

CURRICULUM DEVELOPMENT IN THE GENERAL SECONDARY SCHOOL  
IN EGYPT SINCE 1952, WITH COMPARATIVE REFERENCE TO THE  
SECONDARY SCHOOL IN AMERICA AND  
THE GRAMMAR SCHOOL IN ENGLAND

By

Ali Ahmed Ali Madkour

Thesis submitted for the degree of  
Doctor of Philosophy in the University  
of London, Institute of Education

1979

Department of  
Comparative Education



ABSTRACT

CURRICULUM DEVELOPMENT IN THE GENERAL SECONDARY SCHOOL  
IN EGYPT SINCE 1952, WITH COMPARATIVE REFERENCE TO THE  
SECONDARY SCHOOL IN AMERICA AND THE GRAMMAR SCHOOL IN  
ENGLAND

This study attempts to analyse curriculum development in the general secondary school in Egypt in its relation to the social, economic and political changes that have taken place since 1952. To accomplish this, an analysis of secondary school curricula in two other countries, namely America and England, which have been faced somewhat earlier than Egypt with some of Egypt's current problems, is carried out. Thus in their relation to the social, economic and political changes, the secondary school curricula in the three countries are judged. In addition, in order to understand the nature of these curricula and to characterise changes that have taken place over the period being examined, the major curriculum theories which have dominated educational practices in the world, are identified.

Various socio-economic and political changes are associated with the process of modernisation and democratisation. The effect of this kind of change on secondary school curricula in the three countries takes two forms; first, the need for schools to supply the labour market with skilled manpower flexible and adaptive to the rapidly changing needs of society; second, the need for curricula to provide opportunities for young people to learn the skills needed for making democratic decisions and for participating actively in their society's affairs.

Education at secondary level in the three countries has responded (in different degrees) to these demands at mainly organisational level. However, the pragmatic curriculum in America has been geared, to some extent, to these demands. But the same did not occur with the essentialist curriculum in England nor particularly with the encyclopaedic curriculum in Egypt.

Thus, problem analysis and its intellectualisation is the subject of Chapter 1. The analysis of contextual variables or causes in the three countries, America, England and Egypt, is carried out in Chapters 2, 4 and 6, respectively. Then, in Chapters 3, 5 and 7, the analysis of curricula in the three countries is carried out. Finally, a theoretical framework to close the gap between theory and practice in the general secondary school in Egypt is suggested in Chapter 8.

ACKNOWLEDGMENTS

I wish to record my deepest sense of gratitude to my Supervisor, Mr Robert Cowen, Lecturer in Comparative Education, University of London, Institute of Education, for his stimulating guidance and constant encouragement. The years during which I have had the privilege of working under his care have been real educative years of my academic career. Without his unflinching patience with my shortcomings, this thesis would not have been successful.

I also wish to extend my grateful thanks to Professor George Parkyn who supervised my work from 1974 until his retirement in 1977 and fired my interest in it. It was Professor Brian Holmes, however, the Head of Comparative Education Department, University of London, Institute of Education, who introduced me to the study of Curriculum Development at Secondary Level in 1974. Since then I have been a constant member of his very significant and educative Seminar. The influence of the Problem Approach on my thinking, although it is not explicitly mentioned in this thesis, has been very profound.

My appreciation and thanks are also due to Mrs Alice Rockwell who took great pains in typing this thesis.

My deepest thanks is due to the Egyptian Government and Ministry of Education who, on behalf of the Egyptian people, contributed most of the money and the administrative facilities which made this thesis and many like it possible.

It would be unfair not to mention my wife Awatif and my children Samar and Sharif who lived alone back home and missed me for the first three years I had spent here when I needed to allocate all my time and effort to my study.

CONTENTS

	Page
ABSTRACT	2
ACKNOWLEDGMENTS	3
CONTENTS	4
INTRODUCTION	9
ORGANISATION OF THE THESIS	33
 <u>PART ONE</u>	
CHAPTER 1 PROBLEM ANALYSIS AND INTELLECTUALISATION	36
I. The Changes in Egypt since 1952	37
1. Political Change	37
2. Social Change	38
3. Economic Changes	40
II. The Problem Area	41
III. The Problem	46
1. Problem Analysis	46
2. Policy Formulation	48
3. Intellectualisation	49
a) Curriculum Development	49
b) Social Equilibrium	53
c) Modernisation and the Curriculum	55
4. Formulation of Policy Proposals	58
Notes	62
 <u>PART TWO</u>	
CHAPTER 2 THE CONTEXTUAL VARIABLES IN THE USA SINCE 1900	65
I. Social Change	66
1. Social Classes	66
2. The Influence of Social Structure on Secondary High School and its Curriculum	76
II. Social Mobility	80
1. Technological Change and its Bearing on the Curriculum	81
2. Demographic Change and its Bearing on the Curriculum	93
3. Political Change and Democracy and the Curriculum	97
4. Educational Change	101
a) The Reorganisation of Secondary Education	101
b) Non-selective System	104
c) Administration	106
Notes	112

	Page
CHAPTER 3 CURRICULUM DEVELOPMENT IN AMERICAN SECONDARY SCHOOLS SINCE 1900	119
I. The First Phase: 1890-1920	120
1. Curriculum Aims and Objectives	120
2. Curriculum Content	124
a) The Academic Disciplines	124
b) The Cultural Studies	125
c) The Occupational Fields	126
d) Student Activities	127
3. Organisation and Methods	127
4. The Evaluation System	129
II. The Second Phase: 1920-1950	130
1. Curriculum Aims and Objectives	131
2. Curriculum Content	135
a) The Academic Disciplines	135
b) The Cultural Studies	137
c) The Occupational Fields	138
d) Student Activities	139
3. Organisation and Methods	140
4. The Evaluation System	142
III. The Third Phase: 1950-1970s	143
1. Curriculum Aims and Objectives	146
2. Curriculum Content	151
a) The Academic Disciplines	151
b) The Cultural Studies	159
c) The Occupational Fields	164
d) Student Activities	173
3. Organisation and Methods	176
4. The Evaluation System	178
IV. Conclusion	181
Notes	183

PART THREE

CHAPTER 4 THE CONTEXTUAL VARIABLES IN ENGLAND SINCE THE SECOND WORLD WAR	193
I. Social Change	194
1. Social Classes	194
2. The Influence of Social Structure on School and Curriculum	200
II. Social Mobility	209
1. Technological Change	213
a) Large Scale Production	215
b) Reorganisation of Economy	216
c) Progress in Agriculture	219
d) Economic Growth	220

	Page
2. Demographic Change	221
a) Age and Sex Distribution	223
b) The Working Population	225
3. Political Change	228
4. Educational Change	231
a) Administration	231
b) Selective System	237
c) The Effects of Selection	239
d) The Reorganisation of Secondary Education	242
Notes	247
CHAPTER 5 CURRICULUM DEVELOPMENT IN SECONDARY SCHOOLS IN ENGLAND SINCE 1944	254
Contextual Conditions	255
I. Curriculum Aims and Specifications	257
1. The Academic Field	265
2. The Occupational Field	273
3. The Cultural Field	275
II. Curriculum Content	278
1. The Academic Field	280
2. The Occupational Field	288
3. Students' Interests	289
III. Teaching Methods and Organisation	290
1. Teaching Methods	290
2. Organisation	294
a) Streaming	294
b) Integration	296
IV. Evaluation	302
1. The Aims of Examinations	302
2. Types of Examinations	303
3. Reliability and Validity of Examinations	308
Notes	312

#### PART FOUR

CHAPTER 6 THE CONTEXTUAL VARIABLES IN EGYPT SINCE 1952	321
I. Social Changes	322
1. Social Classes	322
II. Social Mobility	330
1. Modernisation in Agriculture	339
a) The Agrarian Reform	339
b) Land Reclamation	340
c) Peasants and Land	342
d) Agriculture and Economy	344

	Page
2. Modernisation in Industry	346
a) New Policy	346
b) National Planning	348
c) Industrial Output	352
d) Industrial Structure and the State	355
e) Industrialisation and Urbanisation	356
f) Labour Force	356
3. Demographic Change	367
a) Population Growth	367
b) Age and Sex Composition of the Population	369
c) Fertility and Mortality	372
d) Family Planning	374
4. Political Change	375
a) Normative Change	375
b) Democratic Participation	377
5. Educational Change	385
a) Reorganisation of Education	385
b) Selective System	390
c) Administration	393
Notes	397
CHAPTER 7 CURRICULUM DEVELOPMENT IN THE GENERAL SECONDARY SCHOOL IN EGYPT SINCE 1952	403
I. The French Influence	404
II. The Major Changes Since 1952	407
1. Normative Change	407
2. Institutional Change	409
III. The General Secondary School Curriculum (non-change)	422
1. Aims	422
2. Content	428
3. Organisation and Method	444
4. Evaluation	453
Notes	465
<u>PART FIVE</u>	
CHAPTER 8 BASES FOR A CURRICULUM MODEL	473
I. General Review	474
II. Social Change and Curriculum Theories	489
III. The Need for a Theory of Curriculum Development in Egypt	492
1. The Nature of Man	494
2. The Nature of Society	500
3. The Nature of Knowledge	505
IV. A New Curriculum Model	508
V. A Proposal for the Reorganisation of Secondary Education	511

	Page
VI. A New Direction for Curriculum Development	517
1. Aims and Objectives	518
2. Content and Learning Experiences	523
3. Organisation and Method	527
4. Examinations and Evaluation Process	531
VII. Concluding Comment	534
Notes	535
BIBLIOGRAPHY	540

INTRODUCTION

Egypt before the 1952 Revolution was characterised by very marked socio-economic, political and educational inequality with distinctive social classes. The higher class, consisting mainly of landowners, was a small group of people who owned about one third of Egypt's land. This group had considerable influence on the socio-economic and political affairs throughout the country.

The middle class was small in number, consisting mainly of professionals, directors of companies, lawyers and industrialists. The higher degree of culture and social awareness of most members of this class and their realisation of the poverty of the majority of the population especially in the rural areas, had given them a much keener awareness of the country's problems than the large landlords. However, this class had little political influence.

Members of the lower-middle class, such as government officials, employees, tradesmen, and the less successful members of the professionals were passing through a severe crisis. Traders, lawyers and doctors had to face the rivalry of foreigners. Employees were surrounded by a hostile ring of Levantine clerks, and their future was blocked by the foreigners who dominated the country's business.

The lower class consisted of town workers and peasants or 'fellaheen'. The poverty of this class was very obvious to any observer, especially the low standard of living, the overcrowded conditions in which the bulk of Egyptian people lived, and the prevalence of malnutrition, ill-health, pellagra and contagious diseases. Social services and education were very inadequate. The high rate of illiteracy among workers combined with the lack of technical schools and the poverty of trade unions had justified industrialists' complaints of the negligence and low productivity of

Egyptian workmen. The peasant lived in very poor conditions. His house was a mud-brick hovel and his working clothes mere rags. He was in very close contact with land. He spent his day knee-deep in mud. His poor food and the muddy water of the Nile could explain the high incidence of pellagra, tuberculosis and other contagious diseases. There was little civic life. Most of the rural areas were cut off from the civilising influence of the towns. This was due to the poor condition of roads, education and communications.

The foreign communities consisted of the Jews, Armenians, Greeks, Italians, French and the British. Jews tended to concentrate on finance and commerce and lately on industry. The Greeks' commercial character was especially marked. Although the French community was small in number, its cultural influence was enormous. French schools, language and newspapers were the principal means of introducing French and European culture into Egypt. However, French was rapidly losing ground in favour of English; but the cultural influence of the British, though growing, was inferior to that of the French. In brief, during the first half of the twentieth century, Britain dominated the Egyptian political life, while France was the strongest influence on cultural and intellectual life, and other foreign communities controlled finance, trade and business.

The 1952 Revolution was a turning point in the socio-economic, political and educational life of the country. The leaders of this revolution had little or no political experience or ideology. They were forced, therefore, to be completely pragmatic in their approach to government and reform. They believed, however, that a revolution cannot achieve its aims for the people unless it goes beyond the mere political goal of independence and tackles the roots of social and economic problems. Thus, the fall of

monarchy and the ending of the foreign influence were not the only aims of the revolution, but rather the building up of a new social order characterised by sufficiency and justice.

The social and economic policies were often motivated by distributional objectives. The leaders of the new government believed that the distribution of wealth in the rural areas was inconsistent with any concept of justice and gave rise to social evils, one of which was the enslavement of the majority of 'fellaheen' by a minority of the big landlords and the direction of the country's general policy according to their personal interests.

Before the 1952 Agrarian Reform, over 94 per cent of all landowners shared only 35 per cent of the cultivated land, while the remaining 6 per cent of the owners held 65 per cent, half a per cent of whom owned about one third of the whole land. An important change in the distribution of agricultural wealth between 1952 and 1965 is the disappearance of the more than 100 feddan. Surplus lands were redistributed among landless families of no less than 2 and no more than 5 feddans each. Distribution of land has increased the average size of the smallest farm by 50 per cent.

Land reclamation as well as land reform was considered to be a main factor of change; accordingly, reclamation projects were carried out during the 1950s and 1960s. By 1972, almost one million feddans were reclaimed and distributed among landless farmers. Over 400,000 families including some three million individuals benefited by land redistribution of both reclamation and agrarian reform. Co-operative Societies were established all over the countryside to offer various forms of aid to 'fellaheen'. New farming techniques were introduced and new scientific projects of irrigation developed, and all these brought higher crops and

higher per capita incomes. However, the 'fella' is not turning easily from the traditional methods of farming which he has practised for so long. Therefore, the agricultural sector is really still in need of a more educated and trained labour force.

Before the 1952 Revolution there were no well defined industrial plans. Industrial projects were dominated by individuals and aimed at realising quick profits without taking into consideration national interests. Most industries were dependent upon agricultural products such as the food industries, textile industries and furniture manufacturing industries. After the revolution the dominantly free enterprise policy was replaced by a Socialist one depending upon economic planning and state control. All Revolution documents indicate that the national economy should be organised in accordance with comprehensive development plans. Accordingly a number of planning bodies was established in the 1950s and 1960s. Ownership which was dominantly individual has been changed, through nationalisation, into three types of ownership: public, private and co-operative.

From the late 1950s to 1970, social and economic plans were carried out with the target of doubling the national income by 1970. About 40 per cent of the capital was allocated to industry and 20 per cent to increase the agricultural potential. During the planning period, population was shifting from rural to urban areas and employment was shifting from agriculture to industry. Due care was given to the old-established industries, and about 800 new industrial enterprises were established. However, the overall target could not be reached because of the outbreak of war with Israel in 1967.

The value of industrial production rose by 285 per cent during the

period 1951/52 - 1967/68. While industry contributed in 1950 about 8.4 per cent of the total national income, this rose to about 22 per cent in 1966. Despite obvious progress, industry suffers acutely from mismanagement, bureaucracy and shortage of skilled manpower.

One of the major aims of the industrial planning is to increase the standard of living in the rural areas by laying down extensive programmes for the industrialisation of the countryside, training the agricultural workers in rural manufactures, and thus keeping them from migrating to urban areas. Although some rural manufactures have been established in some areas, the countryside is still far from the required industrial level.

Major changes in labour legislation and policies were introduced in 1961 and 1962. Since then workers and employees have the right of 25 per cent of the net profits of firms and factories in which they work. Membership of company boards was reorganised. A board of seven members must include one weekly paid worker and one salaried employee. Social insurance became compulsory and the employer's contribution was increased from 7 to 17 per cent of salary. Average wages of manual workers rose sharply. Hours of work were reduced from 48 to 42 hours a week. Women are guaranteed non-discrimination when they hold the same job as male workers.

