This phenomenon is explained by long inherited traditions and religious attitudes which will be examined later in this chapter. It is interesting to notice that co-education is widely accepted for childhood. Consequently the majority of primary schools are mixed. In 1970, for example, 91% of all kinds of primary schools were mixed schools,
against 6% for boys and 3% for girls. The more adult boys and girls grow, the more single-sex schools exist as shown by table I2.2. The existence of co-education at adolescence is imposed because of demographic and economic needs. Some directorates of education have resorted to co-education in the preparatory and secondary stages in the rural and remote areas; thus dispensing with establishing special schools for girls, besides those for boys. Therefore, one may predict that parents will accept mixed comprehensive schools for demographic and economic reasons. Thus co-education operates for urgent needs. It is equally predicted that the existing single-sex schools will promote profound constraints to the practicability of a genuine comprehensive school system.

(d) Women's Education

Women's educational lag represents a further institutional constraint. In fact, Egypt was one of the first signatories of the UNESCO Convention of Discrimination in Education. However, there is still a lag in girls' education at almost all levels of Egyptian educational system. As a matter of fact, women's education was given due attention during the revolutionary era and has apparently achieved great progress. It has come a long way since the establishment of a maternity school in 1836 in which not one single Egyptian girl agreed to be a student. At present women provide a significant source of manpower in almost all the higher specialisations including art, law, commerce, economics, medicine, nursing, science, agriculture, education as well as in other areas. However, in spite of such an advance in women's education and an acknowledgement of their role in building the new society, there is still a long way for the Egyptian girl to go to realise quantitative and qualitative educational opportunities.

Quantitative lag in women's education can be deduced from table I2.3, which illustrates the improvement of girls' educational level within twenty years. It can be noticed that over twenty years the percentage of illiterate women dropped only 10% while the proportion of those who can read increased by 7%. It is also interesting to note that the holders of junior certificate in 1966 were as many as twenty times their number in 1947. However, in spite of such progress in women's education, there
<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Male</th>
<th>Female</th>
<th>Mixed</th>
<th>Total Number of Schools</th>
<th>Male Schools No. of boys</th>
<th>% of all</th>
<th>Female Schools No. of girls</th>
<th>% of all</th>
<th>Mixed Schools No. of boys</th>
<th>% of all</th>
<th>No. of girls</th>
<th>% of all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>6</td>
<td>3</td>
<td>91</td>
<td>3110</td>
<td>2131</td>
<td>10</td>
<td>103</td>
<td>8</td>
<td>1981</td>
<td>90</td>
<td>1247</td>
<td>92</td>
</tr>
<tr>
<td>Preparatory</td>
<td>36</td>
<td>26</td>
<td>38</td>
<td>1305</td>
<td>297</td>
<td>62</td>
<td>179</td>
<td>80</td>
<td>181</td>
<td>38</td>
<td>44</td>
<td>20</td>
</tr>
<tr>
<td>Gen. Secondary</td>
<td>47</td>
<td>28</td>
<td>25</td>
<td>335</td>
<td>148</td>
<td>80</td>
<td>76</td>
<td>87</td>
<td>38</td>
<td>20</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Tech. Secondary</td>
<td>68</td>
<td>23</td>
<td>9</td>
<td>239</td>
<td>67</td>
<td>81</td>
<td>42</td>
<td>83</td>
<td>15</td>
<td>19</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>45</td>
<td>43</td>
<td>12</td>
<td>58</td>
<td>12</td>
<td>87</td>
<td>11</td>
<td>97</td>
<td>2</td>
<td>13</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

### TABLE 12.3

**NUMBER AND PERCENTAGE OF WOMEN IN DIFFERENT LEVELS OF EDUCATION (1947-1966)**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>1947</th>
<th>1960</th>
<th>1966</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of</td>
<td>No. of</td>
<td>No. of</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>Women</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>000</td>
<td>000</td>
<td>000</td>
</tr>
<tr>
<td>Illiterate</td>
<td>5965</td>
<td>7359</td>
<td>8335</td>
</tr>
<tr>
<td></td>
<td>88.2</td>
<td>83.9</td>
<td>78.9</td>
</tr>
<tr>
<td>Minimal level of reading</td>
<td>726</td>
<td>1126</td>
<td>1835</td>
</tr>
<tr>
<td></td>
<td>10.7</td>
<td>12.5</td>
<td>17.4</td>
</tr>
<tr>
<td>Below junior certificate</td>
<td>53</td>
<td>102</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>Junior Certificate</td>
<td>17</td>
<td>201</td>
<td>359</td>
</tr>
<tr>
<td></td>
<td>0.2</td>
<td>2.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Higher certificate</td>
<td>4</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>0.1</td>
<td>0.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

**Total**

6765 100 8992 100 10562 100

were by 1966 about 80% illiterates and only 0.3% university educated women.

Such a lag in women's education can clearly be seen from a comparison of the proportion of girls and boys enrolled in the various educational stages. According to Sumaya Fahmy a less than half of the enrolment of primary school in 1970 was for girls. She points out that this proportion at post-primary and secondary levels often reaches one third. Table I2.4 reflects the growth of girls' education between 1956 and 1976.

Table I2.4
Comparative statistics of girls' education in Egypt 1956-1976

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>1956</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>No of</td>
</tr>
<tr>
<td></td>
<td>000</td>
<td>girls</td>
</tr>
<tr>
<td>Primary</td>
<td>1976</td>
<td>743</td>
</tr>
<tr>
<td>Preparatory</td>
<td>331</td>
<td>77</td>
</tr>
<tr>
<td>General Secondary</td>
<td>109</td>
<td>18</td>
</tr>
<tr>
<td>Tech. Secondary</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>2481</td>
<td>863</td>
</tr>
</tbody>
</table>


The qualitative lag in women's education can be exemplified by the accent on feminine characteristics of girls' institutions. This type persists in the preparatory schools where boys study physical education and agriculture while the girls learn needlework and domestic science. It was also retained in secondary school by emphasizing the preparation of girls for domestic life, and establishing female culture schools. Even when hobbies and practical studies were introduced into the general secondary syllabuses, needlework and domestic science were provided for the girls, while the boys had four choices. However, in technical education, girls managed to break away from the domestic orientation. As Hyde points out
"With industrialization there has been an increasing demand for young girls to work as clerks in industry and commerce, so the commercial secondary schools are more popular for girls than boys. Other specialized training for them can be found in music, ballet, language schools, industrial courses, and nursing."

These serious inequalities between boys and girls will hinder the practicability of a genuine type of comprehensive schools, particularly, if the public opinion insists on feminine characteristics and the education of boys and girls in separate schools. Thus the continuation of this status quo of women's education will produce a major difficulty for the comprehensive reform.

(e) Allocation of Revenues

In Egypt, the State pays all the cost of education out of the national capital income. Yet there are some resources allocated for education in the governorate through local organisations and personal efforts of the people. There are also the grants which the state receives through unconditional cultural agreements with friendly countries in both East and West, and through aids offered from some international agencies such as UNESCO, the World Bank, etc.

The finance of education comes into focus by examining three key dimensions which indicate what has happened and lead to some predictions of the future. These dimensions include the proportion of the educational expenditure to the total national budget, the cost per pupil, and the distribution of expenditure among the different stages.

The first key dimension serving as an indicator of the future expectations of the finance of education is the proportion of the educational budget to the total national income. Table 12.5 shows this percentage in selected years. The tremendous increase in the budget of education was necessary to meet the rapid growth in the school population and the explosion of aspirations. Nevertheless the inflation absorbs a considerable amount of this revenue, due to the fact that there is a lag in the response of expenditure to the rising prices. The expenditure on education is only developed when real income rises in periods of relative price stability. However, it would also be misleading to assume that
Table I2.5

The development of the educational budget and its percentage of the national budget in Egypt.

<table>
<thead>
<tr>
<th>School Year</th>
<th>The public education budget in Millions</th>
<th>% of the National Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952-1954</td>
<td>25.2</td>
<td>12.24</td>
</tr>
<tr>
<td>1956-1957</td>
<td>36.2</td>
<td>13.50</td>
</tr>
<tr>
<td>1960-1961</td>
<td>57.9</td>
<td>16.00</td>
</tr>
<tr>
<td>1963-1964</td>
<td>65.7</td>
<td>14.00</td>
</tr>
<tr>
<td>1969-1970</td>
<td>104.1</td>
<td>13.31</td>
</tr>
<tr>
<td>1971-1972</td>
<td>104.4</td>
<td>13.60</td>
</tr>
<tr>
<td>1977-1978</td>
<td>230.0</td>
<td>14.00</td>
</tr>
</tbody>
</table>


educational expenditure is relatively stagnant in periods of heavy inflation, since there is no evidence to support this assumption. Hence, one is inclined to believe that such an increase in the Egyptian education budget has significant bearing on the expansion of education, particularly with the relative low unit cost. However, it is worthwhile to notice that more than 85% of the budget is devoted to wages and gratuities. This leaves little to be spent on educational services.

The second dimension of the financial features that affect education development is the unit cost per student. Available data point out that cost per pupil, at all levels and types of education, has been rising over the last twenty five years. Table I2.6 gives the current unit cost per student in the different stages of public education. Bearing in mind the average cost per student in either advanced or developing countries, these figures, however, indicate the relative low cost of students in the Egyptian schools. This can be explained by: the lag of teachers' salaries behind the rampant price inflation; the extensive use of unqualified...
Table 12.6
Comparative statistics of average expenditure per pupil in selected years in different educational stages in Egypt.

<table>
<thead>
<tr>
<th>Educational Stage</th>
<th>Average expenditure per pupil LE</th>
<th>% of increase of 1978 over 1955</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1955/56</td>
<td>1973/74</td>
</tr>
<tr>
<td>Primary</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Preparatory</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>General Secondary</td>
<td>37</td>
<td>54</td>
</tr>
<tr>
<td>Technical Secondary</td>
<td>64</td>
<td>73</td>
</tr>
</tbody>
</table>


In spite of this low average of expenditure per student, the increased cost per unit has serious and far reaching implications. It means, in effect, the educational system needs more finance not to expand or improve, but merely to accomplish the same result. To achieve the necessary expansion and the desirable quality demands even greater resources. Moreover, we expect that it is inevitable to delay a large rise of costs per pupil in the future due to several facts. First, the crowding of classrooms reaches a physical maximum when literally not another pupil can be squeezed in. Secondly the needs for new school buildings become urgent since the double shift system has its physical limit. Thirdly, the employment of unqualified teachers will become difficult to justify when faculties of education turn out better qualified teachers in larger numbers. Finally, the resistance of teachers' demand for salary increases is not an easy matter to meet, (i.e. the government has begun to increase their salaries).

This evidence seems to suggest that Egypt has already largely exhausted
the main conventional escape routes from rising unit costs, and the increase of education expenditure becomes imperative.

The third dimension of the finance of education is related to the distribution of the educational revenue among the different levels of instruction. After considering all the proposals, the Ministry of Education, keeping in mind the political and technical desirability of developing a particular type of instruction, decides on the amount of proposed expenditure. Thus each level of education is allocated certain amounts of money. So far no exhaustive statistics have been compiled concerning this aspect. However, the following table may serve as an indicator of the distribution of the budget among the different types of education.