The Egyptian industrial workforce is aware that it has benefited most from the new legislation and from the country's economic development since the Revolution. The strongest criticism that can be made is that the industrial workers have benefited much more than the 'fellaheen'. And this has also encouraged the drift from rural to urban areas.

It is certain that the efficiency of Egyptian workmen has risen

considerably during the last twenty-five years, but there is equally no doubt that the productivity of Egyptian workmen is still far below that to be found in the USA and UK. The lack of entrepreneurship and managerial skills is one of the biggest obstacles impeding industrial progress. Many studies on this subject concluded that most of the firms and factories studied suffered from acute shortage of managers with imaginative power, competent administrators, experienced professional staff and skilled workers. Despite the spread of general and technical education, it seems that Egypt has failed in its attempt to provide efficiently 'skilled labour' to the Egyptian economic development.

Population in Egypt has doubled in the 40 years between 1927 and 1966. This is, on the one hand, due to the increased birth rate and, on the other hand, due to the amelioration of the health conditions and its effect on the reduction of death rates, in addition to the improvement of social services which also contributed to the reduction of infant mortality rates. It appears from comparison that Egypt is characterised by the highest proportion of children (less than 15 years), being almost double the figures in Britain and 15 per cent more than the USA in this respect. On the other hand, the population proportion of the 15-44 and 45-64 age groups in Egypt is less than those in USA and UK. This population pattern, in which the percentage of the young age group is high and the productive group is low, has a great effect on the efforts made in the field of economic and social progress.

Many studies indicate that fertility is inversely related to the mother's and father's level of education. In other words, fertility declines with increased education. But it seems evident that secondary school and its curriculum did not respond adequately to the enormous

increase of the birth rate in Egypt.

During the pre-Revolution period, the King had extreme power. Political life was characterised by British occupation, corruption and unrest. The Egyptian Cabinet frequently changed twice or three times a year. Two fifths of the parliamentary members were appointed by the King and the rest represented the big landlords, capitalists and the members of political parties.

The basic features of the new society which the Revolution intended to build are: Freedom, Socialism and Unity. Freedom is the freedom of the country and the freedom of the citizen. Socialism is both sufficiency in production and justice in distribution. Unity is the restoration of the natural order of a nation torn apart by the Colonial Powers against its own will. Accordingly, the monarchy was abolished and the Egyptian Republic was established in 1953. The complete independence was accomplished according to the Evacuation Treaty in 1954.

The Revolutionary regime believes that political democracy cannot be separated from social democracy. No citizen can be regarded as free to vote unless he is given guarantees against exploitation and anxiety. He should be given a fair share of the national wealth. Accordingly, the socialist form of democracy was adopted. The single political party was established for all people. Such parties took the form of 'National Liberation Rally', then 'National Union', then the 'Arab Socialist Union'. The Constitution asserted that workers and 'fellaheen' must be granted the right of at least 50 per cent representation in Parliament membership as well as in all legislative councils.

This policy continued to dominate the political scene in Egypt from 1952 right up to the mid-seventies. Then a profound political change

occurred in late 1976. The traditional socialist form of democracy was abolished, and three political parties, in line with Western democracy, were established. Political debates and political changes have been going on ever since considering the success or failure of this experiment.

However, democracy in Egypt is still facing enormous difficulties. Many of the serious socio-economic and political decisions are taken individually outside the concerned institutions. Many Egyptian people are deprived of participation in the making of such decisions. This could be attributable, in part, to the absence of political education and curriculum integration in secondary and higher education.

In pre-Revolution days there was a dual system of education: free, but poor elementary education for the masses; primary, secondary and higher education for the higher classes with sufficient means for paying the fees. The Egyptian Revolution regarded education as the key to development and progress. It believed that education is the right of every citizen regardless of his income or social status. Accordingly, the dual system was abolished, elementary and primary education were unified in one primary school from the age of six to twelve. Education became free of charge at all levels. However, the educational policy has failed to universalise primary education since about one million of compulsory-aged children are still out of school. This could be, in part, a bottleneck to rural development programmes.

The educational budget has increased rapidly from £E 23 million in 1952 to £E 213 million in 1976. Enrolment has also increased at various levels. The number of students in the technical secondary schools increased by 814 per cent from 1952/53 to 1970/71. The proportion of enrolment in these schools increased from 12.4 per cent in 1953 to 52 per cent in 1974.

In this category, however, commercial schools tend to dominate enrolment in this group since they had 32 per cent of the enrolment, while the most needed graduates of industrial and agricultural schools are much less (about 14 per cent and 6 per cent of enrolment). Enrolment in the general secondary school alone was 48 per cent in 1974. However, the increased population in the classroom has not been matched with an adequate selection of curriculum content, organisation and methods of teaching and learning.

The Egyptian education system is a highly selective one. The traditional attitudes towards technical education are reflective of earlier European educational systems in general and the French system in particular. Parents tend to favour general secondary schools for their children because they are the customary stepping stones to prestigious university degrees. Selection starts as early as the end of primary education when a general examination is held to select pupils for the preparatory stage which is general education for all pupils. At the end of the preparatory stage, another selective examination is held to choose and distribute successful pupils among general and technical schools. Pupils with the highest marks enter general secondary schools. Others with lower marks enter technical schools. The progression rate from primary to preparatory level is about 70 per cent. The rate from preparatory to secondary level is about 60 per cent. Success at the final examination of general secondary schools fluctuates between 70 to 75 per cent.

It could be concluded that the socio-economic, political and educational changes which have been taking place in Egyptian society since 1952 have created demands on secondary education in general and on the secondary school curricula in particular. However, the general secondary school

curriculum did not respond adequately to these demands.

Since the French Expedition on Egypt in 1798, the French succeeded in promoting their cultural ideas and system of education. A modern system of education modelled on French lines was established by Mohamed Ali during the first half of the nineteenth century. Ever since the general secondary school curriculum in Egypt has followed the French line in general and the lycée's model in particular.

This curriculum is characterised by being relatively unresponsive to social pressures arising from social, economic and political changes. The main aim of the curriculum in this type of education is to serve as a selection base for higher education. So it is the features of French encyclopaedic curriculum theory which, to some extent, the aims of general secondary school in Egypt are confirming.

The general secondary school in Egypt is following the encyclopaedic school of thought that all knowledge of the real world is useful and should be included in the content of its curriculum. Therefore, the content consists of more than ten subjects. Debates and contradictions about the depth and breadth of the content of the curriculum are going on. As for the last two years of the general secondary school, the Ministry of Education is struggling to retain a broadly based content while reducing the number of subjects.

The curriculum in the general secondary school is organised along the subject-centred approach. A high value is placed on reason and logical organisation of the content. Since logical organisation of the curriculum content is first in importance, the problems and interests of pupils as well as the social, economic and political demands are ignored or treated as of secondary importance.

Despite many improvements which have been made, the curriculum content and its organisation and evaluation have not matched the expressed aims and goals. Improvements have always been made in terms of changing certain aspects of the curriculum without changing the fundamental concepts of it or its organisation. Changing institutions involves changing both aims and means although aims and institutionalised means may not always correspond. Here there is an emphasis on aims without a corresponding emphasis on adequate means to achieve these aims. Such aims as 'whole personality' or 'critical thinking' may be considered as aspirations with little attention being paid to the institutional means of achieving them.

Examinations which are all important in the general secondary school are rigid and unimaginative. From the beginning of the school year to the end, the teacher drills his students in the facts and information, especially those that the examiners are liable to stress. Examinations, therefore, are testing the lowest level of the cognitive domain, namely, the memory or recall, and disregarding the higher level of the mental process such as comprehension, application, analysis, analogy, etc. Thus there is a great discrepancy between the scope of curriculum aims and the scope of the evaluation process.

As for the USA, the technological changes which have taken place during the twentieth century are more than what has been done in all previous history. Moreover, the pace of technology has increased sharply since the Second World War and appears to be ever quickening. Technological change affected almost every aspect of life in the USA. Automation in particular has had a dramatic impact on many American industries as well as on many parts of the service sector of the economy.

Agriculture has been dramatically affected by technological change in

the broadest sense, with the result that the United States is producing much more food with less manpower than two generations ago. Behind the agricultural revolution there has been a tremendous network of roads and motorways and the establishment of agricultural experimental stations which helped in developing machinery, chemical crops, fertilisers and so forth.

A further significant factor is the rapidly shrinking gap between scientific discovery and industrial and agricultural application. The most interesting factor, however, has been the recognition of the unique role of the universities and research centres in modern society; that they can create resources. This has been done in communications, steel industry, automobiles, nuclear energy, as well as in agriculture. Therefore, education for adaptability to changes in the required skills is thought to be important. This means not only skill training that is broad enough to enable the individual to pick up new techniques with comparative ease as his changing jobs require them, but the emotional adaptability to accommodate himself to the changing needs created by technological innovations.

At the beginning of this century there were sixty families who controlled a substantial portion of American productive wealth. The twentieth century, however, has witnessed a kind of redistribution of American wealth. In most of the largest corporations, ownership and control have become largely separated. The proportionate increase in professionals, urban proprietors, managers, officials, skilled and semi-skilled workers has sharply increased. The annual growth rate has increased. Per capita income increased rapidly at all levels of the social scale.

Changes in the size and composition of the population have also important social and economic effects, as does immigration. In the USA, population has increased from about 80 million at the turn of the century

to about 180 million in 1960, and to 205.4 million in 1970. During the nineteenth century immigrants had generally pushed into the agricultural areas. But from the beginning of the twentieth century the 'new' immigrants tended to remain in the industrial areas. They seemed far more than earlier comers to settle in self-contained urban neighbourhoods.

The increase of population, combined with the opening access of secondary education for all, have been affecting enrolment in the public high school. The increase of enrolment has been spectacular. The unalterable fact was that teachers had to keep all the young people sent to them. This ground rule meant that something had to be found for each individual or group to do, and that something could not be the continual concentration on facts and memory.

As a result of the sophistication of technology and its changing demands, the secondary school curriculum in the USA has focused upon a broad general education with an understanding of occupational demands. The rapid increase in population, with movement to urban areas, requires more goods and services. The employment demands are for the more highly skilled labour. All these result in greater emphasis being placed on vocational offerings in the secondary school. The increasing leisure time and the prospect of earlier retirement and longer life span, have reflected in much attention being paid to the cultural area of the curriculum.

As for political changes, the Republican Party had dominated the political life in the USA from Independence until 1860. Then the Democratic Party was established. Since then, democratic ideas and democratic institutions have been growing up. One of these institutions was education. In many different ways, the leaders of the country said that if a society was to be a democratic one, then the people who elected the government, held

office, made laws, enforced laws and consented to be ruled, must be educated as responsible citizens. How was this to be done? The answer was that it could best be done by a common school, close to the people, taught in English, to which all the students of all the people could go together and learn how to live together and govern themselves.

However, a lot remains to be done. In the post-war era, in many circumstances, the USA has been called upon to play the role of leadership in international affairs that was taken previously by Britain and France. Her educational task has been changed. Already considerable interest has been shown by political scientists in the USA in the public's role in the conduct of international affairs. And this has been reflected in the curricula of secondary and higher education. The secondary school is marked by an increasing Social Studies offering world history and economics, and world affairs courses have increased. New trends have also emerged, such as the increasing interest in the history and culture of non-Western societies and the role that each nation has to play now and in the future.

As in Egypt and the USA, social mobility up and down the social scale in England could be explained in the light of the socio-economic, political and educational changes that have been taking place since the Second World War. It was during the second half of the nineteenth century and the beginning of the twentieth century that Britain enjoyed the fruits of a head-start in the industrial revolution. However, by the outbreak of World War I, British industry had certainly settled into a rigid pattern from which adjustment was only begun during the inter-war period and completed under the stimulus of the Second World War. Following the destruction of the war and the growing up of technology and competition in many parts of the world, many British industrial competitors concentrated on building up

new capital equipment making use of the latest research and innovation. Since then the economy has altered and adapted itself, to a great extent, to the new situation. About 25 per cent of manufacturing workers are now employed in engineering, electrical goods, and shipbuilding industries, with their highly variegated output of products which fifty years ago were generally unheard of. Another 10 per cent are employed in the vehicles industry. The post-war period has witnessed the rapid increase of nuclear energy and the use of man-manufactured 'raw materials'.

During the nineteenth and the beginning of the twentieth century, the economic resources had been dominated by the private sector. Several public enterprises were started by Conservative governments between the two World Wars, but most of Britain's large nationalised industries were created by Labour governments after the Second World War.

The mechanisation of agriculture in combination with the increases of efficiency in crop and animal production have resulted in an annual growth in labour productivity of about 6 per cent at present, which is much higher than the average improvement in manufacturing industries and double the rate of improvement in the economy as a whole.

However, Britain's slow economic growth, compared with that of other advanced industrial nations could be attributable to two main factors: the capital and the human. The human factor includes the shortage of skilled labourers and engineers and the insufficient attention to the importance of engineering design, and the attitudes of trade unions and workers; and finally, the inefficiency and lack of initiative on the part of managements.

Since the Second World War Britain has gradually lost its colonies in the world. Consequently, it lost a great deal of raw materials, investments, and markets. So, a growing distance has been recognised between Britain and

the USA, Japan and some Western countries. Since the war, therefore, the USA has exercised the role of leadership in world affairs that Britain and France previously played. Eventually, Britain had to communicate and co-operate with her European neighbours.

In the pre-war period the government had been most of the time in the hands of the Conservative Party. Since the war the situation has reversed, the Labour Party has a clear preponderance over other parties. The social composition of Parliament has changed. The franchise rights had been extended to women, on the same terms as men, since 1935. Representation of the hereditarily titled class, country gentlemen and upper class professionals, fell off sharply from the 1950s. The other professions together with scientists and technologists have come to contribute a large number in the Parliament representation. However, there is inconsistency between domestic and foreign policies and a lack of national unity about the economic policy.

Changed world conditions after the war and the balance between the two major political parties have made the pursuit of consistent policies in Education in Britain a difficult task. Further, the inclusion of Britain into the European Community emphasises different kinds of learning including a more competent study of foreign languages and a widespread and continuing commitment to technological and commercial retraining. Did the educational system and the secondary school curriculum change to meet these needs?

Many of the basic issues in political and economic affairs have been worsened by an educational system which tended to maintain traditional social class attitudes. However, education policies have been changed substantially. Secondary education for all was introduced immediately after the war. The school leaving age was raised to the age of 15 in 1947

and to 16 in 1973. The reorganisation of secondary education on comprehensive lines to eliminate selection is largely accomplished. However, there is a wide gap between the secondary school curriculum and the social, economic and political needs; young people are not sufficiently taught about these needs and problems facing their society.

Despite efforts to reexpress social, economic, political and individual needs in curriculum aims and goals, the content, organisation and evaluation of the curriculum have not matched the expressed aims and goals. In England like in Egypt, and to a much lesser extent in the USA, there is an emphasis on aims without equal emphasis on adequate means to achieve these aims. In other words, the socio-economic, political and technological aims expressed especially in Egypt and to some extent in England, may be considered as aspirations with inadequate attention being paid to the institutional means of achieving them.

Explosions of aspirations, and efforts to adjust educational systems to them do not take place in a social vacuum. There are no universal social laws; there are tentative explanatory hypotheses which apply on the basis of specific initial conditions, and in particular social contexts. In given social contexts there are sources of change which cannot be simplistically classified by particular theories (such as Marxism). There is some consensus however that technology and demography are frequent sources of change. It is also the case that political and social aspirations are powerful sources of change. The educational system itself is both the recipient of change, and in certain cases, the source of further pressures toward change.

In summary, as Holmes points out:

"... a specification of the circumstances under which predictions are to be made involves three operations. First, the contextual determinants or initial conditions should be identified and analysed in detail. Second,

those relevant to the problem under consideration should be selected, thus reducing the total number of variables to manageable proportions. Finally, in order to make logical deductions each of the factors (variables) should be weighted relative to the others."

1

The contextual variables in the USA, England and Egypt will be classified in the following major categories: social mobility; technological change; demographic change; political change; and finally, educational change. Each of these categories identifies both an existing social condition and areas of social dynamics which pose problems of adaptability for the educational system. Within the educational system, some changes, for example, changes in school structures will pose problems in other educational areas - such as curriculum.

Social and economic change is so various and continuous that, for analysis to proceed some arbitrariness must be introduced in analytic categories. By such arbitrariness one thing can be examined at a time. The categories chosen are those which are conventional among social change theorists. In each area of change it is important to find out whether the societies concerned have been getting more or less rigid and to predict the probable situation in the future bearing in mind, all the time, the educational condition.

In a complex, industrial society where the level of technology allows movement towards more automation, one would expect an increase in technical and supervisory jobs rather than unskilled or routine clerical work, as machines are developed to take over heavy and repetitive work. Technological change is constant by altering the shape of the occupational distribution by creating new jobs at the upper levels. Therefore, one would expect a higher

proportion of men working as technicians, skilled workers and administrators, and a lower proportion as unskilled labourers. This upgrading of the work force creates mobility as many sons of unskilled labourers become skilled workers, technicians and administrators.

Under technological advancement, one would expect an expansion of the labour force, a change of the distribution of jobs, a decline in the farm jobs and an increase of urban professional, business and clerical jobs. One would also expect an increase in service occupations if more leisure time were available to greater numbers as a result of mechanical aids. Certainly all these changes create mobility at social scale levels.

Technological changes have created demands on education in general, and on secondary school and its curriculum in particular. It is thought that educating for adaptability to changes in skills requirements is to be vital. This means not only curriculum activities are broad enough to enable the individual to pick up new techniques with comparative ease as his changing job conditions demand them, but the emotional adaptability to accommodate himself to the changes created by technological innovations.

Demographic change, composition of population, the size of each age-group, the birth and death rates are also affected in social mobility. For example, birth and death rates in high status groups are major factors in determining the availability of high status positions and in industrialised societies, such as the USA and England, the general rule is for the birth rate to go down as income and status positions go up. But this is true only among the educated class in Egypt.

The population pattern in which the percentages of the young-age group is high and the old-age group is low is characteristic of the demographic status of developing countries, such as Egypt, and has a great effect on

the efforts made in the field of socio-economic and educational progress. The increase in the proportion of children, as a result of the high birth rate, creates an increase in expenditure in the field of public services, especially education, health and social welfare. This in turn creates more pressures on the productive elements of the population.

Immigration and migration also affect social change and social mobility. The population movement of consequence in the countries concerned has been the migration of rural young people to the big towns and cities. They usually entered industries at the unskilled and semi-skilled levels. They often suffered discrimination which slowed their ascent into the skilled and white-collar jobs.

The European reformers and the American revolutionaries did not think that individuals were equal in all respects. They thought individuals should be equal before the law, but national leaders should be selected from an aristocracy, not of birth, but of natural talents. This justified a special kind of secondary school with a special curriculum for the academically and intellectually able students. The most important feature of the concept of equality was related to political equality. Economic equality was ignored. Even though few national leaders denied the right of every adult to exercise the vote.

In practice, equality before the law has been followed by political equality. The old aristocracy has been destroyed and power has gradually shifted from them to the middle class of employers, managers and professional people until now it is shared by the latter and those institutions which represent the interests of the majority of the populations. Labour everywhere gained considerable power, and this has resulted, particularly since the Second World War in America and England, and since the 1952 Revolution

in Egypt, in far greater economic equality. Ever since, there is a general tendency for moving away from an elitist view of society to a more egalitarian view. There has also been a growing concern about equality of opportunity and questions of social justice, in addition to the configuration of democratic institutions and the move away from religious values to the more rationalist and secular ways of thinking, particularly in America and England. The former demands that the curriculum should provide opportunities for children to learn the skills needed in the making of democratic decisions, the latter has made pupils more likely to question authority and to demand explanation and participation.

Under both arguments, education as a human right and education as a form of investment for economic growth, secondary education for all has been accomplished and a common school for all has been established in both the USA and England. In Egypt, free education at all levels has been accomplished, and the expansion of compulsory education up to the age of 15 or 16 has been emphasised.

As a result of trends towards greater technological complexity and larger organisational size, American society has become more bureaucratic both in private industry and in government. A major feature of bureaucracies is that they establish formal rules of 'personnel policy'. These rules define various jobs and establish requirements of education and experience for each position. Consequently, the secondary school curriculum has been geared to some extent to social and economic needs. Before people are allowed to show what they can do, they must display diplomas which indicate what they have learned.

In Egypt and England, however, the curriculum was geared to the needs of the leisured class and of those belonging to it who were destined to

become the leaders of a certain kind of society. The ability of this group to direct young people, today, into socially necessary occupations is open to question. Similarly, its relationship with a social-class structure in which power is no longer the monopoly of one class might be disruptive. However, the traditional curriculum in secondary school at present tends to perpetuate a class system based on educational opportunities which represents neither economic nor political power.

Concerning the analysis of curriculum in the three countries, Holmes's classification of the four main curriculum theories, namely essentialism, encyclopaedism, pragmatism and polytechnicalisation will be followed. Further, an identification of each of these curriculum theories will be carried out throughout the thesis in terms of: aims; content; organisation and method; and evaluation. But why is this classification necessary?

All curricula, no matter what their particular design, are composed of certain components. A curriculum usually contains a statement of aims or goals and of specific objectives. The statement of aims indicates some selection of content and learning experience and it indicates also the way in which the content ought to be organised. Only certain objectives can be implemented by the nature of curriculum content. Others can be implemented only by the nature and organisation of learning experiences. Thinking, for example, is one of the latter objectives. So, the statement of aims either implies or manifests certain types of teaching and learning, whether because the objectives required them or because the organisation of the content demanded them. Finally, a curriculum includes a programme of evaluation which ought to be consistent with the nature of aims and objectives and relevant to diagnosing the weaknesses and strengths of the teaching and learning process, and measuring the outcomes.

Curriculum development, therefore, is a complex undertaking that demands many kinds of decisions. Decisions need to be made about the general aims which schools are to pursue and about the more specific objectives of teaching and learning. The major areas of knowledge must be selected, as well as the specific content to be covered in each. Decisions need to be made about the type of organisation and teaching methods with which to implement both the content understandings and other objectives. Decisions need to be made regarding how to evaluate what people are learning and the effectiveness of the teaching and learning process in achieving the desired aims. Finally, a decision needs to be made regarding what over-all pattern of curriculum theory, the designed curriculum, is to be. For all these considerations, it is intended here to analyse the curricula in the three countries in terms of aims, content, organisation and method, and evaluation.

---

NOTE:

1. Holmes, B. Problems in Education: a comparative approach, London, Routledge & Kegan Paul, 1965, p.41

ORGANISATION OF THE THESIS

This thesis consists of five parts. Part One, which consists of Chapter 1, is allocated to problem analysis.

Part Two comprises Chapters 2 and 3. Chapter 2 has been allocated to contextual variables of change in the USA since 1900. This chapter will deal with the following aspects:

- a. Social change: social mobility; the norms and attitudes towards secondary schools and their curricula.
- b. Technological change: in industry and agriculture; the rate of economic growth; the need for skilled manpower and their bearing on the secondary school curriculum.
- c. Demographic change and its bearing on secondary school enrolment and curriculum.
- d. Political change: normative change, institutional change, democratic participation and its bearing on the curriculum.
- e. Educational change: the reorganisation of secondary education; the effects of selective or non-selective system; and finally, the system of administration.

Chapter 3 has been allocated to curriculum development in the American secondary high school since 1900. In this chapter, a theory (theories) will be chosen to examine the nature of the curriculum in the USA, and to indicate the changes that have or have not taken place in response to the contextual variables set out in Chapter 2. This shall be done taking into consideration contextual causes, curriculum aims and objectives and curriculum content and learning experience. In this aspect, attention will be paid to the balance between different areas of knowledge and the introduction of vocational and practical studies. Attention will also be given to the organisation of content, evaluation systems and finally, the tendency

towards a common core curriculum.

Part Three comprises Chapters 4 and 5. Chapter 4 will deal with contextual causes of change in England since the Second World War. This chapter will be written in the same manner as Chapter 2. Chapter 5 has been allocated to curriculum development in secondary school in England since 1944. This chapter will be written in the same manner as Chapter 3.

Part Four comprises Chapters 6 and 7. Chapter 6 has been allocated to the analysis of contextual causes of change in Egypt since 1952. Chapter 7 is allocated to curriculum development in the general secondary school in Egypt since 1952. This chapter will be written in the same manner as Chapters 3 and 5.

Part Five comprises the final chapter, which is Chapter 8. This chapter will attempt to establish bases for a curriculum model which might be appropriate to the Egyptian conditions and needs identified in Chapter 6. This chapter will attempt also to show what has been learnt from the curriculum responses of the United States and England to socio-economic and political changes.

PART ONE

CHAPTER 1

PROBLEM ANALYSIS AND  
INTELLECTUALISATION

## I. THE CHANGES IN EGYPT SINCE 1952

The 1952 Revolution stands as a turning point in modern Egyptian history. Many socio-economic and political changes have taken place since then.

On the eve of the Revolution six major goals were announced. The most salient of these were: a) achievement of the country's complete independence; b) setting up of a sound democratic system; and c) establishing social justice.<sup>1</sup> The attainment of these Revolutionary goals required changes in many aspects of society.

### 1. Political Change

The instability and unrest which had characterised the pre-Revolution period was attributed to various phenomena: foreign occupation, a corrupt monarchy allied with feudalism and monopoly, and the political party situation. Changes made subsequently were as follows:

- a. From monarchy, the republican regime was established in 1953.
- b. Complete political independence was accomplished according to the Treaty of Evacuation in 1954.
- c. Political parties which were "only groups differing on personal questions or those regarding the Anglo-Egyptian relations",<sup>2</sup> were dissolved in 1953. Democracy according to the Revolution has come to mean "the sovereignty of the people, the placing of all authority in their hands and the dedication of power to the achievement of their goals."<sup>3</sup>

A socialist form of democracy was adopted: one political organisation for the whole people. This political organisation took the form of the 'Liberation Rally' from 1953 to 1957, the 'National Union' from 1957 until

1962, and the Arab Socialist Union from 1962 until the mid-1970s. In late 1976, The Arab Socialist Union has split into three parties: right, middle and left. The National Assembly consists of representatives of the three parties.

- d. Representation of the masses underwent big changes. Two fifths of the parliamentary members were appointed by the King. The rest mostly represented the big landowners and capitalists. Accordingly, the parliamentary organisations "hardly touched the lives of the bulk of the Egyptian people, the millions of fellaheen who lived in thousands of little hamlets in the Egyptian countryside".<sup>4</sup> Mass representation has been attained since 1957. Peasants and labourers have been granted the right of 50 per cent representation in Parliament as well as in all legislative councils.<sup>5</sup>

## 2. Social Changes

The structure of Egyptian society has undergone major changes since 1952:

- a. Before the Revolution, two distinct classes encompassed the majority of the population. The first class was composed of feudalists and capitalists, who represented only half a per cent of the total population but who owned more than 34 per cent of the cultivable land. The second class was mainly peasants and labourers. A middle class did exist but was mostly uninfluential.<sup>6</sup> Hence, a policy of social justice has been adopted to bridge the gulf between rich and poor through the laws of Land Reform in 1952, 1961 and in 1968, and also the Socialist Laws of 1961.
- b. The welfare of the masses came to be a main concern of the State.

For instance, 400,000 families including some three million individuals benefited by land redistribution. Co-operative Societies were established all over the countryside to offer various forms of aid to farmers. In 1971 the number of such Societies reached 5,013 covering all Egyptian villages.<sup>7</sup>

Social Service Centres were established in rural as well as urban areas. In 1971 their number reached 1,023 in the country as a whole.<sup>8</sup>

- c. The importance attached to industry required improvement in the conditions of the labouring group. According to the 1961 Socialist Laws, labourers enjoy: 50 per cent representation on boards of factories; 25 per cent of the annual net profit of the firms where they work; reduction of working hours to seven per day; various types of insurance in case of sickness, retirement and accidents.
- d. The status of women within Egyptian society has been substantially improved. They have been given franchise rights since the 1956 Constitution and formal equality with men in most types of work. According to the National Charter in 1962, "woman must be regarded as equal to man and she must, therefore, shed the remaining shackles that impede her free movement so that she might take a constructive and profound part in shaping life."<sup>9</sup> The enrolment of girls in all stages of education (which did not exceed 6 per cent in 1937) amounted to 38 per cent, 34 per cent and 36 per cent in primary, preparatory and general secondary education respectively in 1974.<sup>10</sup>

### 3. Economic Changes

The Egyptian economy before the Revolution was undergoing serious crises. Economic conditions were made worse by the slow growth of national income relative to the rate of population growth. The average annual growth rate in the national income from 1937-1947 was 1.5% whilst the growth in population was 1.9% during the same period.<sup>11</sup> Since the Revolution radical changes have been undertaken to improve living standards:

- a. The dominantly free enterprise policy was replaced by a socialist one depending on economic planning and State control. The Constitution stated that, "The National economy shall be organised in accordance with a comprehensive development plan which ensures raising the national income."<sup>12</sup>
- b. The agrarian economy before the Revolution (66% of the investments were in agriculture alone with a heavy stress on cotton production) was replaced by an agro-industrial one. Investment in agriculture from 1960-1970 was estimated at 36% whilst in industry it was 49.5%.<sup>13</sup> Attention to agriculture continued. For example, almost one million feddans have been reclaimed, that is 16% of the whole cultivable areas at mid-century.<sup>14</sup>

In industry, care has been given to the existing industries as well as to establishing new ones. Since 1952, 800 new industrial projects have been established.<sup>15</sup> Consequently, a clear change in the distribution of labour force has been witnessed. Between 1960-1970 the number of agricultural workers declined from 58% to 51% of the whole labour force, while in industry it rose from 12.6% to 18.5%

- c. Ownership, predominantly individual before the Revolution, has been

changed through a series of nationalisation schemes to three styles of ownership: public, co-operative and private. The National Charter stated that, "Nationalisation is the transfer of one of the means of production from the sphere of private ownership to that of public ownership."<sup>16</sup>

- d. The planned economic policy necessitated the establishment of new institutions, such as : the Permanent Council for Development of National Production in 1953; the National Planning Committee for drafting a national comprehensive plan for social and economic development in 1955; a new Ministry of Industry in 1956; and a new Ministry for Scientific Research in 1964.

It should be noted, however, that the socio-economic measures taken since 1952 have not all been of equal success, nor could they solve all the problems encountered. Chief among the hindrances is the population growth which is one of the highest in the world. The total population of the country nearly doubled in about thirty years. The population increased from 15,933,000 in 1937 to 30,076,000 in 1966.<sup>17</sup>

## II. THE PROBLEM AREA

The socio-economic and political changes after the 1952 Revolution have created a demand not only for more scientists and technologists, but also for more skilled workers and technicians to play their part in modernised and even automated industry.