Table I2.7
Distribution of public education expenditure by types of education from 1972 to 1974

<table>
<thead>
<tr>
<th>Type of Education</th>
<th>1971/72</th>
<th>1972/73</th>
<th>1973/74</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LE 000</td>
<td>LE 000</td>
<td>LE 000</td>
</tr>
<tr>
<td>Primary</td>
<td>50,882</td>
<td>61,110</td>
<td>67,826</td>
</tr>
<tr>
<td></td>
<td>49.0</td>
<td>48.7</td>
<td>48.9</td>
</tr>
<tr>
<td>Preparatory</td>
<td>23,058</td>
<td>27,721</td>
<td>30,765</td>
</tr>
<tr>
<td></td>
<td>22.1</td>
<td>22.1</td>
<td>27.3</td>
</tr>
<tr>
<td>General Secondary</td>
<td>13,089</td>
<td>15,758</td>
<td>17,486</td>
</tr>
<tr>
<td></td>
<td>12.5</td>
<td>12.5</td>
<td>12.2</td>
</tr>
<tr>
<td>Tech. Secondary</td>
<td>14,159</td>
<td>17,145</td>
<td>19,015</td>
</tr>
<tr>
<td></td>
<td>13.5</td>
<td>13.6</td>
<td>13.7</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>3,218</td>
<td>3,913</td>
<td>4,338</td>
</tr>
<tr>
<td></td>
<td>2.9</td>
<td>3.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Total budget of</td>
<td>104,406</td>
<td>125,647</td>
<td>139,430</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Although the expenditure on primary education represents 50% of the total budget of public education, primary schools are still unable to accommodate all children of primary school age. Thus to enforce compulsory education and to extend the compulsory schooling age, will necessitate a considerable increase in expenditure. It is striking to notice that a large amount of expenditure is directed to higher education and universities. The overstress on the importance of this type of
education in view of planners is evident from specifying 60% of all investment in education and training in the new Five-Year Plan (1978-82) to the third level of education as demonstrated by Table 12.8.

These figures may lead to the conclusion that there is a clear contradiction between the intention of the State to face the target of extending the compulsory schooling to the age of fifteen and widening the equality of educational opportunities on the one hand and the estimated expenditures allotted in the Five-Year Plan (1978-82) for public education on the other. Such an investment in public education is neither adequate for the expansion of education, nor does it help the implementation of the proposed solution of reorganising the Egyptian secondary schools on comprehensive lines.

iii. Environmental Constraints

(a) Teacher Shortage

At present, there are over 230,000 teachers employed by the Ministry of Education at the different stages of education. Yet, Egypt is still plagued by an acute shortage of teachers, especially in Arabic and Foreign languages, arts, and physical education. The National Council for Education and Scientific Research found in 1973/74 there was a shortage of 9, 10, and 2.6 thousand teachers at the primary, preparatory and general secondary, and technical secondary levels respectively. 38

Such a shortage may be attributed to the expansion of education, the lack of educational plans dealing with the actualities of the situation required, the incapacity of teacher training institutions to provide a flow number of teachers needed for local use and foreign secondment and the necessity of replacing the unqualified teachers. At present, there are 19 faculties of education, most of them having been established in the seventies. The total enrolment in such faculties and the number of graduates have nearly trebled within the period 1970-1976. Table 12.9 gives evidence of such a quantitative development.

Facing the dilemma of increasing quantity at the expense of quality, faculties of education with their shortage in teaching staffs, and equipment found themselves incapable of providing a reasonable solution.
Table 12.8
Percentages distribution of investment in education and training in the 1978-82 Egyptian Plan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>£E</td>
<td>%</td>
</tr>
<tr>
<td>Primary</td>
<td>14.5</td>
<td>14.9</td>
<td>15.0</td>
<td>15.0</td>
<td>15.4</td>
<td>52,850</td>
<td>15.0</td>
</tr>
<tr>
<td>Preparatory</td>
<td>8.5</td>
<td>8.9</td>
<td>9.6</td>
<td>9.8</td>
<td>10.2</td>
<td>33,400</td>
<td>9.5</td>
</tr>
<tr>
<td>General Secondary</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.5</td>
<td>4,550</td>
<td>1.3</td>
</tr>
<tr>
<td>Technical Secondary</td>
<td>7.7</td>
<td>8.0</td>
<td>9.6</td>
<td>9.8</td>
<td>10.0</td>
<td>32,074</td>
<td>9.1</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>1,900</td>
<td>0.5</td>
</tr>
<tr>
<td>Universities and Higher Education</td>
<td>62.2</td>
<td>61.5</td>
<td>59.6</td>
<td>59.3</td>
<td>58.2</td>
<td>211,510</td>
<td>60.0</td>
</tr>
<tr>
<td>Training and University and School books</td>
<td>5.5</td>
<td>5.1</td>
<td>4.4</td>
<td>4.3</td>
<td>4.1</td>
<td>16,180</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Total Investment in £E 58,590 63,734 73,190 76,770 80,180 352,464 100.0

Source: Calculated from Ministry of Planning, the Five Year Plan 1978-1982, op. cit. pp. 170-171
Table I2.9

Development of enrolment and graduates of faculties of education 1970-1976

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Enrolments</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970/71</td>
<td>11,591</td>
<td>1,894</td>
</tr>
<tr>
<td>1971/72</td>
<td>13,971</td>
<td>1,911</td>
</tr>
<tr>
<td>1972/73</td>
<td>18,651</td>
<td>2,393</td>
</tr>
<tr>
<td>1973/74</td>
<td>21,756</td>
<td>2,694</td>
</tr>
<tr>
<td>1974/75</td>
<td>26,501</td>
<td>3,504</td>
</tr>
<tr>
<td>1975/76</td>
<td>32,743</td>
<td>5,084</td>
</tr>
</tbody>
</table>


However, the intake of the faculties of education achieved insignificant progress during the last five years as shown by table I2.10. With this relatively small number of freshmen enrolled in the faculties of education, it is difficult for the supply of teachers to meet the demand for local use and foreign secondment.

Egyptian teachers, it is acknowledged, are a treasure for the Arab world. They are also seconded to some Asian and African countries. Being able to pay in hard currency twice or thrice the salary of a teacher in Egypt, the Arab countries have attracted a large number of Egyptian teachers at all levels to sign individually private contracts. Hence, the Egyptian teacher, reputed for conscience and zest because of higher salaries, has become an acute demand, and the Arab countries in need of his services, compete with each other in offering more pay to have him serve in the best working conditions. Thus the individual contracts play a major role in increasing the shortage of teachers in Egypt. Besides these contracts there is an increasing number of teachers seconded to Arab and Afro-Asian countries. As for 1978/79, for example, the total number of such teachers in all subjects was estimated to amount to 30,000. Therefore, it is necessary to take into consideration in planning teacher supply the demand of the Arab and Afro-Asian countries.
### Table I2.10
Intake of the Egyptian faculties of education 1977-1978

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cairo</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>Ain Shams</td>
<td>600</td>
<td>1450</td>
<td>1300</td>
<td>800</td>
<td>1350</td>
</tr>
<tr>
<td>Alexandria</td>
<td>900</td>
<td>1025</td>
<td>935</td>
<td>900</td>
<td>850</td>
</tr>
<tr>
<td>Assiut</td>
<td>1575</td>
<td>1775</td>
<td>1975</td>
<td>1300</td>
<td>1400</td>
</tr>
<tr>
<td>Mansourah</td>
<td>550</td>
<td>550</td>
<td>500</td>
<td>800</td>
<td>700</td>
</tr>
<tr>
<td>Tanta</td>
<td>500</td>
<td>800</td>
<td>800</td>
<td>850</td>
<td>850</td>
</tr>
<tr>
<td>Zagazig</td>
<td>500</td>
<td>300</td>
<td>400</td>
<td>400</td>
<td>800</td>
</tr>
<tr>
<td>Minya</td>
<td>500</td>
<td>625</td>
<td>625</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Menoufia</td>
<td>-</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Suez Canal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

Total: 5175 6725 6785 6000 7000

Percentage of increase: - 29% 0.9% -11% 16%

Source: Adapted from Dessouqi, K., Social Defects on Egypt of Egyptian Teacher-secondment to other Arab countries, paper presented to the Second Conference of the Euro-Arab research Group, Tunisia, December 18th-22nd, 1978, p.14.
Apart from the secondment and the private contracts of teachers, there is a necessity to replace the unqualified teachers. This need represents another burden on failing teacher supply. As shown by table I2.II the percentage of unqualified teachers employed in the preparatory and secondary stages and who require replacement, was nearly one third of the teaching force. This requires a serious plan to provide the untrained teachers with evening courses in the vocational field such as education, psychology and curricula to qualify them for the teaching career. This places another burden on the shoulders of the faculties of education.

The shortfall in number of teachers has made itself felt for several years. The shortage in teaching staff has been doubled in some subjects and trebled in others within three years from 1974-1977 as demonstrated by table I2.I2.

According to statistics gathered by K. Dessouki showing the deficiency in teacher supply during the Ten Year Plan (1974-1984), the total number of teachers required to cover the local growth in public education, was estimated at 52,000 or an annual increase of 5,241 teachers. To mend this situation, the planning and coordination office proposed an annual total demand of 9,710 teachers: 7,200 for local growth and 2,510 for secondment starting from 1977. This would make 38,840 needed teachers in the four-year period of 1977-1980. It was argued that the needed number of graduates would be 11,460 annually with 2% reserve included. If this plan works efficiently without interference from unexpected factors, the nominations for the four years to come 1977-1980, will rise to 45,840 with a surplus of 8,560 in the major teaching subjects and with a deficit of only 1,560 in artistic and domestic education subjects, as illustrated in table I2.I3.

(b) Buildings and Equipment

It is estimated that a large number of educational premises, especially leased places, are no longer suitable for educational purposes. However, the Ministry of Education is concerned only with laying down school building policy, drawing up its plans to meet education requirements and specifying the suitable model to each type of education. In view of its
### TABLE 12.11

**TEACHERS' QUALIFICATION AT THE SECONDARY STAGE IN EGYPT 1971-1976**

<table>
<thead>
<tr>
<th>Type of Qualification</th>
<th>Preparatory Schools</th>
<th></th>
<th>Gen. Secondary School</th>
<th></th>
<th>Tech. Secondary School</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Trained and graduated</td>
<td>8036</td>
<td>28.8</td>
<td>13777</td>
<td>39.5</td>
<td>9786</td>
<td>70.2</td>
</tr>
<tr>
<td>Untrained and graduated</td>
<td>6588</td>
<td>23.7</td>
<td>10627</td>
<td>30.4</td>
<td>2835</td>
<td>20.3</td>
</tr>
<tr>
<td>Trained with intermediate</td>
<td>9998</td>
<td>35.9</td>
<td>6630</td>
<td>18.9</td>
<td>914</td>
<td>6.6</td>
</tr>
<tr>
<td>Other qualification</td>
<td>3271</td>
<td>11.7</td>
<td>3883</td>
<td>11.2</td>
<td>403</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>27893</td>
<td>100</td>
<td>34914</td>
<td>100</td>
<td>13938</td>
<td>100</td>
</tr>
</tbody>
</table>