According to a report made by the Ministerial Committee for Manpower in 1967, about educational policy in Egypt, "the expansion of education in Egypt has been carried out in a quantitative direction without paying due attention to the qualitative needs which are required for social and economic

development."<sup>18</sup> Egypt, therefore, is faced with an acute shortage among semi-skilled workers, skilled workers and technicians, while a surplus of labour exists for non-skilled jobs.

In the same report, the shortage of semi-skilled workers was estimated at 434,000 in 1970 and 500,000 in 1975, and is expected to rise to some 656,000 in 1980. The shortage of skilled workers was estimated at 139,000 in 1970, 267,000 in 1975, and is expected to rise to some 759,000 in 1980. The shortage of technicians was estimated at 213,000 in 1970, 263,000 in 1975, and is expected to rise to about 373,000 in 1980.<sup>19</sup>

The shortage among these groups could be attributable, in part, to the great numbers of students preferring to join general secondary schools rather than technical secondary schools. The National Council for Education, Scientific Research and Technology in 1974 reported that 48 per cent of students were enrolled in general secondary schools. Of the 52 per cent of students enrolled in technical schools, 14.1 per cent were in industrial schools, 5.9 per cent in agricultural schools and 32 per cent in commercial schools.<sup>20</sup>

One of the aims of the general secondary school is to prepare its students for universities and higher institutes. But the numbers of secondary school graduates exceed the capacity of universities and higher institutes. These institutions cannot absorb more than 50 to 60 per cent of the graduates. Moreover, the government does not undertake their employment in the public sector. The private sector employs few of them because of their lack of useful skills; there is already a surplus of clerks. Thus, the surplus of general secondary school graduates does not easily make skilled or even semi-skilled workers, or contribute qualitatively to the needs of development.

In the post-war period the USA and England have seen an increasing demand for skilled labour and technicians to play their role in reconstruction and development. Holmes pointed out:

"The war had multiple effects on Europe. All the major powers suffered economically.... In the victorious countries, particularly, there was a heightening of aspirations and expectations, the overriding principles of which were egalitarian. In Western Europe the demand was for peace, improved housing, better health services, ... and greater and less expensive access to education."  
21

The demand for education grew under the impetus of both arguments - education as a human right, and education as a form of investment for economic growth.

"The socio-political reformers demanded 'secondary education for all'. Progressive educationists agreed that secondary education as a human right should be made freely available and stressed the interests of each individual child in their desire to introduce more active methods of teaching and learning."  
22

The explosions of knowledge, aspirations, and population have contributed different pressures at different times in the three countries (USA, England and Egypt). The nature of demands can be grouped as follows:

- a. a demand for secondary education for all students according to their abilities and interests;
- b. an economic demand which has reflected the skilled manpower required for industry, commerce and the social services.

On the other hand, secondary schools have failed (at different degrees in the three countries), to respond adequately for the following reasons:

- a. traditional resistance or reluctance to educate young people according to their abilities and interests, e.g. the Selective System in both England and Egypt.

- b. institutional resistance, e.g. unbalanced curricula, the prevalence of theoretical concerns over practical ones, the stress on memorisation and rote learning, the rigidity of examinations, etc., especially in Egypt.

In the USA and England educational provision has approximated to demands more than in Egypt. For instance, secondary education for all students according to their interests and attitudes has been adopted as a stated policy in both the USA and England. The balance between languages, social studies, mathematics and natural sciences has been achieved to a great extent in the USA even more than in England, and in both countries more than in Egypt. The introduction of optional subjects to suit the individual differences has been achieved to a great extent in the USA, to some extent in England, but not yet in Egypt. Some attention has been given to vocational and practical skills in education in the USA; less attention has been given to these skills in England and Egypt. In the classroom, the stress laid on understanding, application, analysis and analogy rather than memorisation has been considerable in the USA and England; less so in Egypt. In both the USA and in England, there is some flexibility of curriculum provision. In both countries, each state or local authority or even every single school decides its own curriculum and method of teaching and textbooks, etc. In Egypt the situation is reversed. There is a deadening effect of a rigid centralisation which prescribes exactly the same curriculum and textbooks for every single school.

The explosions - of knowledge, aspirations and population - have contributed different pressures on the curriculum and methods of teaching. The greater amount of information means that it seems as if more must be learned if mastery is to be thorough. Students feel the pressure to

specialise earlier and earlier. Having specialised, they find it evermore difficult either to change from one area to another or to gain an overview of several fields.<sup>23</sup>

The explosion of knowledge and changes in school organisation have created problems of curriculum development. Holmes points out that:

"A major question is whether plans for curriculum differentiation can be prepared which will meet the many aims of education. Can the learning experiences and activities which constitute the curriculum meet the needs of society? And how, out of the vastly increased body of knowledge can appropriate selections be made?"

24

The explosion of scientific and technological knowledge accounts for another form of curriculum interest:

"namely the relationship between general (or academic) and vocational education. Of widespread concern, particularly of the 16-18 age group, is how relationships between school and work can be adjusted to satisfy educational, consumer and manpower demands."

25

In response, vocational subjects have been introduced in the USA and enrolments increased in vocational programmes. In England very little has been done. And in Egypt nothing has been done within general secondary education.

The increased birth rate during the war and immediately afterwards in the three countries, combined with the adoption of secondary education for all in the USA and England, has filled the schools with young people. The percentage of pupils in any class who could be expected to benefit from the old methods declined considerably. Brauner pointed out that "the enrolment revolution made schooling for the new clientele a regulatory fact before it could assure them a successful education."<sup>26</sup>

To meet the explosion of aspirations school systems expanded in the

three countries and secondary education was reorganised, or transformed, along comprehensive lines in both the USA and England. The age of compulsory attendance has been raised in both countries, and attempts have been made to universalise primary education in Egypt.

### III. THE PROBLEM

In Egypt, the socio-economic and political changes that have taken place since 1952 have not been matched by changes in the general secondary school curriculum.

#### 1. Problem Analysis

Changes in the social, economic and political context (as reflected in both educational and non-educational institutions) which have altered the demand for quality as well as quantity of secondary education have been met by a non-change response from the curriculum in the general secondary school. In other words, there is imbalance or inconsistencies between the socio-economic and political changes on the one hand and the non-change in the general secondary school curriculum on the other hand.

According to Holmes, "every educational issue has its socio-economic and political dimensions; and the reverse is equally true."<sup>27</sup> It may be fair to say that the socio-economic, political and even educational changes which have taken place in Egypt since 1952, in England after the Second World War, and in the USA since 1900, can serve as a point of departure for research in the curriculum development at secondary level. The problem itself, however, determines what is the relative importance of each of the factors contributing to it and its solution.

Accordingly, the major changes which have to be stressed in this study

are: social change, social mobility and the norms associated with them; the modernisation of industry and agriculture, the changing needs for skilled manpower, the rate of economic growth and the real income and standard of living and the norms associated with the modernisation of the economy; politically, stress will be laid on political norms, political institutions and democratic participation; demographically, stress will be laid on the increase of population, the age and sex distributions, the norms associated with them and their effect on school enrolment and curriculum; finally, in education, stress will be laid on the reorganisation of secondary education, the effect of Selective or non-Selective Systems, administration and the norms associated with them.

Concerning the non-change area which is the curriculum in general secondary school, stress will be laid on the following aspects: the vagueness of the curriculum aims and objectives and the inconsistencies between them as norms, and the curriculum content, organisation and methods and evaluation; the imbalance in the content of curriculum between different areas of knowledge; the prevalence of traditional organisation and methods of teaching and learning; and finally, the prevalence of traditional examinations that lay stress on memorisation and rote learning, regardless of understanding and critical thinking.

Such limitations do not imply that the other aspects of education, such as the general aims of education, structure, centralisation, finance and teacher education and training will be ignored. The selection of these variables simply means a restriction of interest on those which are most related to the problem at hand and its solution.

## 2. Policy Formulation

As Holmes points out, inevitably, policy must be "goal-directed",<sup>28</sup> a reflection of "social aspirations and expectations". Thus,

"the planners' task is to formulate policy (or policies) in such a way that those whose duty it is to adopt it can, if they wish, make a rational decision based on predicted outcomes."

29

Concerning the problem at hand, the main aim of general secondary education in Egypt - as stated by the Ministry of Education - is not only to prepare students for universities and higher institutes, but also to prepare them for life in their society as active and productive members. But the present curriculum in the general secondary school is not realising these aims. For schools to achieve these aims and to respond adequately to the demands made by the socio-economic and political changes the following changes in curricula should be put into practice:

- a. The establishment of a set of clear aims and specific objectives which could be applicable in the classroom. In formulating these aims and objectives, three resources must be taken into consideration: first, the socio-economic and political aims and goals; second, the nature of knowledge and disciplines; third, the nature of the individual student, his needs, interests and abilities.
- b. The establishment of a common core curriculum, where every student must reach a minimum level of skills, experiences, understanding in the main areas of knowledge at a basic level.
- c. Further, an individualised curriculum should be offered, where the student can take options according to his abilities and interests.
- d. Establishment of a balance between different areas of knowledge, e.g. between languages, social sciences, mathematics and natural

sciences.

- e. Establishment of a balance between theoretical and practical studies.
- f. Establishment of a kind of integration within and between areas of knowledge.
- g. Establishment of an adequate system of evaluation, i.e. a system based on initial diagnoses, teaching flexibility, feedback and final assessment.

This is the working hypothesis for this study. An alternative hypothesis could be: replanning the curriculum in the same way as stated above, within the reorganisation of secondary education.

### 3. Intellectualisation

Problem "intellectualisation is necessary in order to sharpen the foci of an investigation".<sup>30</sup> On the one hand, problem intellectualisation will help in clarifying the relevant concepts; on the other, it will narrow the field of investigation to manageable proportions. The problem at hand demands a careful analysis of the relevant contextual variables, as specified above, in the three countries. It also demands the analysis of the concept of curriculum development, its criteria and its components in their relations to the identified contextual variables.

#### a) Curriculum Development

All curricula, no matter what their particular design, are composed of certain components. These components are: aims and specific objectives, content, organisation and methods, and evaluation. According to Taba, "if curriculum development is to be a rational and a scientific ..., the

decisions about these elements need to be made on the basis of some valid criteria."<sup>31</sup> Taba continues saying that,

"The difference between a curriculum decision-making which follows a scientific method and develops a rational design and one which does not is that in the former the criteria for decisions are derived from a study of the factors constituting a reasonable basis for the curriculum."

32

These factors, she concludes, are: the learner and learning process, the culture and society and their needs, and finally, the nature of knowledge and disciplines. Therefore, scientific curriculum development needs to draw upon analysis of these factors "in order to determine the purposes of the school and the nature of its curriculum."<sup>33</sup>

Curriculum development is, after all, a plan for preparing young people to participate as productive members in their society. One would ask then, what are the social and cultural needs of a society? In order to answer this question, an analysis of socio-economic, political and cultural conditions of the society is necessary for determining the aims and objectives of the curriculum, for the selection of content and learning experiences and for the selection of what is to be stressed in teaching and learning.

The nature of society and its needs, therefore, constitute the first source of criteria for making decisions about the curriculum. The second source of criteria for making decisions about curriculum development is the nature of the learners and the nature of the teaching and learning processes. Taba states that:

"A curriculum is a plan for learning; therefore, what is known about the learning process and the development of the individual has bearing on the shaping of a curriculum. Such knowledge should determine which objectives are achievable under which conditions."

34

Information about teaching and learning process is also important.

Taba continues,

"If learning is an organic whole, then the curriculum should not be piecemeal. On the other hand, if learning is developmental, then the curriculum should also embody a developmental sequence."

35

The nature of knowledge and the specific characteristics and unique contributions of each discipline constitute the third source of criteria for making decisions about curriculum development.<sup>36</sup>

The theory of knowledge raises many questions about the relationship of the various disciplines to the development of mind and to the nature of knowledge. Consideration of the kind of integration which should be aimed at in curriculum planning within and between the broad areas of knowledge, is helped by a view of the nature of knowledge which relates the disciplines to specific modes of thinking. Peterson,<sup>37</sup> for example, does not think of general education in secondary schools in terms of general knowledge, but rather in terms of the development of four main modes of thought: the analytic, the empirical, the moral and the aesthetic. Phenix<sup>38</sup> proposes six realms of meaning in his generic classification of knowledge: symbolics (languages, mathematics), empirics (physical sciences, social sciences), aesthetics (music, visual arts, literature), ethics (moral philosophy), synoptics (history, religion), and synnoetics (a term used by Phenix to represent personal or relational knowledge as in certain aspects of philosophy or psychology).

According to this view, disciplines are rarely assignable to a single mode of thought or realm of meaning; for example, literature contributes to the development of both moral and aesthetic realms. The view of the nature of knowledge which relates different disciplines to specific modes

of thought or meaning seems to suggest that an appropriate relationship in the curriculum between the broad areas of knowledge would be that which resulted in the exercise of all modes of thought at a level appropriate to the learner.

Curriculum development is, therefore, a complex process that includes many kinds of decisions. Decisions have to be made about the general aims and specific objectives. Decisions need to be made about the appropriate selection of content and learning experiences. Further decisions need to be made about the adequate organisation, methods and evaluation. All these decisions, when in the process of being made, have to take into consideration the three sources of criteria identified above, namely, the nature of society and its needs; the nature of the individual, his abilities, attitudes and needs; and the nature of knowledge and disciplines.

Nevertheless, if no careful attention was paid in making these decisions about the curriculum development, inconsistencies may occur between the aims of curriculum (as norms), and the content, organisation and evaluation of the curriculum. Inconsistencies may also occur between the social, individual and cultural needs on the one hand, and the curriculum on the other. For example, in Egypt, England, and to a much lesser extent in the USA, there is an emphasis on these needs in the curriculum aims without a corresponding emphasis on adequate means to achieve these aims. In other words, the socio-economic and political demands expressed in the aims of general secondary school curriculum may be considered as aspirations with little or no attention being paid to the institutional means of achieving them.

b) Social Equilibrium and Education

According to Roberts, an important mediating process through which the economic demands are transformed into educational practices is a society's system of social stratification, its political system and the norms associated with them. In his own words,

"the economic system has little direct influence upon education but that its influence is mainly mediated through other institutional systems; particularly through political systems, through systems of social stratification, and through the ideologies associated with them."

39

Turner argued that the dominant ideologies in societies can act as "organising folk-norms".<sup>40</sup> He contrasts the elitist ideology which, he claims, is dominant in Britain, with the populist ideology in the USA, and he concludes that in accordance with these different ideologies, the development of the economy in the two countries has resulted in different educational solutions to similar problems being devised in the two countries. Some members of the high and middle classes seek the appropriate education in order to maintain or improve the class positions occupied by themselves and the members of their families. The economically weaker sections of society will tend to use the political system in order to increase their educational opportunities.

Politically, whether the economic needs are transformed into educational practice depends mainly upon the government norms relating to education:

"A government may decide to pursue an educational policy closely geared to the needs of industry in order, for instance, to facilitate economic growth.... Governments may wish to use education as a means of creating national unity or as a means of securing the ideological commitment of the population to the ruling regime."

41

Because of these mediating processes, changes may take place in some elements of the social system before an adequate change could take place in the other elements, i.e. the economic and technological changes on the one hand, and the lack of democracy and democratic participation on the other. Such a case will bring about inconsistencies or unequilibrium in the non-adaptive and the non-dynamic social system.

According to Pareto, a

"social system is in equilibrium if, when it is artificially subjected to some modification different from the modification it undergoes normally, a reaction at once takes place tending to restore it to its real, its normal state."  
42

This would imply that a change in the various elements that enter the system and any change in their mutual relations will bring about a reaction which will minimise the impact of the change. This emphasises the point that an equilibrium system is dynamic and adaptive.

But when a change occurs in different ways and at a different time and on a different scale, it brings inconsistencies in the behaviour of that system. There are some changes which are cumulative and others which proceed gradually and, therefore, without the system being completely adaptive, change does not always lead in the direction as the norms of the system expect it should - i.e. towards the state of equilibrium.

Parsons, however, recognizes the equilibrium state as "a theoretical point of reference. In empirical fact no social system is perfectly equilibrated and integrated."<sup>43</sup> This lack of complete equilibrium is explained by the inconsistency in changes that occur all the time in a social system; sometimes within norms, or between norms and institutions, or within institutions.

Concerning the problem at hand, Egypt, for example, has abandoned most

of the policies which were followed before the Revolution, and more in the direction of participatory socio-economic and political culture. These changes of policy have led, in some cases, to instability and disorder mainly because such changes demand normative changes first. In some other cases, changes in some institutions without adequate changes in some other institutions create inconsistency, i.e. the socio-economic and political changes on the one hand, and the non-change in the general secondary school curriculum, on the other.

It is, therefore, fair to say that institutional changes in harmony with the normative patterns, and with adequate and simultaneous changes in other institutions, will lead to equilibrium.

c) Modernisation and the Curriculum

The policy of a society relating to education is liable to be influenced by normative conceptions of how this society ought to be structured and how it ought to be governed and developed. A 'modern' society is visualised to have, as Abernethy says,

"a high degree of vertical and horizontal mobility, mass literacy, recruitment to office on the basis of individual achievement, and the emergence of specialised and interdependent occupational roles."

44

The 'modern' state in such a modern society is usually conceived, according to Abernethy,

"of as an independent nation state composed of citizens who are equal before the law and at least nominally able to participate in the selection of the ruling elite; government is relatively centralised, accepts some responsibility for the welfare of its citizens, and efficiently deploys its human and material resources in the solution of pressing policy problems."

45

Thus, a 'modern' society is also a democratic one in which participatory socio-economic and political culture is prevailing, its democratic ideals are its guiding norms for its social and political institutions, its philosophy, as a whole is in harmony with the needs and interests of its citizens. Citizens in such a society are expected to participate in the social, economic and political processes.

The existence of such a participatory socio-economic and political culture presupposes the existence of the 'modern' man. Judging against two criteria namely, rationality and activeness,<sup>46</sup> modern man is

"oriented toward the future, regards changes as the norm rather than the exception, is self-conscious about his own thinking processes, and places a premium on 'scientific' modes of explanation."

47

Such a concept of 'modern' man implies that his education is 'scientific', and that the 'citizen' in him is active in social, economic and democratic participation; he is also prepared for change and remains 'adaptive' in his attitudes and behaviour.

The establishment of socio-economic, technological and political institutions requires not only an awareness of the processes involved in them and the skills needed for them, but also a qualitative change of ethos from ignorance and passive acceptance of authority to the 'rationality-activist' model which requires from the individual a constant adjustment and flexibility to change.

The establishment of the new institutions without preparations for the change and without adjustment and readjustment causes gaps between the dominant norms of the old society and the new norms accompanying the new institutions. Such an 'a-synchronous' change creates inconsistencies between the old norms and the new norms, between the old skills and the new skills.

These new elements of culture take time to be built as they include reorganisation of the old values and norms. Education has been regarded as a substitute for time to build new social, economic and political culture, and also through the process of teaching and learning the gaps and inconsistencies mentioned above can be minimised. Many educationists and economists support this view; for example, Almond and Verba say that:

"The great advantage of education is that skills that may take years to develop for the first time can be passed on much more easily once there are some who possess them."

48

Education is the most important determinant of new attitudes, and it is also the most manipulatable. Harbison and Myers have regarded education as "the key that unlocks the door to modernisation",<sup>49</sup> and literacy is regarded as "the basic personal skill that underlies the whole modernising sequence".<sup>50</sup> It is assumed here that educated citizens are more able to participate positively in their social, economic and political affairs. They are also able to transform the social norms to social reality.

What is the specific role which the curriculum at secondary level should play? Holmes points out that,

"The complexity of modern technological society makes it necessary for the curriculum to help to 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.... What is here argued is that every social problem today has its scientific aspects. Rational decisions cannot be taken by individuals unless they can in some measure assess these for themselves. 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. This means that the curriculum should, at least, not discourage the entry of able pupils into technical work."

51

Concerning the establishment of democratic institutions, the demands, as

Holmes puts it,

"that the curriculum should provide opportunities for children to learn the skills needed in the making of democratic decisions. This implies the development of a social intelligence that will take into account all the aspects of a problem - the moral, the political, the scientific, the economic, and so on - work out the possible consequences of any policy and judge in the light of these."

52

#### 4. Formulation of Policy Proposals

The question then arises: Is the general secondary school curriculum in Egypt developed in such a way as to meet the above mentioned demands and needs? In answering this question the following will be undertaken:

First, curriculum development in Egypt will be examined in relation to two other countries, namely the USA and England, which have been faced somewhat earlier than Egypt with some of Egypt's current problems. To do this, a survey of the socio-economic and political state of the United States and England, and the nature of the curriculum that has developed in these countries in response to the other changes, is necessary. For doing this, the following variables are specified to be examined in each of the three countries (USA, England and Egypt): a) changes in social mobility; b) the modernisation of industry and agriculture; the rate of economic growth; the need for skilled manpower and their bearing on secondary school curriculum; c) demographic change; age and sex distribution of population and their bearing on secondary school enrolment and curriculum; d) changes in political norms, and institutions; changes in democratic participation and their bearing on the secondary school curriculum; e) educational change; the reorganisation of secondary education; selective or non-selective system and administration.

Secondly in their relation to these changes, the secondary school curricula in the three countries will be judged. Further, to understand the nature of these curricula, to see through the great mass of detail, some simplifying curriculum models are needed to characterise changes that have taken place over the period being examined (from 1900 for the United States, 1944 for England and 1952 for Egypt).

Holmes, in the IBE Bulletin No.190 in 1974, has outlined four general curriculum theories within which current curriculum debates may usefully be placed. These curriculum theories are essentialism, encyclopaedism, pragmatism and polytechnicalization.<sup>53</sup>

Essentialism stems from Aristotle. In its simplest expression it suggests that the content of a truly liberal general education should consist of a few carefully selected subjects. In practice it found expression in the seven liberal arts. 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.<sup>54</sup>

A second general theory has its roots in the pansophism of Comenius and came to flower in the proposals made by the French encyclopaedists. This theory maintains that all knowledge of the real world is useful and should be included in the curriculum. In practice the encyclopaedists emphasized the importance of modern languages, science and practical subjects as against the classical languages and literary subjects. This tradition came to dominate the whole of north, east and central Europe including Russia, with the exception of England and Wales. It influenced nineteenth century American educational development.<sup>55</sup>

The American contribution to curriculum theory stems from Benjamin Franklin's practicalism and pragmatism. As a distinctive philosophy the

latter justified a curriculum theory not very different from that proposed by the Englishman Herbert Spencer. It suggested that the content of education should be selected in the light of problems young people are likely to face when they leave secondary school. The Seven Cardinal Principles of Curriculum Development enunciated in 1917 by a Committee set up by the National Education Association continue, Holmes argues, to dominate curriculum debate in the USA.<sup>56</sup>

The polytechnicalization of the content of education constitutes a curriculum theory which may both cut across and be incorporated in those already mentioned. It suggests that every aspect of school work should be seen in the light of its relationships with the productive life of society.<sup>57</sup> Central to this theory is the proposal that the dichotomy between general education and vocational training should be broken down, and vocational studies should become the heart of general education by being taught in such a manner as to reveal the principles of productive life. In socialist countries this theory is actively debated and curriculum practice reflects it.<sup>58</sup>

Curriculum innovation reflects in each country some of the common problems resulting from changes in education and society and the ability of those in charge of the curriculum to resist change. In England and Wales, for example, the traditional concentration on a small number of freely chosen subjects in the pre-university years of the secondary school has been questioned and proposals to increase the number of subjects have been made. Another issue has been to decide which are the 'essential' subjects. Nineteenth-century debates placed the natural sciences in opposition to the classical languages. In the twentieth century, the arts subjects have competed with the natural sciences for a central place in the restricted

grammar school curriculum. Post-war discussions have been designed to identify 'disciplines', with their own internal logic and structure, so as to justify their inclusion in the curriculum. Others have argued that subjects in the curriculum should be integrated so as to make them more relevant and meaningful to pupils.<sup>59</sup>

The encyclopaedists favoured modern rather than the classical languages and the natural sciences rather than literary subjects. However, in most European systems the struggle to eliminate the dominance of the classical languages has persisted until now, for example, in France. The continued strength of the classical languages is closely linked to the persistence of differentiated second stage system of academic, vocational and extended elementary schools. The explosion of knowledge and specialized research needs have created serious problems in countries where encyclopaedism continues to inform curriculum theory. The need has been felt for depth studies in the last years of secondary education in those subjects which pupils intend to study in the university and higher institutes.<sup>60</sup>

The high school curriculum for intending college entrants in the USA generally includes three compulsory elements, the social sciences, the natural sciences and language and communication studies. Around this core of work are built options or electives which allow high school students to specialise to some extent in the subjects in which they hope to major when they enter college. Students in the non-college entry tracks follow much the same core curriculum and choose appropriate options.<sup>61</sup>

Holmes points out that these general theories are not mutually exclusive but offer frameworks within which current curriculum debates may usefully be placed. These general theories, and Holmes' account of them, will be taken as offering alternative models from which a choice might be made in Egypt.

NOTES

1. Nasser, G.A., Philosophy of the Revolution, Cairo, 1952, p.9 (in Arabic).
2. Issawi, C., Egypt: an Economic and Social Analysis, London, O.U.P., 1949, p.170
3. The National Charter, Cairo, 1962, p.48
4. Wilber, D., U.A.R.(Egypt): its People, its Society, its Culture, New Haven, Harf Press, 1969, p.140
5. The 1956 Constitution, and the 1971 Permanent Constitution, article 87.
6. Research Project on Employment and Unemployment, U.A.R., Cairo, 1963.
7. C.A.P.M.S., Statistical Handbook, A.R.E., Cairo, 1972, p.52
8. Ibid., p.53
9. The National Charter, op.cit., p.92
10. Ministry of Education, Education and Training in Egypt, Cairo, The Ministry Press, Feb.1976, p.2
11. El-Kammash, M., Economic Development and Planning in Egypt, new York, Frederick A.Praeger, Publishers, 1968, p.72
12. The 1971 Constitution, article 23.
13. Statistical Handbook, op.cit., p.61
14. Arab Republic of Egypt, Facts and Figures, Cairo, 1972, p.23
15. Ibid., p.16
16. The National Charter, op.cit., p.73
17. C.A.P.M.S., Population and Development: A Study on the population increase and its challenge to development in Egypt, Cairo, 1973, p.22
18. The Ministerial Committee for Manpower, Report about the Educational Policy in Egypt, Cairo, 1967, p.12 (in Arabic).
19. Ibid., p.13
20. The National Council for Education, Scientific Research and Technology, Report, June-Sept., Cairo, 1974, p.61 (in Arabic).

21. Holmes, B., Problems in Education: a comparative approach, London, Routledge & Kegan Paul, 1965, p.221
22. Ibid., p.222
23. Brauner, C.J., American Educational Theory, New York, Prentice-Hall Inc., 1964, p.9
24. Holmes, B., Curriculum Innovations at the Second Level of Education, Paris, UNESCO, IBE No.190, 1974, p.25
25. Ibid., p.31
26. Brauner, op.cit., p.11
27. Holmes, <sup>Problems in Education</sup> Problems in Education, op.cit., p.35
28. Ibid., p.40
29. Ibid.
30. Ibid., p.33
31. Taba, H., Curriculum Development: Theory and Practice, New York, Harcourt, Brace & World, Inc., 1962, p.10
32. Ibid.
33. Ibid.
34. Ibid., p.11
35. Ibid.
36. For full discussion, see Taba, ibid., pp.10-11
37. Peterson, A.D.C., Arts and Science Sides of the Sixth Form, Oxford, O.U.P., 1960.
38. Phenix, P.H., Realms of Meaning, New York, McGraw-Hill, 1964, p.28
39. Roberts, K., 'Economy and Education: Foundations of a General Theory,' Comparative Education, Vol.7, No.1, 1971, p.4
40. Turner, R.H., Modes of Ascent through Education, as referred to by Roberts, in ibid., pp.3-4
41. Roberts, op.cit., p.5
42. Pareto, V., The Mind and Society, London, Cape, 1935, Vol.4, p.1436
43. Parsons, T., The Social System, London, Routledge & Kegan Paul, 1951, p.298

44. Abernethy, D.B., The Political Dilemma of Popular Education, Stanford, Stanford University Press, 1969, p.3
45. Ibid.
46. Apter, D., The Politics of Modernisation, Chicago, University of Chicago Press, 1965, ch.1. See also, Abernethy, op.cit., ch.1.
47. Abernethy, op.cit., pp.3-4
48. Almond, G.A. and Verba, S., The Civic Culture, Princeton, N.J., Princeton University Press, 1963, pp.501-2
49. Harbison, F. and Myers, C.A., Education, Manpower and Economic Growth, New York, McGraw-Hill, 1965, p.181
50. Lerner, D. and Pye, L., Communication and Political Development, Princeton, N.J., Princeton University Press, 1963, p.341
51. Holmes, B., 'Social Change and the Curriculum,' in the Yearbook of Education 1958, London, Evans Brothers, 1958, p.379
52. Ibid.
53. Holmes, B., Curriculum Innovations at the Second Level of Education, op.cit., p.23
54. Ibid.
55. Ibid.
56. Ibid.
57. Ibid.
58. Ibid., p.34
59. Ibid., p.24
60. Ibid., pp.24-5
61. Ibid., p.25

PART TWO

CHAPTER 2

THE CONTEXTUAL VARIABLES

IN THE USA SINCE 1900

Part Two consists of Chapters 2 and 3. The intention of Chapter 2 is to analyse contextual variables in the USA during the twentieth century taking into consideration changes in social, technological, demographic, political and educational conditions. These will be analysed also in their bearing on education in general and on the secondary school curriculum in particular. Chapter 3 will deal explicitly with the curriculum developments which have occurred in consequence of the changing context. Curriculum developments in the USA will be analysed also in their relation to the pragmatic curriculum theory.

I. SOCIAL CHANGE

1. Social Classes

Although there is a great deal of controversy over details, and considerable variation from one part of the country to another, many researchers agree that contemporary American urban society can usefully be described as having five social classes. No single variable defines a class; instead, the interaction between several variables creates the total way of life which characterises a class. The classes can be labelled as follows:<sup>1</sup>

1 - Upper class	1%
2 - Upper-Middle class	9%
3 - Lower-Middle class	40%
4 - Working class	40%
5 - Lower class	10%
	<hr/>
	100%

a) The Upper Class

"In every community there are a number of families who are clearly recognised as superior to all of the rest: they are richer, more powerful, more exclusive in their interactions. In large cities there are enough of them to form neighbourhoods or even complete suburbs of people who live in mansions. They constitute an upper class."

2

Income alone cannot put a family into this class; they must also be personally accepted by the other upper-class families of the community. A man gains acceptance for his family and for himself, he must be a man who cannot be ignored, one who must be consulted when the big decisions are made.