**TABLE 12.12**

**DISTRIBUTION OF TEACHER'S SHORTAGE BY SUBJECTS**

**DURING 1974-1977**

<table>
<thead>
<tr>
<th>Subject</th>
<th>1974</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D-N-</td>
<td>D-N+</td>
</tr>
<tr>
<td>Arabic language</td>
<td>3888</td>
<td>7800</td>
</tr>
<tr>
<td>English language</td>
<td>1408</td>
<td>4000</td>
</tr>
<tr>
<td>French language</td>
<td>555</td>
<td>1430</td>
</tr>
<tr>
<td>Science</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>586</td>
<td></td>
</tr>
<tr>
<td>History and geography</td>
<td></td>
<td>580</td>
</tr>
<tr>
<td>Philosophy and sociology</td>
<td></td>
<td>330</td>
</tr>
<tr>
<td>Art education</td>
<td></td>
<td>1089</td>
</tr>
<tr>
<td>Domestic economics (girls)</td>
<td></td>
<td>377</td>
</tr>
<tr>
<td>Musical education</td>
<td></td>
<td>780</td>
</tr>
<tr>
<td>Physical education (boys)</td>
<td></td>
<td>1097</td>
</tr>
<tr>
<td>Physical education (girls)</td>
<td></td>
<td>411</td>
</tr>
</tbody>
</table>

Source: Dessouki, K., *Social defects on Egypt of Egyptian teacher-secondment to other Arab countries*, op. cit., p. 6.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Total of both growth &amp; second-</th>
<th>Average Graduation per year from 77-80</th>
<th>Employment Expectations in 4 years 77-80</th>
<th>Difference of total demand &amp; employment expect. within the 4 years</th>
<th>Situation at the end of 4-year period (1980)</th>
<th>Yearly needed provisions from 1981 and on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic Language Teaching</td>
<td>- 9,400</td>
<td>2,860</td>
<td>11,440</td>
<td>+ 2,040</td>
<td>- 5,783</td>
<td>3,300</td>
</tr>
<tr>
<td>English Language Teaching</td>
<td>- 6,800</td>
<td>1,930</td>
<td>7,720</td>
<td>+ 920</td>
<td>- 3,091</td>
<td>2,200</td>
</tr>
<tr>
<td>French Language Teaching</td>
<td>- 880</td>
<td>415</td>
<td>1,660</td>
<td>+ 780</td>
<td>- 650</td>
<td>400</td>
</tr>
<tr>
<td>Science</td>
<td>+ 6,000</td>
<td>1,670</td>
<td>6,680</td>
<td>+ 680</td>
<td>+ 1,530</td>
<td>1,300</td>
</tr>
<tr>
<td>Mathematics</td>
<td>+ 6,400</td>
<td>2,200</td>
<td>8,800</td>
<td>+ 2,400</td>
<td>+ 3,511</td>
<td>1,100</td>
</tr>
<tr>
<td>Geography and History</td>
<td>+ 4,200</td>
<td>1,175</td>
<td>4,700</td>
<td>+ 500</td>
<td>+ 549</td>
<td>1,000</td>
</tr>
<tr>
<td>Philosophy and Sociology</td>
<td>+ 800</td>
<td>510</td>
<td>2,040</td>
<td>+ 1,240</td>
<td>+ 1,684</td>
<td>300</td>
</tr>
<tr>
<td>Artistic Education</td>
<td>- 2,200</td>
<td>350</td>
<td>1,400</td>
<td>- 800</td>
<td>- 2,658</td>
<td>1,000</td>
</tr>
<tr>
<td>Home Economics</td>
<td>- 1,400</td>
<td>260</td>
<td>1,040</td>
<td>- 360</td>
<td>- 1,572</td>
<td>700</td>
</tr>
<tr>
<td>Musical Education</td>
<td>- 760</td>
<td>90</td>
<td>360</td>
<td>- 400</td>
<td>- 1,838</td>
<td>500</td>
</tr>
</tbody>
</table>

Total: -38,840  11,460  45,840  + = educationists only
- = educat. & non-educat.

success in reducing the costs of construction, the public premises organisation has been required since 1957 to undertake the construction of premises for stages other than the elementary one. The construction of school buildings, however, is the responsibility of the Ministry of Housing and the corresponding directorates at the different governorates.

In the light of the inadequate resources allotted to school premises, and the incapability of the Public Agency for Constructions to undertake its responsibility and cope with the increasing demand for schools resulting from the expansion of education, school buildings still constitute an acute problem. Though the number of pupils, for example, has risen since 1966 from 4.7 million to 7 million in 1978 the number of school buildings has not increased at the same rate during this period. Official statistics of school premises issued in November 1967 indicate that the number of government and free private school buildings amounted on November 15th 1966 to 8,464. At present there are nearly 13,000 schools, 42% of which are not Ministry owned.

The insufficient number of school buildings has affected the quality of education. Faced with this problem, the Ministry of Education has been obliged to operate a two-shift system at all levels of education. Although this policy was declared as a temporary solution for such a problem, the ministry has maintained it as a permanent one. Thus the proportion of schools operating more than one shift per day has dramatically increased as demonstrated by table 12.14.

Table 12.14
Comparative percentages of Egyptian schools operating a two-shift system 1970/1975.

<table>
<thead>
<tr>
<th>Stages</th>
<th>1970</th>
<th>1975</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>23.2</td>
<td>30.1</td>
<td>+ 6.9</td>
</tr>
<tr>
<td>Preparatory</td>
<td>9.6</td>
<td>19.1</td>
<td>+ 9.5</td>
</tr>
<tr>
<td>General Secondary</td>
<td>0.04</td>
<td>4.9</td>
<td>+ 4.9</td>
</tr>
<tr>
<td>Technical Secondary</td>
<td>42.5</td>
<td>53.8</td>
<td>+ 11.3</td>
</tr>
</tbody>
</table>

The figures issued in 1978, however, show that Ministry of Education resorted to operating 60% of the primary schools and 40% of the preparatory schools on a 2-cycle basis.

As a consequence, the plan of the study was shortened. The time allotted to each period has been lessened by ten to fifteen minutes. The school activities have been abolished, and the number of pupils has exceeded the limited class density. As one high official told Hyde:

"Some primary schools built for 500 children are used to educate 5,000 in three shifts, so that 1500 leaving meet 1500 or more coming in, so what is left of the playground accommodates 3000 at the end of the session: library, special rooms for arts and music, field and garden have all gradually been taken over to accommodate children who would otherwise not get a chance to go to school."

One can safely argue that this picture is not only seen within primary schools, but it is also applicable to all schools operating more than one shift. This affects the quality of education.

The Ministry of Education is aware of the impact of the shortage of school buildings on the efficiency of education. It has adopted different measures to overcome the problem of school buildings such as using provisional building made of wood, renting buildings, and accepting material and financial grants offered for this purpose. Moreover, the Ministry, within the present economic situation, has spared no effort to provide the minimum number of buildings and rooms in accordance with a certain order of priority. Thus the school premises policy is directed to guarantee the safety of the pupils, to provide adequate facilities for study, and to meet the requirements of the expansion and growth of classes at all stages. The following table gives the estimated costs for the new school premises plan for the year 1978-79.
Table 12.15

School buildings projects for the year 1978-79 and their estimated cost.

<table>
<thead>
<tr>
<th>Building Projects</th>
<th>Total</th>
<th>Cost in LE 000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Schools</td>
<td>Replacement</td>
</tr>
<tr>
<td>Primary</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Preparatory</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Gen. Secondary</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Tech. Secondary</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>113</td>
<td>43</td>
</tr>
</tbody>
</table>


In spending the funds allotted to building projects the Ministry is keen to:

"first, give absolute priority to the replacement of decaying buildings with the safety of the pupils in view,

Second, complete the buildings where construction has already started; and

Third, concentrate the limited funds on what can be completed in the very near future, and not scatter them over too many years."

43

The State has also encouraged the private contributions of the people, local institutions and various firms and foundations to the establishment of schools or annexe classes. Such a self-supporting effort has made a contribution to education worth LE 2.5 million over
the last five years. Nevertheless, these efforts required an organised cooperation under the supervision of political and local organisations to avoid the establishment of projects without planning or considering the actual capacity for execution.

All these efforts, though outstanding, could not reduce the size or effect of the shortage of school buildings. Such a shortage, however, represents a real difficulty in the implementation of the proposed solution of reorganising the school system on comprehensive lines.

Apart from the inadequacy of school premises, there is an obvious shortage in equipment, especially those related to science and technology. Materials in Egyptian schools are largely restricted to textbooks. Moreover, many classrooms are equipped with furniture that cannot be arranged to suit different purposes. Laboratories, workshops and libraries are negligible in primary schools, largely lacking in preparatory and old-fashioned in secondary schools.

Since the comprehensive school requires a special type of building, well equipped, and thoroughly encouraging learning situations and permitting the participation in school activities, it is expected that the present conditions of the Egyptian schools will hinder the practicability of the proposed model in the near future.

2.2 External Educational Arena

Apart from the educational constraints which may impede the acceptance of the proposed solution, there are some obstacles acting through the external educational arena to eliminate the practicability of implementing the reorganisation of Egyptian secondary education on comprehensive lines. Within this external arena one can also identify three major categories of constraints: normative, institutional and environmental.

(1) Normative Constraints
   (a) Attitudes towards Bureaucracy

The ingrained, conservative attitudes and traditions of Egyptian bureaucracy become a major challenge to innovations. The Egyptian normative pattern of behaviour combined with the social structure has influenced the system of bureaucracy as Ammar has pointed out that
"One of the important norms that govern the whole social structure is the weight and respect given to, and authority wielded by, the person who plays the role of the senior.... This pattern which, in the smallest unit, is the authority of the father is extended to the oldest capable number of the extended family, to the head of the clan and to the village councils that congregate spontaneously, having no formal composition."

Thus, it is not surprising that the official and non-official relationship inside such a system of bureaucracy are greatly determined by the same pattern. This can be clearly illustrated from the following extract quoted by Martin Albrow

"In every branch of administration bureaux officers have multiplied, and have been accorded so great a power over citizens that in many countries a veritable bureaucracy, rule by offices, has developed. This bureaucracy becomes increasingly dangerous as the previous custom of conducting business.... The directors of a bureau, in addition to their authority over its personnel, have acquired an often inordinate amount of power over citizens at large."

One of the important features of Egyptian bureaucracy that may hinder the practicality of the reorganisation of secondary education on comprehensive lines is the hesitation to take decisions even on agreed principles. It is thought that decision in administration may lead to making mistakes for which blame may be apportioned later. Thus the safest way to avoid mistakes is naturally not to act. As a result of the negative traits, Egyptian individuals are not self-disciplined and do not feel impelled to shoulder any responsibility. As Shawki has put it

"All of us complain of the government official lacking the feeling of responsibility and the sense of time...."

Studying the Egyptian higher civil servants, Berger finds

"The Egyptian civil servant has been conditioned to 'play it safe' by avoiding responsibility wherever possible rather than to act independently within his authority."

Another feature of Egyptian bureaucracy that may impede the implementation of innovations is the diehard bureaucratic resistance to the delegation of power to personnel in the hierarchy. Confirming this
phenomenon, Berger writes

"Any discussion of the civil service in Egypt, indeed in the Near East generally, is almost certain to mention the unwillingness of high officials to delegate responsibility and the fear of subordinates to accept it. This writer's own experience has confirmed this account. One sees little initiative exercised on any level of the hierarchy. Responsibility is shifted wherever possible."

Generally speaking, the deeply rooted traditions have created certain attitudes toward power between masters and subordinates.