The upper class can be subdivided into two categories: the self-made people who have climbed from middle-class origins to the very top positions in business and the professions, and the people who have inherited wealth and position from a previous generation.<sup>3</sup>

Concerning the values of members of this class, it should be remembered that the newer families tend to absorb the values of the 'old elite' as fast as possible in order to gain acceptance. However, many of the self-made men cling to the predominantly middle-class values of their upbringing. It cannot be money alone, but it is an attitude towards life, that identifies a member of the old elite.<sup>3</sup> This attitude is based on membership in a family line that has been established for at least one, and preferably two or three generations as members of the upper class. For the old elite it appears crude and boorish to display one's wealth or even to talk too much about it. The important thing is not the money nor the skill with which it was earned, but the style in which it is spent. The past has much relevance to the present, and is surer than the future. The family members

all realise that their position depends upon the behaviour of the whole group, so that children must be properly reared and educated.<sup>5</sup>

The American upper class is not based on land, but on ownership of fluid capital and on the skills of management. The managers are usually mobile individuals who did not start with capital; but their earnings give them capital to pass on to their children. The capital has had to be wisely managed if it was to survive the constant changes in the American industrial system. This system allows much more movement into and out of the upper class than would occur in a landed aristocracy; the new managers must be absorbed, and the old families who lose their money or do not renew it must be quietly dropped. The upper class is always in close touch with the values of the middle class and cannot feel itself to be totally unique. American upper class, therefore, is not permanent, not so homogeneous as a landed aristocracy.

Many landed aristocracies have little work to do. They escape boredom by a serious cultivation of the arts or of politics. The American upper class does not have so much free time. Business is often more important than art and learning. What free time they have is likely to be devoted to community leadership, which has business and political implications.

b) The Upper-Middle Class

This class is close to, but not at the top of the system. Above them are the small group of upper-class families who have greater prestige, power, wealth, and income. Below them are the vast masses who do the routine jobs in factory and office. The upper-middle-class people are the active people who are the leaders of the American work world. They are

trained specialists in business or professional pursuits who make the daily decisions that guide the work of the lower-middle-class and working-class people. People of this class do not have jobs, but occupy positions; they do not work, they pursue careers.

There is a conventional distinction in the literature between the 'old middle class' and the 'new middle class'.<sup>6</sup> The former are the entrepreneurs, the independents in business and the professions. The latter are the salaried men, the bureaucratic officials.

Members of the upper-middle class live either in respectable apartment houses in the cities or in single-family homes in the suburbs.

"In a vague way they recognise themselves as a class: they use the terms middle or upper-class in their own conversations, and they think of themselves as educated, successful people who are the active and respected leaders of their local communities. They are almost all white and American born, and those born of immigrant parents tend to minimise their ethnic backgrounds and instead stress their own wide participation among non-ethnic Americans. College has rubbed off most of their ethnic characteristics, and business competition has completed the job."

7

People in this class are interested in the latest styles for their homes, their clothes, their cars, and their thoughts.

The central value orientation for this class is 'career'.<sup>8</sup> Their whole way of life - their consumption behaviour, their sense of accomplishment and respectability, the source of much of their prestige with others - depends upon success in a career. The husband's career becomes the central social fact for all the family.

A career has a beginning. Given the American industrial system, it must be learned; a man must learn how to run it or he is considered a failure. Consequently, the man must be educated either in specific pro-

fessions or in the general arts of salesmanship and business administration. The former are based primarily on technical knowledge, the latter on skills in manipulating people. A career man must have leadership traits which will help him stand out amongst his fellows. Leadership training begins at an early stage in a career: a boy is active in high school extra-curricular affairs in order to develop a balanced personality which will make him popular in College; he participates in College activities partly because he knows that professional schools and employment officers evaluate such activities when they are considering his application.<sup>9</sup>

A man in this class tends to live well, marry well, participate adequately in community affairs. He must be known and trusted as a man if he is to get ahead. His wife should establish a home that has prestige value, a place her husband can be proud to use as a base for entertaining business friends.<sup>10</sup>

The upper-middle class believe in themselves and in the American way of life, and they are devoted to their careers. They stress planning for the future and not too much regard for the past; they stress activity, accomplishment, practical results; they stress individualistic achievement within the framework of group co-operation and collective responsibility. They are not much interested in tradition, in art, in any sort of theory for its own sake. They always ask of an idea, what good is it; how can you use it?

c) Lower-Middle Class

At the turn of this century a high school education was the criterion that distinguished the lower-middle class from the working class,

"... it was scarce, it brought prestige, it signified American rather than foreign skills, it brought a white-collar job and a higher income. The girl who raised herself by becoming a stenographer, the boy who learned book-keeping - these were the typical symbols of the lower-middle class."

11

These people work with paper or near the offices of the bosses; they are identified with those above them and are struggling to live like their superiors, but they live with the little people.

Some of these distinctions persist, but all are weakened. Joseph Kahl in 1957 stated that,

"about half our population now graduates from high school, and in some parts of the country the figure approaches three quarters. The proportion of native born is much higher than it was, so this distinction is less important."

12

Much office work has been mechanised, and much factory work has been made clean and easy. The relative superiority in income of white-collar work has declined. The general rise in income has made it possible for factory wage workers to live comfortably and respectably.

Warner often combines the 'lower-middle class' and 'working class' into the stratum of 'the common man'. However, there remains enough distinction to make it useful for the purpose of studying values to keep the separate labels of 'lower-middle class' and 'working class'.

Part of the lower-middle class works at occupations that are semi-professional, semi-managerial. Another part are small businessmen, small farmers, etc.<sup>13</sup> People of this class are in the fast growing middle-income group. They live in the same parts of towns in small single-family houses, or in small but fairly modern apartments. Most have a high school education, and a great many have some additional special training: normal school, secretarial college, a technical course in electricity or accounting.<sup>14</sup>

Lower-middle class people tend to emphasise the respectability of their jobs and their style of life, for it is respectability that makes them superior to shiftless workers. Respectability can be expressed in various ways. Education is highly valued; people are proud of their high school diploma and any training achieved beyond it; they can urge their children to try to get to college, even though it means financial sacrifice, this makes college a much more difficult goal for them than for the upper-middle class.<sup>15</sup>

d) The Working Class

The ordinary working class man is a semi-skilled factory operative. He left high school before graduation. Although he seeks to work steadily, he has no particular speciality, and drifts from job to job as the labour market dictates. Perhaps the most typical representative is the automobile worker.<sup>16</sup>

Automobile workers are at the top of the semi-skilled level with respect to hourly earnings, averaging about twenty per cent more than workers in all other manufacturing industries combined. But it is important to note that true skilled workers like machine-tool makers earn considerably more, but they are usually not men who had started 'on the line'; they had learned their trade as apprentices when they first got out of school. It is extremely rare for an assembly-line man to become a skilled worker, or to be promoted to a foreman. Here is a basic fact about semi-skilled working class life: it is on a flat level. Kahl stated that:

"There are few differences in pay or responsibility from job to job, from year to year. There is not too much point in working hard to get somewhere, for there is no place to go."

The tasks these men carry out are subdivided into small routine operations that are repeated hour after hour. A man can learn his job in a few hours or, at most, a few days. As the automobile moves along the line, each worker adds some small part, or tightens a few bolts, or sprays on a little paint. He has to work fast, but he need not think much. Some workers fit into the rhythm of the work without complaint, but some dislike repetitive work.<sup>18</sup>

A working-class boy who does not have a driving ambition to climb into the middle class approaches work with a casual attitude. For him high school has relatively little meaning; it is not a necessary step towards college and it has little direct use in training for a factory job. He either leaves school before graduation, or just hangs around until the diploma is handed to him. Then he thinks of a job as an opportunity to earn a lot of spending money.

If the boy has any dreams at all, he thinks of the first factory job as temporary, he expects eventually to climb up in the hierarchy of the plant, or to leave it for something better. As the months go by, the first thing the boy learns is that there is no such opportunity within the factory. One upward route is skilled work, but that means taking a long period of apprenticeship at lower pay, and many young people will not make the sacrifice. Chinoy estimated that in the plant he studied only ten or twelve workers a year out of a force of six thousand were promoted into supervisory levels.<sup>19</sup>

What of the American values of success, of getting ahead? Many boys from the working class never paid much attention to the success dream. As one high school boy has expressed it:

"I'm not definite what I'd like to do. Any kind of job. Anything as long as I get a little cash.... What the hell? I got nothing to look forward to."  
20

But some workers are not content with their position, and consider the factory as a temporary expedient. The favourite escape goal is independent business: the gas station, the little retail store, the farm, etc.<sup>21</sup>

People in this class see that they are not the people in the world who really count; they know that others make decisions, and they then carry them out. In their community living as well as in the factory, they have a sense of being little people who are on the outside of things. Datson's study of working-class life showed little participation beyond the range of the family. Compared to middle-class people, workers are disinterested in public affairs because they feel less sense of participation and control; they read less, understand less, and generally live in a narrowed world.<sup>22</sup>

e) The Lower Class

Hollingshead gives a description of the lower class as seen through the eyes of their superiors:

"It is looked upon as the scum of the city by the higher classes. It is believed generally that nothing beyond charity can be done for these people, and only a minimum of that is justified since they show little or no inclination to help themselves."  
23

This was the opinion of the upper class about mid-century. They added that,

"whole families - children, in-laws, mistresses, and all - live in one shack. This is the crime class that produces the delinquency and sexual promiscuity that fills the paper."  
24

However, respectable people exaggerate when they talk about those whom they consider not respectable. Every town and city contains a sizeable group of people who live in decrepit houses in slum areas, work irregularly at unskilled and semi-skilled jobs, and are usually suffering from poverty. This group contains an undue proportion of Negroes who move from the southern farms to the northern cities, and those who arrived from the European rural areas without the skills of language, education, or any industrial experience. Yet there are also many families with as long a line of Yankee forebears as the local old-family elite. These groups are the least educated groups in the population and the least interested in education.<sup>25</sup>

The central assumption of the lower-class value system is that the situation is hopeless. Because he has to struggle merely to stay alive, because he knows that respectable people sneer at him as 'no good', and because he lacks the technical and social skills necessary for success, the lower-class person gives up.<sup>26</sup>

But now America faces a different situation than that of the first half of this century. American economy has eliminated the necessity of poverty, and the American distribution system has gone a long way towards ending this situation. In periods of full employment, all able-bodied persons who want to can find work. As Americans make progress in social welfare, they are finding ways of eliminating urban slums, of protecting people during periods of illness or temporary unemployment.

However, America still has a lower class, though it may be smaller than in the past. There is still a group of people who live beyond the pale of respectability. Some of them are unable to help themselves; they suffer from long-term illness, from intellectual or physical inferiority,

from inadequate education, from prejudice against the weak and the lame and the immigrant and the Negro.

## 2. The Influence of Social Structure on Secondary High School and its Curriculum

Technological change, population increase, immigration, and democracy have created social mobility and movement from one class level to another. In the 1950s,<sup>27</sup> about two thirds of the men were working in jobs at different levels from those of their fathers. They had to make some deliberate decision about their careers and could not automatically follow along after their parents. In a modern industrial system like that in the USA, it is difficult for a father to pass his job on to his son, and if he could do that it would be the exception, not the rule. Actually, the major influence of a family over a son is to shape his thinking in the direction of a certain level in the occupational hierarchy.

### How the School Curriculum is Related to the Status System

Most secondary schools until about the end of the nineteenth century were characterised by a single aim - that of college preparation. With the advent of the 1930s' depression and the introduction of compulsory attendance laws, there was some change in the general rationale of the high school. 'Meeting the needs' of youth as well as serving the community evolved as general aims of secondary education.<sup>28</sup> In addition to that, much attention is given to the phrase 'equal opportunity for all regardless of background'.

However, it seems apparent from a review of the high school curriculum, method, and materials offered, "that high school activities are organised

in such a way as to serve deliberately or incidentally the interests of the upper-middle and upper classes".<sup>29</sup> As Abrahamson pointed out:

"... those who succeed in our high school come predominantly from those two general class groups; thus, in effect, do they assume a role in society consistent with and similar to that of their families."  
30

What is important here is the fact that the children of upper-middle class and upper-class backgrounds tend to succeed far more and much more easily in secondary education than do those of lower-class backgrounds. And this is no longer to be explained in terms of 'intelligence'. Robert Havighurst and Neugarten pointed out that:

"The orientation of the American school is predominantly that of the middle class. There is strong emphasis upon the character traits of punctuality, honesty, and responsibility. Respect for property is stressed. ... There is always stress upon mastery and achievement. These middle-class values are expected to be binding upon both children and adults."  
31

Therefore, the student whose social-class background is middle class or higher finds the school situation and the school values are on the same line of his home values, one reinforcing the other, while the pupil of lower-class background has to live with the conflicting values of the school on the one hand and the home on the other. In addition to that the boys from the higher-class backgrounds enter the school with an advantage in verbal abilities, and find themselves competing in a situation far more comfortable to them than to their peers of lower social class backgrounds.

Some of the curriculum aspects in the high school are not limited to ability factors alone, but the limitation is also, indirectly, based on social classes. Therefore, attendance in specialised high schools shows a

marked relationship with social class background; placing students in different courses of study in high school involves dividing them according to academic achievement, this also separates students according to social class background; in addition, extra-curricular activities are engaged in much more by students of higher social class background.<sup>32</sup>

Certainly the instructional materials and instructional techniques at the secondary level are clearly those which appeal to the boys and girls from a higher social class background. Taking into consideration that about 80 to 90 per cent of the whole population in America constitutes the lower middle class, working class, and lower class, it follows that the vast majority of students in the public schools come from middle and lower class backgrounds.

Moreover, teachers come from or have 'risen' to a middle class background - that which includes the values, standards, customs, speech and treasured character traits promoted in schools. The teachers, then, react to students by identifying themselves more easily with those from a higher social class background and by being in a position of 'not understanding' those from a lower social class background.

However, since about 1940 there has been a great deal of research on the relation of education to the various social classes, and ethnic groups which make up American society. Books like 'Children of Bondage' (Davis and Dollard), 'Elmtown's Youth' (Hollingshead),<sup>34</sup> and 'Society and Education' (Havighurst and Neugarten) are reports of research studies of this kind. There has been a number of specific studies of school progress; school drop-outs; school awards and honours; grouping of students; and so on, all in relation to the socio-economic status, or the ethnic or colour status of the students.

The results of this type of research have been a more conscious adaptation of the secondary school to the differing motivations of the various social classes, and the more effective use of the school's guidance staff as well as the curriculum. The American Comprehensive Secondary School is intended to meet the needs of a variety of social groups, and this type of research has given information concerning these needs.

George Counts, in 1927, said that local control of education rests with persons of "more favored economic and social classes".<sup>35</sup> Perhaps the same generalisation is true today. It is through the local boards that the primary impact of the social structure on curriculum can be felt.

A close examination of the personnel affecting curriculum development will yield the explanation. The people of a community elect a board of education and thus, in theory, they have certainly controlled its operation. The board, in turn, sets the policy for the school, selects the chief school administrator, and it is responsible for 'hiring and firing' of personnel and the like.<sup>36</sup> It is quite possible, however, as Brickman pointed out in 1964 that, "Some [of the boards] may be motivated more by political, religious, economic, or other interests than by education."<sup>37</sup> The administrator (or Commissioner), with his staff, is the executive of the board and the educational leader of the school. The teachers are at the bottom of this hierarchical structure, but in reality they exert the most considerable influence over the actual classroom situation through their selection of materials and experiences for the students, who are at the 'bottom'. Paradoxically, the parents of these students are at the 'top'. The paradox is resolved on further examining the status system of a

community and the relationship of that structure to the lines of authority in a school system.

Here is the crux of the situation. It has already been demonstrated that the school, in most cases, is controlled by the 'more favored economic and social classes'. In other words,

"those people who are articulate in their exercise of citizen-control over the board of education are invariably of that same higher social class background. And each personal force influencing the curriculum belongs to that higher social class."

38

It is understandable that a boy learns easily and automatically from the values of his parents and his friends. He usually absorbs a general point of view about work and school from his social environment. Many researchers have discovered that the achievement motive is measurable and is related to cultural values.<sup>39</sup> Some cultural groups express more achievement need than others. Furthermore, boys in high school with strong achievement needs perform better at their school work. And there is evidence<sup>40</sup> that the achievement motive is at least partly learned as a result of the way parents, especially mothers, teach their young children habits of early independence.

## II. SOCIAL MOBILITY

No society is completely 'closed', with a system in which each son inherits his father's position and no movement up and down. It is true too, that no society is completely 'open' in which the forces of pure competition would sort people according to their native talent and the effort with which they used their talent.

Nevertheless, talent is partly inherited and more important perhaps

is the fact that a family greatly influences the motivation of a son and thus shapes his ambitions and his drive for success. In addition, there are limitations on the pure competition in the market which bias the distribution of rewards.

As each generation succeeds its predecessor, there occurs a vast sifting process that places individuals into class levels. This is called social mobility. Social mobility can be either intragenerational or intergenerational. The former occurs when, comparing someone's position on the social scale in his later, as against his earlier adult life, he is found to have risen or fallen. The latter occurs when, if someone's position in adult life is compared with his position at birth (at which point he is assumed to have the status of his father), he is found to have risen or fallen in the social scale.

If one seeks to learn what forces producing change in American society are, one finds they include technological, demographic, political and educational pressures.

#### 1. Technological Change

Technological change affected almost every aspect of the life in America. More technological progress has been made in the twentieth century than in all of the previous history of the world. Moreover, the pace of technology has increased sharply since the Second World War and appears to be ever quickening.<sup>41</sup> A further significant factor is that the gap between scientific discovery and industrial application has been rapidly shrinking.

Automation in particular has had a dramatic impact on many US industries,<sup>4</sup> on the chemical and refining industries, on the metal fabricating industries, in the office and in banking institutions, and now it is clearly spreading

its influence to many parts of the service sector of the economy.

There are significant differences between the newer industries and the old ones. While the older industries were organised along mass-production principles and used large numbers of production workers, the newer ones show roughly a one-to-one ratio between production workers and scientist-engineers. Moreover, the proportion of production workers is steadily declining. Between 1954 and 1959, production workers in the aircraft industry, for example, declined 17% while engineers and scientists increased 96%.<sup>43</sup> Also, while the average ratio of research and development expenditures to sales in all industry averages about 3%, the advanced weapons industry averages about 20% and the aerospace industry averages about 31%.<sup>44</sup>

Most of the United States' wealth is concentrated in the productive machinery of the great corporations. But it is often in the hands of companies rather than individuals. Just before the Second World War, there were about 2,000,000 business firms in the US, of these 500,000 were corporations, and they accounted for 90% of the total business of the country in manufacturing and distribution. About 1% of the biggest (non-financial) corporations employed half the workers and controlled almost three quarters of the productive assets of the country.<sup>45</sup> In 1947 a new study showed that a mere 139 corporations held 45% of American manufacturing assets, and the 200 biggest companies employed almost 17% of the non-agricultural work force.<sup>46</sup> The evidence - in the long run - suggests that the degree of concentration has not changed much since the turn of the century.

The community plays an important role in economic life. It is one of the intermediators between individuals and resources on one hand and broad

national and international economic forces on the other. For example, in 1958 there were 14,000<sup>47</sup> organisations, mostly private and non-profit, working for economic growth in municipalities, states and regions. So the community relates to the rest of its region, to the nation, and to the world by the export of goods manufactured locally and by the sale to outsiders of services provided locally. The proceeds of such export sales enable local residents and businesses to buy desired commodities and services outside the community.<sup>48</sup>

The twentieth century has witnessed a kind of redistribution of American wealth. Lundberg in 1937 looked backwards towards the turn of the century when the plutocracy was smaller and more powerful than now. He estimated that sixty families controlled a substantial portion of American productive wealth. According to his figures, seven extended families each owned over 100 million dollars' worth of assets.<sup>49</sup> Lundberg claimed that the sixty families formed the 'de facto government' of the United States. And he showed how those families interlocked through marriage, and indicated that a few great financial houses served as their agents, multiplying their power over newspapers, universities and politics.<sup>50</sup>

As the giant corporations matured, their stock became more widely distributed. When one looks at the recent data, it is hard to find out who does control the great corporations that are the focus of American wealth. In most big companies no single individual owns as much as 10 per cent of the stock.

In 1935, 155 of the largest corporations were studied and it was found that the officers, directors, and largest stockholders as a group controlled half the voting stock in only 15 companies.<sup>51</sup> The conclusion was,

"that for most of the largest corporations ownership and control have become largely separated. This condition appears to be particularly characteristic of the corporations that have travelled furthest along the road of corporate development, such as the railroads and others of the older corporations."

52

Current industrial wealth is spread throughout the nation, and competes for political power with organised small business, organised labour, organised farmers, organised consumers. There are many competing groups, with a concentration of power in the hands of their leaders. They work out a functioning equilibrium under the watchful refereeing of the government.

Agriculture has been dramatically affected by technological change in the broadest sense, with the result that the US is producing much more food with less than half the manpower of two generations ago.<sup>53</sup> American agriculture has been very adaptable in the face of technological change, perhaps unparalleled in any other sector of the economy. People have to change food habits to change their way of growing food, and of dealing with the market.

This adaptive process was made possible through an immense apparatus of government agents going into each area and working with the farmers in an extraordinary way. People themselves wanted to escape from the old, particularly hard, unpleasant labour when they saw the possibilities of the new way. They had really no alternative, particularly after their manpower as well as their sons and daughters migrated to the cities.<sup>54</sup>

The success of the automobile industries was largely due to the fact that the farmers, who controlled the state legislatures, wanted to reduce their isolation. They found a way of making the people who wanted the roads pay for them as they were constructed, through a gasoline tax.<sup>55</sup>

Behind the agricultural revolution has been a tremendous network of systems research, primary government research in the agricultural experimental stations. The fast agricultural developments of the 1950s have, in turn, been subsidised by agricultural surplus and subsidy policies, which constituted a set of experiments and developments. The systems experiments within this particular area, in machinery, in chemical crop agents, fertilisers, herbicide control and so forth, were also of enormous significance.<sup>56</sup>

In addition, it was the first, the wisest, the most enterprising recognition of the unique role of the university in modern society: that the universities can create a resource. This was not done in communications, steel making, automobiles, even in nuclear energy,<sup>57</sup> but it was done in agriculture.

The male occupational distribution is given in the censuses from 1910 to 1950 as shown in Table 1. It shows that the proportionate increase in professionals was most marked in the decades 1920 to 1930 and 1940 to 1950. The same was true for urban proprietors, managers, and officials. Thus the two top categories in the occupational hierarchy expanded most during the boom periods in the business cycle.

The increase in clerks and salesmen was greatest in the 1920s, slowed down in the 1930s, and reversed itself in the 1940s.

There is no clear overall trend underlying changes in these white-collar positions. The professional group expanded most during the 1940s, the business group almost equally in the 1920s and the 1940s, the clerks and salesmen seem to have stopped growing.

Looking at the other side of the data, there is no clear indication that the rate of decline of unskilled workers and farmers is changing.

TABLE 1: MALE OCCUPATIONAL DISTRIBUTIONS 1910 TO 1950  
BASED ON THE USA CENSUSES

Social-Economic Group	1910 %	1920 %	1930 %	1940 %	1950 %
Professional Persons	3.1	3.2	4.0	4.7	7.1
Proprietors, Managers and Officials	7.9	8.0	9.0	9.1	10.3
Farmers	19.9	18.7	15.2	13.0	9.9
Clerks, Salesmen, and kindred	9.2	10.6	12.8	13.4	12.6
Skilled workers and foremen	14.5	16.7	16.4	15.2	18.6
Semi-skilled workers	11.2	13.3	14.4	18.6	21.5
Unskilled workers:					
Farm labourers	14.0	9.6	9.5	8.5	4.8
Others	20.2	19.8	18.8	17.6	13.1
Not reported	-	-	-	-	2.1
Total	100.0	99.9	99.9	100.1	100.0
Numbers	29,483,000	32,806,000	37,916,000	39,446,000	42,565,000

Source: Extract from Alba, M.Edwards. US Census of Population, 1940: Comparative Occupation Statistics, 1870-1940, Washington, Government Printing Office, 1943, p.187. Figures for 1950 from US Census of Population, 1950, Vol.11 characteristics of the population, Part 1, US 1953, Summary, Table 53.

Consequently, it might be concluded that there is no reason to expect the rate of technological redistribution of the labour force to change markedly in the immediate future. Eventually the decline in the farm group will stop, for an equilibrium will be reached between the men on the farm and those in the city whom they feed. But as automation in production becomes common there may be further spurts in the growth of the technicians and the skilled workers at the expense of the unskilled and semi-skilled workers.

The United States has been a high-growth nation. From the end of the Civil War until World War I, real growth averaged about 4.3% annually. From then until 1950, the annual growth rate of 2.9% was still higher than that of all major Western countries.<sup>58</sup> During the 1950s, G.N.P. in the US rose at a somewhat faster rate - 3.3%. But from 1955-60 it rose at a lower rate - 2.3%. An average annual rate of 4.3% prevailed from 1950-55.<sup>59</sup>

Ever since mid-1969, potential output has exceeded actual output. In 1970, the gap totalled \$49.1 billion, while in 1971 it widened to \$66.7 billion (some 6½% of potential G.N.P.).<sup>60</sup> To get the unemployment rate down to about 4% by the end of this decade would require real rates of growth of around 6% annually over the next few years. Such a rate of growth would be well above the rates recorded for most years in the last two decades. Assuming that the existing gap between actual and potential output is closed by 1980, average growth in the decade would be about 5% annually.<sup>61</sup>

The United States has undergone a social revolution in the twentieth century, and particularly since the late 1930s. The average real income (after adjustment for inflation) of the Americans has been going up a great

deal, approximately doubling in the first half of the century. At the same time that per capita income increased on the average, income was being redistributed. The very rich actually lost ground during this period, the middle-income group gained, but the major gains were scored by the people at the bottom of the scale.

In other words, real income was going up for almost everybody, and inequalities in income among different groups were being markedly reduced. Why these changes? Partly full employment and general prosperity, which always benefits the poor and the marginal people more than others; partly a steady increase in the efficiency of industry, which led to an average increase in output per man of between 2 and 3 per cent a year;<sup>62</sup> partly the increasing share of income in wages and salaries and the decreasing share in profits and return on investment; partly the effects of new tax policies; and finally, the results of greater union strength, which brought higher and more equal wages.

The South increased its per capita income in the twenty years preceding 1949 (in current dollars unadjusted for price changes) by 133%, while the other parts of the country moved up only 72%.<sup>63</sup> This improvement came from industrialisation, with its movement of poor workers from depressed rural areas to expanding cities in the South, and out of the region to Northern industrial areas. And Negro men had an increase in wage and salary income of half as much as white men in the decade preceding 1949, so the poorest region and poorest racial group reaped a great benefit from economic growth.

Particular occupations showed these increases in income from 1939 to 1950, again using current rather than standard dollars: service and unskilled workers 176%; operatives 172%; clerks 111%; proprietors and

managers 95 %; professional and technical workers 114%.<sup>64</sup> Again, the lowest paid group scored the greatest gains.

Free education in the US and the spread of technology has been increasing social mobility and the number of strata in the pyramid. Basically, everybody is moving up. The benefits are spreading. Of course, the people at the bottom are still at a disadvantage, but the good things are relatively being shared by everybody.<sup>65</sup>

From 1870 to 1950 the labour force expanded from almost 13 million to over 62 million. The proportion of women in the labour force increased from 15 to 30 per cent. Moreover, during the last two decades there has been a steady increase in the percentage of teenagers in the labour force.<sup>66</sup> In addition, the distribution of jobs changed radically. Farm jobs declined from over one half to less than one eighth of the total, whereas urban professional, business, and clerical jobs increased from one eighth to almost one half, and urban semi-skilled jobs doubled from one tenth to one fifth of the available positions.<sup>67</sup> During the twentieth century, the life span of many a man, the country changed from a rural to a highly industrialised nation.

Over the first six decades of this century, the most rapid growth was in clerical occupations in the first few decades, followed by managerial and administrative occupation and, most recently, by professional and technical occupations.<sup>68</sup>

At present, about 6% of the labour force is unemployed. In 1937 unemployment was over 10%.<sup>69</sup> It was reduced to 4.1, 6.7, 3.8, and 5.9 per cent in 1956, 1961, 1966 and 1971 respectively.<sup>70</sup> One fact of the unemployment problem is that Negroes have a higher unemployment rate than white workers, and that teenagers and women have higher unemployment rates than

the average. Another fact is that a large proportion of the Negro population is functionally illiterate. A large number of young Negroes leave school for jobs.

The fast technological change and the greater emphasis placed on educational competence have meant that groups which lose out early in the educational race will be quickly excluded from the productive life. The position of the Negroes, as Bell pointed out, may become relatively worse, simply because the rate of technological change is such as to outrun the increase in educational opportunities available to them.<sup>71</sup>

However, there is a shortage among the scientists, technologists and technicians, as well as imbalance in distributing the available ones between the different areas of industry. In 1964, as William Baker pointed out, only about 4,000 technologists worked in research and development of the cement industry (the backbone of all the construction in the nation). In the primary metals there were only a little more than 5,000 technologists, while in ferrous metals - in a nation dependent on steel in every form - there were only 3,000 technical personnel.<sup>72</sup> The same observation might be made about the motor vehicle industry.

Turning to those industries in which there are large numbers of scientists and technologists: in 1964, there were 19,000 out of the national total of about 320,000 such personnel employed in aircraft and missile industries. About 50,000 were involved in military electronics and related subjects. There were then some 140,000<sup>73</sup> scientists and technologists working in these two areas alone.

Moreover, with the increase in the speed of development of technology, education is no longer just the concern of the young. Education is a life-time project and business, particularly the big business corporation has come

to realise it. Stress, therefore, is laid on the fact, as Ginzberg pointed out,

"that American society has no place left for the unskilled worker, and that even the skilled worker would have to undertake repeated training to keep his skills from obsolescing."

74

#### What Does That Mean for the Curriculum?

The complexity of modern technological society makes it necessary, as Holmes pointed out, for the curriculum to help to 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. This means that the curriculum should, at least, not discourage the entry of able pupils into technical work."

75

A problem which seems to run deeply through the USA - concern with the role of curriculum to meet the technological change and the changing demands of industry, is divergence in thinking between those who have been raised in the tradition of general education and those who have been raised in the tradition of vocational training.

Both kinds of background are necessary and their blending should be able to contribute effectively to the training of skilled and technical manpower. The fact is sometimes overlooked that one of the important roles of all education, "whether it be defined as 'academic' or 'vocational', is to prepare young people to participate in the economy and to earn a living."<sup>76</sup> To look at education from this particular point of view should not lower its importance in terms of the cultural role which it plays, or its citizenship role, or its spiritual role.

In addition, the secondary educational system must lay a foundation which will enable those who enter the labour market to return later to education and training programmes for upgrading of either their general education or their specialised skills. In short, curricula and programmes of instruction must be adapted to serving a variety of needs on the part of those students who will enter the labour market at various stages as well as those who must also be adequately prepared for a variety of higher institutions.