Since comprehensive schools require a great deal of freedom to function as a creative educational institution, providing a wide variety of courses to different levels of abilities, one may expect that the traditional attitudes of masters and subordinates will hinder significantly the creativity of comprehensive schools, and impede them functioning in a successful manner.

(b) Attitudes of the Religious Group

Another arena of resistance to innovations is cited within the religious groups. Being Muslims, the majority of Egyptians are influenced by the attitudes of the ulama and the different religious societies towards modernisation. They consider Islam as an all-embracing religion, dealing not only with the moral and spiritual features but with all aspects of life whether material, social, or personal. Islam, for the orthodox Muslims, is regarded as the religion suitable for all communities and at all ages. The attitudes of Egyptians are highly influenced by the moral philosophy of Islam. Therefore, it is expected that the religious attitudes of the Egyptians particularly those of the religious class, will affect the implementation of the comprehensive school in three ways: two of them have a direct influence on the practicability of establishing genuine comprehensive schools whilst the third has an indirect influence.

First, Islam has a great suspicion for the value of co-education, as well as an attitude of inferiority of women.

All these attitudes have affected the education of girls all over the Muslim world, and resulted in greater percentage of educated boys than that of girls. Although girls' education has certainly achieved much more progress in Egypt than in many other Arab and Muslim countries, the lag of women education still exists and urges a well designed educational
system helping to modify the old habits and form new attitudes. Within these inherited attitudes toward co-education and female seclusion, together with the revival of Islam against western modernization as represented by the success of the Islamic Revolution in Iran in early 1979, one may predict that the religious groups will retain the opposition to educating boys and girls, especially in their adolescence, in one school. At present, however, this tide against co-education has reached the university. The Time Magazine in one of its recent issues has reported that

"At Cairo University, (enrolment = 130,000), hundreds of female Egyptian students have donned the veil and demanded classes separate from male students."

Of course public opinion concerning this issue, as it is expected, would be divided between advocates and opponents. It is predicted that the population in isolated and unpopulated areas will accept the idea because there is no other alternative. Rural populations will not stand against it because of their higher moral and religious consciousness, whereas urban inhabitants will vary in their attitudes. In general, one can predict that parents with secular education backgrounds will advocate mixed comprehensive schools, whilst parents with religious education will advocate single-sex comprehensive schools.

Secondly the attitudes of Muslim science were favourable only towards medicine, certain branches of philosophy, and mathematics. The remainder of philosophy which did not square with religious dogma, and higher mathematics with its exactness were not sciences recommended for Muslims. This attitude was obviously developed from the middle of the sixteenth century onward, as Szyliowics puts it

"Many ulema had always looked upon the teaching of non-religious subjects with suspicion and hostility so that before long the study of these topics decreased progressively and the curriculum became restricted to the religious sciences."

The attitudes toward practical subjects were not expressed. Since the curriculum of the existing religious school does not encompass practical subjects, it may be taken as indication of the unfavourable attitude towards the practical studies. Thus, it is predicted that the planners of the curriculum content for a comprehensive school will be influenced by this attitude giving much more weight to theoretical and religious...
subjects than to practical studies.

Thirdly the religious attitudes towards family planning can indirectly affect the practicability of comprehensive education in Egypt. Bearing in mind that the democratization of secondary education would be neither a desirable need nor an appropriate policy without achieving the democratization of primary education, one can predict that such religious attitudes favouring large families and causing enormous increases in school-age children would impede the implementation of comprehensive education especially at the upper level of secondary education.

Thus under the condition of religious attitudes, social traditions, family structures, economic aspects, it is expected that the attitudes toward birth control will remain soaring, and the family planning programme will continue to be ineffective. Consequently, within the Egyptian limited financial resources, the continuous rapid increase in the number of children at school age will hinder the implementation of the proposed solution due to the incapacity of the first level of education to absorb all the number of children at compulsory schooling age, and the inability of the system to offer enough places for secondary education.

(c) Parents' Attitudes

A further normative constraint lies with the attitudes of parents toward the different types of schools. It is noted that although one of the aims of education in society is to transmit agreed and approved moral and cultural values, it is an oversimplification to think that there exists in the community at large only one such set of values. There are many groups in society, each of which may have different normative considerations which its members wish to see embodied in the pattern of education provided for their children. Thus the attitudes of parents toward the kinds of school and types of knowledge reflect their established values regarding education, and their status in society. This raises the question of the right of the individual parents, by means of association with others of a like mind, to institute kinds of education other than, and different from, that provided by the State if they are prepared to finance such education privately. This, in turn, raises the question of the impact of such private education on realizing social justice. However, it is argued that, this right of individuals must be considered in the context of the present educational needs and initial conditions of society.

Parental ambition, however, is a major element which should be borne
in mind when implementing the comprehensive school system in Egypt. This ambition is mostly determined in the light of parents' attitudes and normative pattern. Most parents consider the general academic school the best choice of secondary education. This attitude has been widely established because of its long-standing prestige. The general secondary school is favoured by parents and students partly because it has been associated with entry to white-collar rather than manual employment, and partly because it is the only school leading to universities and higher education. Consequently on looking for educational opportunities, parents mainly looked to general secondary education. This pattern of parents' aspiration and attitude has not fundamentally changed since the introduction of modern education. The comparative evidence seems to suggest that parents who care about education and realise its influence on future careers are likely to be immensely anxious to get their children into an academic secondary education. One may predict that parents whose children are in general secondary schools will oppose the introduction of comprehensive education because of an expected fear of losing the traditional privilege and prestige. However, it might gain a substantial acceptance of comprehensive education across all social classes. Yet, rejection may come strongly from upper and upper-middle class parents who have, indeed, enjoyed more power in the Egyptian society within the open-door economic policy.

The attitude of parents toward technical education has been highly associated with the long established attitude regarding manual work. This attitude has also been enforced by certain policies adopted and implemented in the field of technical education. Outstanding of these policies are the admission of students with low marks, in preparatory education certificate, to technical secondary schools, as well as the deprivation of their graduation, except under certain sophisticated conditions, from attending universities or institutions of higher education. Therefore, technical schools have been looked at by parents and children as second-class schools. Even within the field of technical education itself the attitude of parents differs from one type of school to another. They prefer commercial schools because their close relation with white-collar jobs rather than industrial and agricultural schools which are more related to manual work. Thus one may expect that, the growing pressure of demand for secondary education on the one hand, and
the acute shortage of academic school places on the other, which created strong competition and caused a great deal of frustration among both middle class and working class parents, will establish sound grounds for the acceptance of the comprehensive school system by those parents who were not lucky enough to gain a general secondary school admission for their children.

Apart from supporting the academic type of secondary education, the majority of upper class parents would encourage private education. Indeed private schools differ very widely in their characteristics. Very often views about private education rest upon deep-rooted, but perhaps misconceived, convictions and sentiments about the quality of their education. Controversies, however, have been centred around foreign schools and their place in the general system of education particularly within the adopted socialist policy. Although very few of such schools are left unnationalized, some parents still feel that foreign schools are sacrosanct and hallowed by long traditions. On the other hand, many parents think of foreign schools as an outcome of the old landed aristocracy. Generally speaking, private schools both foreign and native, are regarded as the attempt on the part of the upper class parents to provide their children with a special education appropriate to their growing status and importance as leaders in the society.

(ii) Institutional Constraints

Two major institutional constraints which may affect the implementation of comprehensive education as a nationwide policy are expected to be imposed by private schools and Al-Azhar educational institutions. These are examined as follows.

(a) Private Schools

Private education has made a real contribution to the development of literacy in Egypt at a time when schools were scarce. Their effect on the education of men and women was remarkable during the beginning of this century when other efforts to increase the number and quality of schools were feeble. Egyptian private schools can be broadly divided into three categories. The first includes those subsidized schools which charge no fees. The second category comprises those independent schools which are granted no aid and charge fees. The third includes foreign schools which
are presently called language schools. At present, private education is responsible for the instruction of a significant proportion of all boys and girls enrolled in the different levels of general education. In 1973/74, for example, the percentage of pupils enrolled in all kinds of private schools was amounted to 10%, 24% and 23% in primary, preparatory and general secondary schools respectively. Subsidised schools encompass a small proportion of pupils at the preparatory and secondary levels compared with the percentage of enrolment in independent and language schools as demonstrated by Table 12.16. Each subsidised private school is granted annual aids ranging from LE 30 to LE 40 thousand per class. This grant is aimed at helping the school to maintain its plans, pay its rent (in case it is not owned by the proprietor), and to keep and improve its basic educational needs. Having been granted such aids, the subsidised schools are unlikely to oppose the comprehensive reorganisation.

The main resistance is expected to come from both independent and language schools due to their inherited traditions and long prestigious reputation. Although claims for eliminating the role of private education were strong in the early sixties, the Egyptian examination system combined with the competitive nature of selection procedures for secondary education has helped to foster independent schools. Such schools are not subject to the admission procedures applied to the State schools. Independent private schools have their own methods of selection which are not completely restricted to the mark-criterion. Since the implementation of comprehensive education, as has been mentioned, requires the abolition of the competitive selection procedures, at least for the first cycle of secondary education, it is expected that independent schools will lose a significant number of their pupils especially at the preparatory and secondary levels. Thus one is inclined to predict that independent schools will fight for their own survival and oppose the implementation of a nation-wide policy of comprehensive education.

Foreign schools, by catering for the top stratum of society and attracting the children of the aristocratic classes, had exerted great influence on Egyptian education. They had contributed deliberately to the low standard in the Arabic language by failing to offer their students adequate courses in the mother tongue. In addition, foreign schools, with no control on their work by the State, had formed their pupils as persons
### TABLE 12.16

DISTRIBUTION OF CLASSES AND PUPILS BY TYPES OF PRIVATE SCHOOLS IN 1973/74

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Types of Private Education</th>
<th>Total Private Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subsidised Schools</td>
<td>Independent Schools</td>
</tr>
<tr>
<td></td>
<td>No. in Classes</td>
<td>%</td>
</tr>
<tr>
<td>Primary</td>
<td>4856          56</td>
<td>196380      57</td>
</tr>
<tr>
<td>Preparatory</td>
<td>1504          44</td>
<td>60345       44</td>
</tr>
<tr>
<td>Gen. Sec.</td>
<td>213           12</td>
<td>7521        11</td>
</tr>
</tbody>
</table>

"Who were conversant with language and history of the particular country to which their school belonged, but were ignorant of their own homeland. Furthermore, they looked upon their compatriots, the graduates of government schools with an air of condescension and snobbishness."

In brief, foreign schools had participated in creating a type of cultural aristocracy and forming a group of cultural elite who later became highly powerful in the conduct of the general affairs of the country. By 1955/56 the total of these schools at all levels were 284 with a total enrolment of 26,614 pupils of whom 72% were Egyptian as shown by the following table.

Table 12.17

<table>
<thead>
<tr>
<th>Nationality of Schools</th>
<th>No of Schools</th>
<th>Male Students</th>
<th>Female Students</th>
<th>Egyptian Students</th>
<th>Foreign Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>156</td>
<td>24,187</td>
<td>32,830</td>
<td>47,114</td>
<td>9,903</td>
</tr>
<tr>
<td>Italian</td>
<td>26</td>
<td>2,784</td>
<td>5,983</td>
<td>5,636</td>
<td>3,131</td>
</tr>
<tr>
<td>American</td>
<td>21</td>
<td>3,281</td>
<td>4,666</td>
<td>6,651</td>
<td>296</td>
</tr>
<tr>
<td>British</td>
<td>28</td>
<td>4,514</td>
<td>4,726</td>
<td>6,038</td>
<td>3,202</td>
</tr>
<tr>
<td>Greek</td>
<td>44</td>
<td>6,116</td>
<td>4,899</td>
<td>1,761</td>
<td>9,254</td>
</tr>
<tr>
<td>Maronite</td>
<td>1</td>
<td>1,068</td>
<td>30</td>
<td>986</td>
<td>112</td>
</tr>
<tr>
<td>Austrian</td>
<td>1</td>
<td>48</td>
<td>7</td>
<td>53</td>
<td>2</td>
</tr>
<tr>
<td>German, Swiss &amp; Russian</td>
<td>6</td>
<td>277</td>
<td>1,339</td>
<td>104</td>
<td>712</td>
</tr>
<tr>
<td>Dutch</td>
<td>1</td>
<td>238</td>
<td>130</td>
<td>362</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>284</td>
<td>41,513</td>
<td>54,610</td>
<td>69,509</td>
<td>26,614</td>
</tr>
</tbody>
</table>

Source: Botkor, A., *op. cit.*, p.78
The Revolutionary Government, in order to liberate the country culturally, has taken the necessary steps to eliminate foreign cultural influence which would jeopardise the national spirit of youth. Law 160, which was issued in 1958 for the purpose of Arabicising foreign schools, stipulated that all the school proprietors, directors and staff must be Arabs, and limited foreign elements at such schools to language instruction. Furthermore, foreign schools were required to follow the State curriculum and official examinations. Consequently, the number of such schools dropped from 284 in 1955/56 to only 99 schools in 1973/74. However, the number of students slightly declined from 69 to 59 thousand pupils in the same period. The following table compares the status of the language schools in 1963 and 1973.

Table 12.18
Language Schools in Egypt, 1963/73

<table>
<thead>
<tr>
<th>Type of School</th>
<th>1963 - 1964</th>
<th>1973 - 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Classes</td>
<td>No. of Pupils</td>
</tr>
<tr>
<td>Primary</td>
<td>1478</td>
<td>44589</td>
</tr>
<tr>
<td>Preparatory</td>
<td>514</td>
<td>14977</td>
</tr>
<tr>
<td>Gen. Secondary</td>
<td>307</td>
<td>7318</td>
</tr>
<tr>
<td>Vocational Schools</td>
<td>91</td>
<td>1990</td>
</tr>
<tr>
<td>Total</td>
<td>2390</td>
<td>68874</td>
</tr>
</tbody>
</table>

With the present conditions of increasing foreign economic influence, as well as the deep penetration of foreign trade and the monopoly of executive positions and high posts, the pressure on language schools has increased. Parents and students, particularly within the privileged classes, have become strongly motivated to join such schools. It has been suggested that if these schools were called language schools, and their school subjects dealing with national matters were taught in Arabic, there would be no objection if the rest of the subjects would be taught in a foreign language. In the meantime, such schools have been given reasonable elasticity for adding any desirable disciplines. Thus, it is expected that language schools with their unique curricula, their organisational pattern, their autonomy and their inherited prestige under the present prevailing encouraging attitudes of a certain influential group in the society will oppose the implementation of the comprehensive reform.

(b) Religious Schools

The second institutional constraint within the external educational arena is expected to be raised by religious institutions. Although religion is taught to all pupils - Moslems and Christian - at all levels of public education, there are special institutions and schools for religious education. A few of these are for Christianity and are attached to churches, while the majority are for Islam under Al-Azhar responsibility. Since little has been written on the institutions of Christian religion in Egypt, we confine the discussion to Al-Azhar institutions.

It is worthwhile to mention that the duality of education (religious versus secular) started in Egypt from the time of Mohamed Ali. When he introduced modern education, this went parallel and uncoordinated with the existing religious educational system. A very long time indeed has passed before the Islamic religious schools were revised. Only as recently as 1961, Al-Azhar institutions were organised parallel to the public educational system. Nevertheless, Al-Azhar has its own educational ladder which comprises four stages: primary, preparatory, secondary and higher education as demonstrated by Figure 29.

Quantitatively, the religious schools provide education for a relatively small proportion of pupils at all levels as shown by the following table.
FIGURE 29
The Educational Ladder in Al-Azhar

Table 12.19

Number of classes and pupils in Al-Azhar schools in 1973-74

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>No. of Classes</th>
<th>Proportion to public Education</th>
<th>No. of Pupils</th>
<th>Proportion to public Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>1606</td>
<td>1.7%</td>
<td>70561</td>
<td>0.2</td>
</tr>
<tr>
<td>Preparatory</td>
<td>606</td>
<td>2.2%</td>
<td>32730</td>
<td>3.0</td>
</tr>
<tr>
<td>Gen. Secondary</td>
<td>617</td>
<td>7.3%</td>
<td>26077</td>
<td>8.0</td>
</tr>
<tr>
<td>Readings</td>
<td>25</td>
<td>-</td>
<td>450</td>
<td>-</td>
</tr>
</tbody>
</table>


The table shows that against 1000 children enrolled in public primary schools, there were only two children enrolled in religious schools. This proportion, however, was 100 to 3 at the preparatory level. The table indicates that this percentage is only significant at secondary level, where there were 100 pupils in general secondary schools against 8 in Al-Azhar secondary schools.

Having different aims, special structure and curricula, and autonomous finance, Al-Azhar institutions will resist any innovation that may eliminate, change, or affect their prosperity and traditions. Therefore, one may expect that Al-Azhar would resist the adoption of comprehensive education as a nationwide policy.

(iii) Environmental Constraints

These are exemplified by the dramatic population growth on the one hand and by the lack of physical resources on the other.

(a) Population Growth

Egypt has experienced a tremendous growth in population since the first quarter of the twentieth century. Her rate of population growth is
one of the highest in the world. It is as much as four times the rate of Britain and double that of the United States. The relatively short period since 1947 is, according to Omran, the most critical in the history of Egyptian demography. He points out that this period "has brought the highest rate of growth ever recorded in the country."

The population has exploded from 19 million in 1947 to 26 million in 1960, to 30 million in 1966 and to 38 million in 1976. The population phenomenon which has a significant impact on education is the age structure. Egyptian population has been characteristically young with a high ratio of youth and a small ratio of old people to those of intermediate ages. Such a wide base of young population can be attributed to the birth of many children and the survival of very few people to middle age and much less to old age. Quantitatively the increase in the age group under 15 ranges from 26 to 55 per cent of the increase in population. Between 1946 and 1960, the rate of growth in the population over 15 years of age was 17.4 per thousand, while that for the population under 15 was 32.2 per thousand. Thus, as a result of a consistent combination of a high fertility and a low life expectancy, Egypt has a very high percentage of children below 15 years of age. This in turn, has led to a high youth dependency ratio. Hence, a huge burden of young dependents on the smaller core of supporters has created a serious obstacle for economic progress. Table 12.20 indicates Egyptian dependency ratios as measured by dependents in 100 population of 15 to 60 years ago.
Table 12.20

Egyptian dependency ratios (1927-1970)

<table>
<thead>
<tr>
<th>Year</th>
<th>Youth under 15</th>
<th>Old age Over 60</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td>70.7</td>
<td>12.0</td>
<td>82.7</td>
</tr>
<tr>
<td>1937</td>
<td>72.0</td>
<td>11.7</td>
<td>83.7</td>
</tr>
<tr>
<td>1947</td>
<td>68.1</td>
<td>10.8</td>
<td>78.9</td>
</tr>
<tr>
<td>1960</td>
<td>83.6</td>
<td>11.9</td>
<td>95.5</td>
</tr>
<tr>
<td>1970</td>
<td>83.4</td>
<td>11.6</td>
<td>95.0</td>
</tr>
</tbody>
</table>


The present unfavourable age structure is expected to continue for the near future in the sense that the proportion of children will not decrease and the proportion of working age will not increase. However, population projects, though very useful for the prediction of population movement, as well as for the sound educational planning, must be taken with caution especially in such a rapidly changing society as Egypt. Therefore one can safely argue that the future pattern of population growth in Egypt is uncertain.

The Central Statistical Committee, however, has projected the future course of population growth at specific dates covering the period 1960 to 1985. For any date, five different series of projections were calculated on the basis of five different assumptions relative to fertility trends and ranging from constant rates of fertility to declining rates by 1% at least and 5% at most. The following table presents a summary of the results obtained.
Table 12.21

Projection of population growth in Egypt, 1960-1985

<table>
<thead>
<tr>
<th>Projection</th>
<th>1960 Census</th>
<th>Population Estimates (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26.1</td>
<td>29.9</td>
</tr>
<tr>
<td>2</td>
<td>26.1</td>
<td>29.8</td>
</tr>
<tr>
<td>3</td>
<td>26.1</td>
<td>29.9</td>
</tr>
<tr>
<td>4</td>
<td>26.1</td>
<td>29.7</td>
</tr>
<tr>
<td>5</td>
<td>26.1</td>
<td>29.2</td>
</tr>
</tbody>
</table>


This table shows that according to the highest projection (no.1) the population will be more than double in 1985 compared to 1960. On the other hand, the most conservative estimation shows that the population will have increased less than 50% by the end of the period. This large difference between the minimum (38.8 million) and the maximum (52.5 million) projection estimates make the prediction of Egyptian population movement extremely difficult. Hansen and Marzouk, for example, believe that the most probable rate of growth for 1960-85 lies between 2.1 and 2.5 per cent. In their opinion, the high rate of growth during the 1960's, which reached nearly 3%, was influenced by a temporary upsurge in births after World War II. Therefore, the continuation of the high fertility rate of the 1960 decade and the high growth rate of the 1947-60 period is unlikely. Further support for their position lies in the growing evidence of a fall in the level of fertility of the youngest women and the recent trend toward increase in the average age of marriage. On the other hand, Mead argues that the growth rate will experience a steady rise.

"if the current rate of increase is in the range of 2.5 to 3 per cent per annum, perhaps a reasonable guess would be that by 1985 the growth rate would be in the range of 3 to 3.5 per cent per annum."
To sum up, it seems probable that any conceivable drop in fertility, which might be brought about through the use of birth control in the coming decade or two, is likely to be offset by a slight increase in fertility as a concomitant of the moderate increase in income, an improvement in health and a high proportion of young. However, there is always the possibility that the decline in fertility might be accelerated by some anticipating structural changes in the economy and increase in education. Considering the fact that the 1976 census shows that Egypt's population reached 38.2 million, one is inclined to believe that the second projection, built on the assumption that fertility rate will decline 1% between 1960 and 1985, is very plausible.

Population projections have an important implication, not only for estimating the annual rate of increase of the population, but also for estimating age distribution. According to the highest estimates, younger people—fifteen and under—will increase by approximately 10 to 11 million persons from 1960 to 1985. If fertility declines by 5% during this period, their absolute size will actually decline from 11.2 million in 1960 to 10.7 million in 1985.62 Given continuation of the 1960 fertility level, by 1985, the Egyptian society will have to take care of twice as many young people than it would if fertility declined to half of its 1960 level.

A recent projection for school age population (ages 6-18) was calculated for the period 1980 to 1990 on the assumption that the fertility rate level of the 1966 will continue to decline by one per cent. Table 12.22 gives the result of this projection.

Although the percentage of the school age population is expected to decline from 28 to 25.3 of the total population, the number of children is expected to increase by 1.8 million between 1980 and 1990. Bearing in mind that the absorption capacity of the Egyptian schools in 1975 was 5.9 million out of 10.9 million children, such an increase imposes tremendous burdens on the educational system. Efforts anticipated to accomplish a universal primary education were hindered by such a increase in number of children which impeded the achievement of a full ratio in the previous years, for compulsory, as well as for post-compulsory, education. Although the percentage of pupils enrolment has achieved apparent progress during the last two decades, there is still a great number of school aged population (e.g. 6.2 million) left with no
<table>
<thead>
<tr>
<th>Year</th>
<th>Primary Age Group 6-12</th>
<th>%</th>
<th>Junior Secondary Age Group 12-15</th>
<th>%</th>
<th>Upper Secondary Age Group 15-18</th>
<th>%</th>
<th>Schooling Age Group 6-18</th>
<th>%</th>
<th>Total of Population 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>5846</td>
<td>14.3</td>
<td>2832</td>
<td>6.9</td>
<td>2764</td>
<td>6.8</td>
<td>11142</td>
<td>28.4</td>
<td>40910</td>
</tr>
<tr>
<td>1981</td>
<td>5894</td>
<td>14.1</td>
<td>2839</td>
<td>6.8</td>
<td>2794</td>
<td>6.7</td>
<td>11527</td>
<td>27.6</td>
<td>41750</td>
</tr>
<tr>
<td>1982</td>
<td>5950</td>
<td>13.9</td>
<td>2846</td>
<td>6.7</td>
<td>2804</td>
<td>6.6</td>
<td>11600</td>
<td>27.2</td>
<td>42650</td>
</tr>
<tr>
<td>1983</td>
<td>6001</td>
<td>13.8</td>
<td>2862</td>
<td>6.6</td>
<td>2806</td>
<td>6.4</td>
<td>11669</td>
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<td>43600</td>
</tr>
<tr>
<td>1984</td>
<td>6052</td>
<td>13.6</td>
<td>2884</td>
<td>6.5</td>
<td>2810</td>
<td>6.3</td>
<td>11746</td>
<td>26.4</td>
<td>44600</td>
</tr>
<tr>
<td>1985</td>
<td>6119</td>
<td>13.4</td>
<td>2910</td>
<td>6.4</td>
<td>2817</td>
<td>6.2</td>
<td>11846</td>
<td>26.0</td>
<td>45618</td>
</tr>
<tr>
<td>1986</td>
<td>6226</td>
<td>13.3</td>
<td>2931</td>
<td>6.3</td>
<td>2827</td>
<td>6.1</td>
<td>11984</td>
<td>25.7</td>
<td>46550</td>
</tr>
<tr>
<td>1987</td>
<td>6385</td>
<td>13.4</td>
<td>2946</td>
<td>6.2</td>
<td>2869</td>
<td>6.0</td>
<td>12200</td>
<td>25.6</td>
<td>47600</td>
</tr>
<tr>
<td>1988</td>
<td>6570</td>
<td>13.5</td>
<td>2964</td>
<td>6.0</td>
<td>2890</td>
<td>5.9</td>
<td>12424</td>
<td>25.5</td>
<td>48650</td>
</tr>
<tr>
<td>1989</td>
<td>6781</td>
<td>13.6</td>
<td>2990</td>
<td>6.0</td>
<td>2910</td>
<td>5.8</td>
<td>12681</td>
<td>25.4</td>
<td>49800</td>
</tr>
<tr>
<td>1990</td>
<td>7020</td>
<td>13.7</td>
<td>3028</td>
<td>5.9</td>
<td>2927</td>
<td>5.7</td>
<td>12975</td>
<td>25.3</td>
<td>51111</td>
</tr>
</tbody>
</table>

education. By 1975, for example, the enrolment ratios were 71%, 44% and 29% in primary, preparatory and secondary stages respectively. Thus, providing equal educational opportunities for all boys and girls through a comprehensive educational system poses a tremendous problem. If the intention is to universalise primary education and to extend the compulsory schooling to the age of fifteen, then this appalling increase in the school age population will represent, indeed a great obstruction. It is predicted that such an increase will hinder the practicability of the proposed solution.

(b) Physical Resources

The question concerning financial resources cannot be divorced from its environment. Education is but one part of the vast web that makes up life in a society. The country's economy has a given amount to deploy among its various activities. In Egypt, however, the investment in education, as in other sectors, has been affected, to a great extent, by military expenditure which is high compared to the country's whole budget. However, with population growth rate of 2.5%, the current growth of the Egyptian economy is unlikely to be able to cope with the intensified demand for basic goods and services such as food products, health and education which were declared to be basic rights of all Egyptians.

Although industrialization has played a leading role in the economic development of Egypt, the country is almost an agricultural one. However, there is a limit for the increase in cultivated land. The total availability of arable land remains just around 6 million feddans.

The extension of such an area has proved slow, difficult and costly.63 This has resulted in a dramatic decline in the land/man ratio from 0.42 feddans in 1917 to 0.20 feddans in 1966. Moreover, the present state of farming techniques, which is on the whole, inefficient by modern standards, is unable to redress such a difficulty.

Egypt's principle mineral product is petroleum. Although a number of other minerals are found, their production is unimportant except for iron ore, manganese, phosphate and salt. However, there are still vast desert areas which have not yet been tapped.64

This lack of physical resources affects the growth of the national income, and the allocation of resources to education as well. If Egypt wants to implement a comprehensive school system able to provide social justice, and to meet more fully the economic needs, then a greater
budgetary allocation is required. However, the state budget is not expected to meet all the heavy demands, at least in the near future. Hence education cannot command a rapidly increasing share of the available resources. Therefore it is unlikely to implement the proposed solution of reorganising secondary education along comprehensive lines due to such a lack of financial resources.

3. An Alternative Solution and its Workability

If the model of reorganising the educational system along comprehensive lines has little probability of operating successfully because of either the aforementioned constraints or the rejection of an egalitarian system of education, we propose the development of a technical educational system, which may serve as an alternative solution to the problem of the inadequacy response of the educational system to the needs of social and economic development.

The alternative solution maintains the dual system of secondary education within the structural organisation of a 6-3-3 pattern. It calls for a connection between general and technical education. Thus, the alternative model introduces no change in the existing structure of the educational system. It aims at bringing about some changes in the content of education and the administrative procedures. These changes include the increasing of enrolment in the technical secondary education, particularly in industrial and agricultural schools, the introduction of practical subjects to the general school, as well as cultural subjects to the technical school, and the equalisation of the chances of access to higher education for both the technical and general secondary school graduates.

The content of education in the secondary stage should not be exclusively concerned with the preparation for university and higher education. But it should also provide opportunities for vocational training to equip those students who plan to enter a working life. Therefore theoretical studies must be strengthened by some practical experience. Meanwhile, technical studies should be given an added amount of practical work, as well as an amount of general culture. Hence, the traditional barrier between general and technical education would be eliminated by giving the former a practical vocational dimension and the latter an additional depth in science and culture. New areas of vocational training should be introduced to the technical schools. Thus, training for
industrial skills in the production sector should comprise electrical engineering, metal and weld mechanics, building technology and so forth. Training for the service sectors should include catering, hotel and restaurant management, domestic skills, nursing, social work and applied arts.

The alternative model also provides for some changes in the administrative procedures. Within the tendency of extending the compulsory schooling to the age of 15, selection between primary and preparatory education should be abolished. Strategy at the secondary stage should be directed towards the increase in enrolment in the industrial school to meet the requirements of the development plans for skilled workers. Enrolment should be increased in the five-year technical schools to supply the country with the required number of technicians. Some measures should be taken to facilitate the transfer of students between the different types of technical schools and between the different branches within the same school.

The distinction between general and technical secondary school leavers in the admission to higher education must be abolished. The five per cent quota intake of technical secondary graduates from those who obtained more than 70% of the total marks, should be abandoned. Instead, equal chances for access to higher education, especially to technical institutions should be adopted and implemented. This may help to lessen the pressure on general secondary schools, and give equal prestige to technical schools.

The probability of this alternative model to solve the problem concerning the adaptation of the Egyptian educational system to the social and economic needs is limited. Most of the constraints that face the proposed solution apply also to this alternative one. Outstanding of these constraints are the traditional low level of appreciation of the economic value of personnel trained specially for the technical tasks, and the social attitudes toward manual work, which have for long placed a high premium on membership in the genteel professions, even if economically unrewarding. With their eyes set on eventual admission to universities and therefore a white-collar job, the majority of the preparatory graduates continue to press on with general secondary education. Even if the placement office could manage to increase the enrolment in technical secondary schools, such schools would continue to be scorned by students anxious to pursue the status symbol and imagined open-sesame of a literary or scientific university degree.
Apart from the normative constraints, the pressing obstacle comes down to the matter of money. Funds, as has been demonstrated, are continually short for new buildings, better-trained and better-paid teachers, and equipment. This would affect the expansion of educational opportunities to cope with the increasing number of school population. The financial constraints would also restore the living dilemma of allocating more revenue to university and secondary education than to primary education. This, in turn, would not help to eradicate the illiteracy, but would maintain the existing defects of the present educational system.

In the final analysis, if the probability of the success of the alternative solution is little in responding to the requirements of industrialisation, it is negligible in producing social justice and equality of educational opportunity, and in developing a greater sense of community.

4. Conclusion

In the light of the comparative analysis of the comprehensive school models of the United States, England and Sweden, we were able to present an outline for a model of reorganising the Egyptian educational system along comprehensive lines. The model sets up certain proposals concerning structure, selection, grouping and curriculum. The model is displayed in terms of general principles underlying these aspects.

An attempt has been followed to examine the workability of the comprehensive school system in Egypt. By investigating the Egyptian initial conditions, we have been able to dispose of the constraints which may impede the practicability of such a solution. We have classified such constraints into normative, institutional and environmental within or outside the educational arenas. Our intention has been to demonstrate the resistance of the personnel and institutions to the implementation of a comprehensive school system, and the prediction of degrees of success of such an egalitarian system.

In the light of this analysis, we may predict that the acceptance and implementation of an effective comprehensive school system is unlikely to operate successfully in Egypt, at least in the near future, unless a large part of such constraints can be eliminated.

Therefore we have suggested an alternative solution which maintains the
selective educational system, and calls for some changes in the content of education and in some administrative procedures. We are convinced that the probabilities of the alternative solution of solving the problem concerned are limited because of several constraints working together to hinder the practicability of such alternative solution.

Thus, there is no panacea in education. The comprehensive school system is not intended to perform essentially different central functions from the selective system, but to perform the same functions more flexibly. Moreover, it is not only comprehensive schools which have to find a means of responding relevantly and effectively to the changing demands of contemporary society. However, since comprehensive education has been claimed to be strong in flexibility, it has a special faculty of gearing to contemporary and future needs of society. On the other hand, advocates of the selective schools maintain that a certain deliberate resistance to change is necessary for preserving the traditional virtues.

We should have in mind that most of the Egyptian plans for social and economic development have been hampered because of the inadequate response of the traditional selective system of education to the changes taking place in the country. Hence the reorganisation of the system along comprehensive lines would go a long way to accomplish an adequate and effective response to the needs of individuals and society. We suggest that the proposed model which will bring about a radical change in the educational system should be widely open to discussion, and its merits should be judged in the light of scientific research.
REFERENCES


8. Ibid., p.74.


11. Ibid., pp.50-52.


13. Ibid., pp.86-87.


27. Ibid., pp.135-156.


38. Helmi, M.K., Education in Egypt, op.cit., p.29.
39. Ibid.
41. Helmi, M.K., Education in Egypt, op.cit., p.29.
48. Ibid., p.152.
52. Boktor, A., op.cit., p.73.
58. For detailed discussion of the methods of projection and the assumptions of the different rates of fertility see : UAR, Central Statistical Committee, Population Trends in the UAR (Egypt), Cairo, CSC Press, 1962.
60. Ibid., pp.30-31.
61. Mead, D.C., op.cit., p.27.


APPENDICES
APPENDIX I

A Letter to the Egyptian Educational Authorities

The Director 10/2/1978
Egyptian Cultural Bureau
4 Chesterfield Gardens
LONDON W1.

Dear Sir,

This application is presented by M.M. Metwally, Assistant Lecturer, Faculty of Education, Tanta University, who is a study-leave member at the London University, Institute of Education.

Since my study for the PhD deals comparatively with the Comprehensive school system in the United States, England and Sweden with reference to the emerging policy in Egypt, could I ask you to submit the following request to the Egyptian educational authorities in order to contact the departments of

- Secondary Education, at the Ministry of Education
- Curricula for the Secondary Stage
- Coordination and planning for Secondary Education
- Examinations

for the purpose of obtaining latest data regarding

- the curricula applied in the Egyptian comprehensive schools
- the plan of study, and the number of periods per week for the common programme and for the optional subjects
- the selection procedure for the experimental comprehensive schools at Tanta and Suhag
- the grouping methods in such schools
- the examination system.

I should be grateful if you kindly request them to send me any publications and/or ministerial decrees concerning the aforementioned fields, as such data would greatly benefit me in completing my studies.

Yours faithfully,

M.M. Metwally.
السيد الاستاذ الدكتور المستشار الثقافي ومدير كتب البعثات ببلدن

بعد التحية،

مقدمه لسياستهم، محمد مرسي، الدكتور، المدير، كلية التربية، جامعة طنطا،
وعضو الأكاديمية العربية بجامعة لندن.

حيث أن موضوع دراستي لدرجة الدكتوراه موضع الدراسة الشامل في جمهورية مصر.

العربية بالمقارنة مع الولايات المتحدة وأنتويرب والسويد.

الرجاء التكرم بالاتصال بالجهات الآتية:

1. وزارة التعليم الثانوي.
2. إدارة التكامل والتنسق.
3. إدارة المناهج التعليمية.
4. الإدارة العامة للامتحانات.

وذلك لأعدد دراسات ودراسات الحائزة بتطبيق الدراسة الشاملة.

 مصر العربية في طنطا وأسوان في المباني الآتية:

1. المناهج العليا في الدراسة الشاملة في مصر.
2. خطة الدراسة بالدراسة الشاملة في مصر.
3. نظام التعلم المطبق في الدراسة للمواد الأساسية والمواد الإختيارية.
4. نظام الاداء بالدراسة الشاملة في طنطا وأسيوط.
5. نظام الأبحاث بعمل

الرجاء التكرم بإرسال هذه الدراسات والقرارات الدراسية والنشاطات والأنشطة المعلنة.

بالегистرات أعلاه للأسف، بما في أشكال رسائل.

مع طيب تلقّي الأسير.

مقدمه: محمد مرسي

١٩٧٨/٢/١٠
APPENDIX II

Translation of the Reply to the Letter

Ministry of Education
General Administration for Secondary Education
Plan and School Organisation Department.

The Director-General of General Administration for Foreign Cultural Relations.

We have received a letter No.1601 date 3/4/1978 from the General Mission Department, Ministry of Higher Education, a copy is enclosed, requiring data concerning the project of the comprehensive secondary school and its implementation in the Arab Republic of Egypt.

Replying to this letter I would like to state the following :

1. The comprehensive secondary school project in Egypt is still in its first phase of implementation. It has been decided to start, in the new school year 1978/79, in Tanta and Suhag.

2. The proposed curricula to be implemented in the comprehensive secondary school in Egypt are the same curricula applied in the general secondary schools, in addition to some practical studies appropriate to the environment. The student chooses one according to his interests and abilities.

The following practical fields were chosen for the comprehensive secondary school at Tanta :

A  The agricultural field :
    Food industry, milk production, gardening, poultry keeping, animal keeping and beef-keeping and silk-worm cultivation.

B  The industrial field :
    Air-conditioning, electronics, automobiles and mechanics.

C  The commercial field :
    Secretarial and business studies.

The following practical fields were chosen for El Shaheed Abel El Moneim Reyad comprehensive school at Suhag.

A  The agricultural field :
    Food industry, bee keeping.

B  The industrial field :
    Electronics, radio and television, electrical installations, internal decoration (carpentry and decorating)
The commercial field:
Arabic and foreign typing, secretarial.

3. As regards the plan of the study in the comprehensive school, it is the same as that in the general secondary school plus four periods per week for the practical studies.

4. As far as the branching system is concerned, this is started in the second grade whereas the students choose between literary or scientific branches. Then in the third grade the scientific branch is divided into: science and mathematics and the student chooses one of them.

In addition to this the student chooses one or two of the advanced specialised subjects. These are optional subjects giving the student in the literary branch opportunity to choose one language (either Arabic or a foreign language) and either geography or a philosophical subject. The student in the scientific branch chooses only one of the two languages (Arabic or foreign). It must be noticed that all the advanced level subjects are taught only in the third grade.

5. As regards the admission system in the comprehensive school, it is the same system as applied in the general secondary school according to the total marks and the student's age. Thus the student with higher marks and younger is preferable. This system will operate until greater numbers of secondary school transfers to comprehensive school. In this case this admission system may be changed to give the opportunity for a larger number of students to attend this school without conditioning the total marks.

6. The examination system in the cultural subjects is the same as that which operates now at the general secondary schools, while in the practical fields it is suggested that evaluation will be continuous all over the school year, practical and written. This evaluation has an effective role in success and marks scored on this examination are added to the total marks. Opportunities for further practical work during summer holidays are given to those students who have proved backward and they are examined again before the start of the new school year.

In the third grade, a practical examination is given to students by an External Committee before the start of the examination of the General Certificate of Education. Those who pass the practical examination are given a vocational certificate, may be beneficial to those in certain circumstances.

With regards.

11.4.1978

The General Director
Abd El Rahman Mahmoud

The Director of the Plan and Organisation 12.4.1978.
وزارة التربية والتعليم
الإدارة العامة للتعليم الثانوي
إدارة الحطة والتنظيم الرئيسي

السيدة الاستاذة / المديرة العامة للإدارة العامة للعلاقات الثقافية الخارجية

تحية طيبة وعذر

فقد ودنا الخطاب رقم 1701 بتاريخ 198/4/2 من الإدارة العامة للبعثات

بوزارة التعليم العالي والمطل صوره منه وعناق بشكل بيد من مشروع المدرسة

الثانوية العامة وتطبيق في جمهورية مصر العربية. ودا على هذا الخطاب

أشرف بالموافقة على ما يلي:

1- أن مشروع المدرسة الثانوية الصغيرة في مصر مازال في طور الإعداد للمرحلة الأولى

2- أن الماهج المزعج تطبيقها في المدرسة الشمالي في مصر في نفري الناهج بالتعليم

التثاقيف العام مع عناصر دراسات عامة لبعض المجالات العملية التي تلام البيئة على

أن يختار الطالب أداه وجه لفترة واستعداداته.

وقد تم اختيار المجالات الآتية لدراسة طنطا المدرسة الثانوية الشمالي:

- في المجال الزراعي: الصناعات الغذائية – الألبان – البت)[- تربية

- الدجاج – تربية الحيوان – تربية النحل وبدلة الفضاء

- في المجال الصناعي: التجهيز والتجهيز – البكرات – السيرات

- في مجال الكهرباء – الكهرباء – مهنة الكهرباء

- ج: في المجال التجاري: التكتية – إدار حل

كما تم اختيار المجالات الآتية لدراسة المهن متهم رياض الثانية

الشمالية بسـمها:

- في المجال الزراعي: تصنيع غذائي – تحل

- ب: في المجال الصناعي: كهرباء (الصاكي) – إنتاج الزيتون – كهرباء

- تجهيزات – ديكوب (نقالة رصيف)

- في المجال التجاري: أناء كهرباء وأغراض – أعمال الكهرباء

(1) فيما يتم تحديد مادة دراسة بالدراسة الشاملة في نسخة الدارسة بدراسة

الثانية العامة وبدلاء البلاط 4 حسب أساليب المجالات العملية

(2) فيما يتم تحديد المهن الشاملة في نسخة الدارسة الشاملة حيث

يختار الطالب أداه من المواد الأدبية أو القسم العلمي أو رياضيات وشبه العلوم ونشأ

نماكل بالصف الثالث الثاني في مدرسة جمهورية مصر العربية ويتولى

الطلاب إياها.

هذا يخالف مادة الاستوى الخاص وهي مواد اختيارية فين لطلاب القسم الأدبى

اختيار استوى الخاص لأخذ النغمات القرآنية أو الأجنبية وذكيم يمكن اختيار

الأساليب الخاص في الجغرافيا أو المواد العلمية أما طالب القسم العلمي يجبره

في اختيار أحدى اللغتين العربية أو الأجنبية فقط – على أن جميع مواد
المستوى الخاص برس الضعف الثالث الثاني فقط

(5) وما يختلف نظام القبول بnad سلسة الشاملة فهو نفس النظام المعمول به في المدارس الثانية العامة أي خصا للجميع وليس في نفس الأعلى درجات والأصغر
سا ذلك إلى أن يتم تحويل عدد ماسب من المدارس الثانية إلى مدارس شاملة وفي هذه الحالة يمكن تغيير نظام القبول لتأمل الفروة لآبن عدد ممثلا الطلاب للالتحاق بهذا النظام دون التعديل بمجمع الدرجات.

(6) أما نظام الامتحانات فهو بالنسبة للمؤدب الثقافية نفس النظام المعتم حاليا بالمدارس الثانية العامة. أما بالنسبة للمجالات العملية فإن تنسيق أن يكون التقييم صناعيا طول العام الدراسي نظرياً وعلياً يكمن لهذا التقييم أنه في النجاح والرسوب وتفاعل الدرجة للجميع وتأمل الفروة أمام المختصين لمزيد من التدريب خلال أشهر الصيف ورساحة المدرسة مع وجود المدرسين على أن يعقد لهم امتحان قبل بدء العام الدراسي التالي.

والنسبة للضع الثالث الثاني فيجبر للطلاب امتحان على قبل امتحان الثانية العامة بواسطة لجنة من حاخ المدرسة يضع الناجحين فيه شهادة مهنيـة للانتفاع بها ضد اللزم.

وتفعل بقبول فائق الاحترام.

الدير العام

في: 1978/4/11

jawwad

1978/4/12

صدور طبق الأمـصل.
BIBLIOGRAPHY
ABDEL-AZIM, M., Health aspects of social welfare, The second social welfare seminar for the Arab States, Cairo, 1970 (Arabic text).


Advice to Parents Column, Guardian, January 7, 1969.


Akhirasa'a, Egyptian Weekly Magazine, Cairo, 15 March 1967 (Arabic text).

Al-Ahram, Egyptian daily newspaper, Cairo, 3 September 1968

Al-Ahram, Egyptian Daily Newspaper, Cairo, 15 November 1968.


AL-WAKIL, A.W., Focus on the Arab Socialist Union, Cairo, Dar al Shaab, 1963 (Arabic text).


ANIS, M., Study of the National Income of Egypt, Cairo, Al-Nahada Beraksoph., 1950.


ATUTOV, P.R. and ZHIDELEV, M.A., The Scientific-technological revolution and the role of the school in preparing young people for work, Soviet Education


BARAMI, R., El, and ULAISH, M., The development of the Egyptian economy in the modern era, Cairo, Al-Nahda Bookshop, 1945, (Arabic text).


THE CENTRAL ADVISORY COUNCIL FOR EDUCATION (ENGLAND), Children and their primary schools, London, HMSO, 1957

CENTRAL ADVISORY COUNCIL FOR EDUCATION (ENGLAND), 15 to 18 (The Crowther Report), London HMSO, 1959.


CENTRAL AGENCY FOR PUBLIC MOBILISATION AND STATISTICS (CAPMS), Statistical Indicators 1952-1968, Cairo, CAPMS, 1969.

CAPMS, The increase of population in the United Arab Republic and its impact on development, Cairo, CAPMS, 1969.


CENTRAL STATISTICAL COMMITTEE, UAR, Population trends in the UAR (Egypt), Cairo, CSC Press, 1962.


COUNTY BOROUGH OF BARROW-IN-FURNESS EDUCATION COMMITTEE, Classification for secondary education, Barrow Printing Co.Ltd., 1946.


DAVIS, H.M., Constitutions, electoral laws, treaties of the States in the Middle East, Durham, Duke University Press, 1953.


DENVER PUBLIC SCHOOLS, Curriculum development through Committees of Instruction, Denver, Colorado, The Schools, 1954.


DEWEY, J., How we think, Boston, D.C. Heath & Co., 1933.


EDUCATIONAL POLICIES COMMISSION (USA), Education for all American children, Washington DC, National Education Association, 1948.
EDUCATIONAL POLICIES COMMISSION (USA), Education for all American Youth — a further look, Washington DC, National Education Association, 1952.


EL-KABBANI, I.M., A memorandum on the general educational policy for the spread of education in Egypt, presented on May 28, 1945, Cairo, 1945 (Arabic text).


EL-KABBANI, I.M., Studies in the organisation of education in Egypt, Cairo, El-Nahdah El-Misrieh, 1958 (Arabic text).


EL-KOUSSY, A.A., Educational implications, UNESCO paper submitted to the Meeting of Arabic-speaking States on their Social Sciences Resources relative to the Social Implications of Industrialisation and Technological changes, Cairo, 18-25 November 1959.


FAHMY, M.S., A tentative plan for the future development of the education system in the UAR, Cairo, The Institute of National Planning, 1964.


FIRTH, G.C., Comprehensive schools in Coventry and elsewhere, Coventry Education Committee, 1968.


GOLDBERG, M.L. and PASSOW, A.H., The effects of ability grouping, Education, Vol.82, No.8, April 1962, pp.482-487.


HARRISON, G.M.A., Sheffield has opportunity for all her children, Education, Vol.139, June 1972, p.533.


HAYKAL, M.H., Discussion on the ASU now, Al-Ahram, 1 November 1968 (Arabic text) p.3.


HILL, C.J., Transfer at eleven, Slough, NFER, 1972.


HOLMES, B., Polytechnical education in the USSR, in Hans Collection, Various Essays in Education, pp.1-5.


HUSSIEN, T., The future of culture in Egypt, Cairo, Dar el Maaref Press, 1938 (Arabic text).

HUTCHINS, R.M., The higher learning in America, New Haven, Yale University Press, 1936.


ISMAIL, S.K., EL GHANAAM, M.A. and AL ZAITARI, M., Actual planning and administration of developing the curricula in the Arab Countries, a survey study, New Education, Regional office for Education in the Arab Countries, No.2, August 1975, pp.81-116.


INSTITUTE OF NATIONAL PLANNING (UAR), Research project on employment and unemployment among the educated, Final Report, Cairo, Institute of National Planning, 1963.


LITTLE, T., Egypt, New York, Prager, 1958.


LUNN, J.C., Streaming in the primary school, Slough, NFER, 1970.


MACCIA, E.S., Curriculum theory and policy, Ohio, Educational Theory Centre, Ohio State University, paper 65-176, 1965.


MACKENZIE, G., The social context of curricular change, Theory into Practice, Vol.1, No.4, October 1962, pp.185-190.


MINISTRY OF ECONOMY (UAR), Economic progress in the UAR, Cairo, Memphis Publisher, 1968 (Arabic text).

MINISTRY OF EDUCATION (Egypt), Law No.55 of 1957 concerning the organisation of the preparatory stage, Cairo, Ministry of Education Press, 1955 (Arabic text).


MINISTRY OF EDUCATION (ARE), Documentation Centre for Education, The ARE educational policy in the secondary stage, Cairo, DCE, 1972.

MINISTRY OF EDUCATION (ARE), Ministerial Decree No.185, for the year 1974, Cairo, Ministry of Education Press, 1974, (Arabic text).
MINISTRY OF EDUCATION (ARE), Ministerial Decree No.80 dated 20.5.1974 concerning rules for admission to the Schools of the Ministry of Education, Cairo, Minister's Bureau, 1974, (Arabic text).

MINISTRY OF EDUCATION (ARE), Ministerial Decree No.139 dated 22.8.1974 on the levels of teaching for the third form, general secondary schools, Cairo, Minister's Bureau, Ministry of Education, 1974, (Arabic text).


MINISTRY OF EDUCATION (ARE), Education and training in Egypt, Cairo, Minister of Education Bureau, 1976.

MINISTRY OF EDUCATION (ARE), Basic education and its role in combating poverty: a project presented to the World Bank, Cairo, Minister of Education Bureau, 1978.


MINISTRY OF EDUCATION (UAR), Qualifications and standards of teaching staff of various levels of education in 1956-57 and in 1959-60, Cairo, Ministry of Education Press, 1960 (Arabic text).


MINISTRY OF EDUCATION (UAR), Basic qualification of teaching personnel, Cairo, Ministry of Education, Training Department Press, 1961 (Arabic text).

MINISTRY OF EDUCATION (UAR), Ministerial Decree No.72 for the Year 1962, Cairo, Ministry of Education Press, 1962, (Arabic text).

MINISTRY OF EDUCATION (UAR), The educational planning in the UAR, Cairo, Documentation and Research Centre for Education, 1962.


MINISTRY OF EDUCATION (UAR), Aims of the general secondary stage and some means of achieving them, Cairo, Government Press, 1964, (Arabic text).


MINISTRY OF EDUCATION (UAR), Ministerial Decree No. 52, for the year 1969, Cairo, Ministry of Education Press, 1969, (Arabic text).


MINISTRY OF EDUCATION (UK), The nation's schools: their plan and purposes, Pamphlet No. 1, London, HMSO, 1945.


MINISTRY OF INFORMATION (ARE), The programme of the National Action 1971, Cairo, Government Press, 1971 (Arabic text).

MINISTRY OF INFORMATION (ARE), The October Working Paper, presented by President Mohamed Anwas El-Sadat, Cairo, State Information Service, 1974.

MINISTRY OF INSTRUCTION (Egypt), Law No. 10 of 1949, concerning the organisation of secondary schools and examination of intermediate and secondary certificates, Cairo, Ministry of Instruction Press, 1949, (arabic text).

MINISTRY OF INSTRUCTION (Egypt), Law No. 142 of 1951 concerning the organisation of secondary education, Cairo, Ministry of Instruction Press, 1951, (Arabic text).

MINISTRY OF INSTRUCTION, Law No. 211 of 1953 concerning the organisation of secondary education, Cairo, Ministry of Instruction Press, 1953 (Arabic text).

MINISTRY OF NATIONAL GUIDANCE (UAR), President Nasser's Speeches December 1961, Cairo, Information Department, 1961 (Arabic text).


MINISTRY OF NATIONAL GUIDANCE (UAR), President Nasser's Speeches and Press Interviews, Cairo, State Information Service, 1963 (Arabic text).

MONKS, T.G., Comprehensive education in England and Wales, Slough, NFER, 1968.


NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, Recommended grades or years in Junior high, or middle schools : A statement by the Committee on the junior high school education, The Bulletin of NASSP, Vol.51, No.316, February 1967, pp.58-70.


NATIONAL CENTRE FOR EDUCATIONAL RESEARCH (NCER), The system of education in the Arab Republic of Egypt, Cairo, DCE, 1973.


NATIONAL CENTRE FOR EDUCATIONAL RESEARCH, Report on the unified experimental school at Nasr City, Cairo, DCE, 1975 (Arabic text).

NATIONAL CENTRE FOR EDUCATIONAL RESEARCH, Projects and achievements of the National Centre for Educational Research in the Year 1975/76, Cairo, DCE 1977, (Arabic text).


NATIONAL CENTRE FOR EDUCATIONAL RESEARCH, Guide for the unified experimental school, Cairo, DCE, 1978 (Arabic text).


NATIONAL EDUCATION ASSOCIATION (NEA), Project on the instructional program of the public schools, planning and organising for teaching, Washington DC, 1963.


NATIONAL SWEDISH BOARD OF EDUCATION, Cooperation between school and working life, Stockholm, Information Section, 1975.


NATIONAL UNION OF TEACHER, Transfer from primary to secondary schools: Report of a Consultative Committee appointed by the Executive of the National Union of Teachers, London, Evans Brothers, 1949.


NUGENT, D.F. et al, Development of manpower resources for Egyptian industrialisation, Cairo, 1962.


POTTER, G.R., Parental choice, the pitfalls, Education, August 8, 1969, p.1016.


RADZ, M.A. and RISINGER, C.F., A revolution comes of age, social studies curriculum development in the seventieth social science Education Consortium, Newsletter, May 1971, pp.3-5.


SHAWKI, A., The Executive machinery and its effects on the provision of public service, Cairo, Dar el Maaref, 1959, (Arabic text).


SOBIEH, N.A.A., Secondary education in the Arab Countries : UAR, Iraq Republic, the Syrian Arab Republic, Cairo, Central Egyptian Association for editing and publishing, 1971, (Arabic text).


STONECIPHER, B.L., Grouping in other classrooms, Where, Vol.83, No.2, October 1962, pp.77-79.


SWEDISH INSTITUTE, A general survey of the Swedish school system and higher education in Sweden, Stockholm, Svenska Institute, 1963.


TILLAMN, R., Is ability grouping taking schools in the wrong direction? Yes., The Nation's Schools, Vol.73, No.4, April 1964, pp.70,128.


WALLEN, N.E. and VOWLES, R.O., The effect of intraclass ability grouping on arithmetic achievement in the sixth grade, Journal of Educational Psychology, 1951, pp.159-163.


WARRINER, D., Land and poverty in the Middle East, Welwyn Garden City, Hertfordshire, RIIA, 1948.