Since scientists, in a highly technological society, cannot qualify to act as managers simply on the basis of their knowledge of science, and since managers cannot avoid making decisions that increasingly involve them in judgments about science and technology, one way out of the current problem is to broaden the educational base of both groups.<sup>77</sup> In short, a common core curriculum, which includes the basic knowledge of science as well as some solid grounding in the humanities and social studies, should be studied by secondary students as a basic level of their education.

In considering the type of high school graduate desired, the managers from industry generally agreed they were not seeking young job applicants who had been trained in specific skills. Rather, they were interested in young people whose school preparation makes them eligible for intensive skill-training. They want:

"... the schools to provide young people with a solid background in the fundamentals of mathematics and science, the capacity to read instructions with full comprehension, and the self-discipline to accept training and carry assigned jobs through to completion."

78

The participants from the armed forces, in Arden House Conference on Improving the Work Skills of the Nation, stated that,

"... the services prefer a young man with citizenship training, a sense of responsibility, a broad background, and an open mind, to one who has been trained narrowly in a specific skill. Among the services, the Air Force in particular is interested in men with a solid grounding in mathematics and science, since 70 per cent of Air Force jobs are in electrical, electronic and mechanical fields."  
79

Therefore, educating for adaptability to changes in skills requirements is thought to be vital. This means not only skill training that is broad enough to enable the individual to pick up new techniques with comparative ease as his changing jobs demand them, but the emotional adaptability to accommodate himself to the changes created by technological innovations, particularly if they come fairly late in a worker's life. The foundation of such adaptability must be laid in the schools.

## 2. Demographic Change

Since people are both consumers and producers, population has a double significance for economists. It is the source of demand for goods and services and, at the same time, it provides the labour employed in producing those goods and services. The growth of the population also affects community life by creating problems, such as overcrowding and pollution. Changes in the size and composition of the population therefore have important economic and social effects.

A country's population is increased by births and decreased by deaths. Similarly, it is increased when people from abroad come to live in the country (immigration), and decreased when people leave the country to live elsewhere (emigration). Natural increase or decrease is the balance between births and deaths. Migration is the balance between immigration and emigration.

The USA population increased from about 80 million at the turn of the century to about 180 million in 1960, and to 205.4 million in 1970.<sup>80</sup> This enormous increase is largely due to the difference between the birth rate and the death rate. The birth rate in the United States stands at an average 1.2% or 19 per thousand, against 16 per thousand generally in the United Kingdom. The death rate is 9 per thousand in the United States against 12 per thousand in the United Kingdom and 15 per thousand in Egypt in 1970.<sup>81</sup>

The distribution of the population according to age reveals several important aspects and characteristics of the community. In the USA, the percentage of children under 15, on the basis of the 1960 Census, attains 27.16% of the whole population as against 42.76% in Egypt. The 15-44 group represents 44.46% in the United States as against only 40.47% in Egypt. The 45-64 group constitutes 20.20% in the US as against only 13.29% in Egypt.<sup>82</sup> This comparison means that the burden exerted by children (under 15) on the productive elements of the population (15-64) is higher in Egypt than in the United States, while the percentage of the productive elements of the population is higher in the United States than in Egypt. The United States, in fact, represents the group of countries which have passed the stage of development and have reached the stage of demographic stability to a great extent.

What about the immigration movement to the United States? From 1920 to 1950 about two million<sup>83</sup> men migrated to the United States and remained there. Assuming that these men took jobs in the United States at the same level as the occupations they declared as their usual ones, then the immigrants entered the occupational hierarchy as follows:<sup>84</sup>

Professional persons	7.6%
Proprietors, managers, officials, clerks	7.1%
Skilled and semi- skilled workers	30.3%
Unskilled workers	37.6%
Farmers and farm labourers	12.4%
Miscellaneous	4.8%
Total	99.8%

Comparing these percentages with those of all men in 1950 as shown above in Table 1, it could be concluded that immigrants entered professional ranks in the same proportion as did the native-born. Thus, the immigrants did not affect mobility at that level. However, the immigrants were notably under-represented in the ranks of businessmen and clerks and over-represented in the ranks of unskilled workers.

In other words, from about 1920 to 1950, the effect of immigration on the mobility of the native-born was very small. But in earlier generations the effect was much greater for two reasons: the number of immigrants was much larger and their skills were less developed.

The demographic change, combined with some other reasons, have been affecting the enrolment in the public high school. The growth pattern of this school is spectacular. By 1900 about 10 per cent of children aged fourteen to seventeen were actually in school. In 1930 more than 50 per cent attended, and by 1960 nearly 90 per cent were attending.<sup>85</sup> In the 1970s the proportion comes close to universal secondary education.

Both the public schools and the private institutions enjoyed a boom in attendance after 1945. The estimated enrolment rose from about 6½ million

in 1949 to about 10 million in 1959. The enrolment in 1962-1963, according to the US Office of Education was 35,000,000 for kindergarten through grade eight, and 11,700,000<sup>86</sup> for grades nine through twelve. These figures, which are combined for public and non-public schools, represent a rise of about two million over the total for 1961-1962.

In 1890 only 43,000 students graduated from high school, but in 1930 there were 666,000 graduates; in 1940 1,220,000; in 1960 1,700,000 and in 1970 there were around 2,700,000 graduates.<sup>87</sup> In 1890 3.5% of the seventeen-year-olds were graduated from high school. In 1949-50 59% graduated. This proportion rose to 64.2% in 1959-60.<sup>88</sup>

As the students filled the schools to overcrowding, the percentage of students in any class who could be expected to benefit from the old methods of teaching declined considerably. Since the situation was novel, as Brauner pointed out,

"Students and teachers had to work things out for themselves without the benefit of any precedent that was known to be useful. The unalterable factor was that teachers had to keep all the youngsters sent to them. This ground rule meant that something had to be found for each youngster to do, and that something could not be the continual absorption of factual information."

89

As the supply of information to be mastered grew even greater and more complex, the school presented less and in a more simplified form so that the average student could grasp and hold it. However, the new generation of students would not sit still and listen the way more able students had submitted to their teachers in earlier years. The new schools invited the expression of parental opinion; hence, what the parents wanted and would allow became increasingly influential.

As the numbers of students increased and the control became more

difficult, the instruments available for exercising it grew weaker and fewer. The way out seemed through something everybody could do and that most would do voluntarily. Teachers with less concern for information that all could master and with more concern for activities that all could perform explored projects, field trips, camping, and such socialising activities as dancing, singing, etc. The diversity of activities necessary on a camping trip or in putting on a play assured a wide range of things to do. And in that broadened range it was hoped that there would be something everyone could and would want to do.<sup>90</sup>

### 3. Political Change

From the 1770s to the 1870s Americans planned, built, changed, argued and fought over the kinds of institutions that should be developed. The Republican Party has dominated the political life in the United States since Independence until 1860.<sup>91</sup> Then the Democratic Party was established. However, the two parties afterwards have become so much alike; they neither sound conservative nor revolutionary, nor do they represent a class. Both have claimed to express the national traditions and the national interests.

The judicial power of the United States has been vested in one Supreme Court, and in such inferior courts in other states. The Supreme Court first consisted of a Chief Justice and five Associate Justices according to the Judiciary Act of 1789.<sup>92</sup> The Act of 1869 provided for a Chief Justice and eight Associate Justices, this number has remained unchanged ever since.

Education also was one of these institutions. As they set up and operated a republican form of government dedicated to equality, democracy and freedom, they found that they needed an educational system appropriate

to such a government. In many different ways they said that if a republican government - or society - were to prosper and endure, then the people who elected the government, held office, made laws, enforced laws and consented to be ruled must be educated as responsible citizens. Democracy was never for illiterates.

Evidence of this type of thinking can be found in their writings and in the leaders' public utterances. Washington, for example, in his farewell address of 1796 said:

"Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened."

93

Jefferson, in his later years wrote:

"If a nation expected to be ignorant and free, it expected what never was and never will be."

On another occasion he wrote:

"We must have a system of free universal education that will teach our youth what is going on now and to imbue each with a desire to make his part of the world go right."

94

James Madison, father of the American Constitution, put it this way:

"A popular government, without popular information, or the means of acquiring it, is but a prologue to a farce or tragedy, or perhaps both."

95

Benjamin Franklin, the founder of the academy and father of pragmatism, wrote:

"We must have a system of public education, its purpose must be to educate our people in their public duties."

96

John Dewey emphasised the importance of freedom. Freedom is explicit in a

democracy, so he argued, organised freedom must be explicit in the school. Each member of the society (school) must have the right to share in the making of decisions.

However, this was not easy to do. The people who had won the revolution war were not really Americans, at least not yet. They were English, French, Scottish, German, and Dutch. And they were soon to be Irish, Italian, Hungarian, Polish, and Russian, with different languages and different traditions. When it was finally decided that they should all learn the same language and the same principles of republican government, how was this to be done? The answer was that it could best be achieved by a common school, taught in English, to which all the children of all people could go together and where they could learn how to live together and govern themselves.

Everyone must pay for all. If there are weak spots anywhere, the whole community of freedom is weakened. So the common schools must be supported by taxes paid by all.

But who is to control these schools? The only institution of a free society which serves everyone equally and is controlled by everyone is the government. Hence the government should control the common schools. And to keep the schools close to the people, the State and local governments, rather than the national government, should control the schools.

Despite the advocates of free and equal education for all, the era of republican education tried to get along with common schools at the elementary level, but with secondary and higher institutions created generally, to serve the rich and upper class rather than the ordinary people. But the major failure to achieve the reformers' goal of a common universal school was the system of segregated schools for Negroes. For

most Americans the term 'free man' was limited to white men.<sup>97</sup>

Whereas the republican ideal had been to provide elementary education for all and secondary for the few, the democratic goal has been to provide secondary education for all. The academies failed to realise their original goals, so they were replaced by the public schools at the end of the nineteenth century. Instead of the concentration on the three R's and classical languages concentration on science and modern languages was emphasised. Vocational training and new subjects were introduced. The organisation of the curriculum moved gradually from the classic subject-centred to the broad field-central curriculum, to the core curriculum, and to the activity curriculum. Units, projects, activities, visits, handi-crafts, gardens, laboratories, audio-visual aids, and so on have been used to overcome the drill from textbooks. There is little doubt that the general quality of learning for most children has risen as the school added vitality to the learning process.

However, in this context, the deficiencies of present curriculum in the USA should be judged against two criteria: the first being the USA democratic institutions, the second being the USA international role. In its relation to democratic institutions, as Holmes points out,

"the curriculum should provide opportunities for children to learn the skills needed in the making of democratic decisions. This implies the development of a social intelligence that will take into account all aspects of a problem - the moral, the political, the scientific, the economic, and so on - work out the possible consequences of any policy and judge in the light of these."

98

In the post-war era, under difficult circumstances, the USA has been called upon to play the role of leadership in international affairs which Britain and France previously undertook. Her educational task has been

changed, but the educational system has not yet been geared to it.

"Although John Dewey was constantly analysing the role of education in a democracy his concern was primarily domestic rather than international. Over the years the system has served this purpose as well."

99

Already considerable interest has been shown by political scientists in America in the public's role in the conduct of international affairs.<sup>100</sup> The contribution might be made by the educational system to the political problem in deciding what ought to be taught in the schools. "If the public are to participate in foreign affairs ... then perhaps the systematic teaching of political science is a necessary corollary." Students should be trained in the methods of political analysis and the principles of weighting the possible consequences of alternative political action.<sup>101</sup> Alternatively, through history, general social studies, geography, science, and so on, the basic principles on which political decisions should be made could be drawn out. Then the whole question arises of how the subject matter or this area of knowledge should be treated.

#### 4. Educational Change

##### a) The Reorganisation of Secondary Education

Education in America during the colonial period was dominated largely by European influence. The colonists were quite willing to pattern their schools after their English heritage. This meant that the colonial secondary schools followed the English Latin grammar schools. In organisation they were designed to prepare the well-to-do for higher education through a classical curriculum.

"So the Latin grammar school was designed to prepare sons of the privileged classes for college in order that they might eventually enter one of the 'higher' professions, such as the ministry, law, medicine, teaching, or simply that of 'gentleman'. Relatively few in the total population were expected to attain these callings in life. Most were expected to be tradesmen, farmers, workers, mechanics, or servants. For these an elementary education was considered sufficient - or even more than necessary."  
102

In the eighteenth century, however, cities and towns grew rapidly in size, trade and commerce increased, immigration rose, and goods and services were much more in demand than in the seventeenth century.<sup>103</sup> The cry was heard that the former school was no longer appropriate for preparing young people to engage in these new important occupations of making goods, distributing them, and selling them. Education, some said, should become more practical, not only intellectual or literary.

As a result, during this century the practical utility ideal for education began to attract mild attention. The most detailed plan for pragmatic education was outlined by Benjamin Franklin in his proposal relating to education of youths in 1749.<sup>104</sup> His proposal called for a new type of secondary school to be known as the academy. The plan was provided for a new educational philosophy with a realistic and practical approach. Some academies opened their doors to girls, a notable victory for democracy. By the 1870s some 6,000 academies<sup>105</sup> dotted the educational landscape.

But the common-school reformers, such as Horace Mann, Henry Barnard, W.Harris and John Dewey, felt that the private academies could never do the job that needed to be done. They therefore argued that free public schools should be created to provide a practical education for those boys and girls who would not or could not go on to college.<sup>106</sup>

The growth in the number of academies offers proof that they met an

urgent need in American life. It did allow the people to see more clearly the unique kind of secondary education that was needed. However, the academy fell short of making secondary education democratic, it was terminal as well as college-preparatory in character,<sup>107</sup> but it did popularise the need for public secondary education.

So the academy was not accepted by the common-school reformers; they argued that preparation for life, and the elimination of class distinction could be achieved only when a free school meant that all children were given a free education together and when the entire school system was supported by taxes levied upon everyone.

The academy gave way to the public high school. The first public high school was established in Boston in 1821. It was, however, after 1880 that this new provision for secondary education began to flourish both in the number of schools and enrolment. The creation of the common school, as a new structure for secondary education, raised a problem in the field of curriculum. What should be the content of education for the masses who crowded into the public schools? Two possibilities existed:<sup>108</sup> the content might remain the same, where each student could acquire the same knowledge and reach the standard of attainment previously set. Evidence against this possibility accumulated in the USA during the late nineteenth century. Or the content of education might be changed, "As a matter of fact not one, but all these were tried."<sup>109</sup> So the reorganisation of the school system forced changes in the curriculum.

By 1918 there was little doubt that the struggle for public secondary education was won. Many high schools had expanded their course offerings and had developed practical subjects for terminal students as well as classical subjects for college-bound students. In a sense these schools

became comprehensive high schools offering parallel curricula under one roof where students of many different classes and with varying interests and abilities associated freely.

However, there are some non-comprehensive high schools, for smaller segments of the adolescent population. Among the specialised high schools of a non-vocational nature are the Central High School of Philadelphia, the High School of Music and Art, and the Bronx High School of Science in New York City. Moreover, there are vocational high schools of every type in the large cities. Such vocational schools may be operated in cooperation with a corresponding industry.<sup>110</sup>

Through a comprehensive high school for the vast majority of American adolescents and through several types of specialised institutions for specific interests, it is perhaps clear that secondary education in America makes a definite effort to further the democratic ideal of equal educational opportunities for all young people and to get schools more closer to socio-economic needs.

b) Non-selective System

In the USA there is in general no segregation into different types of school, but only one public high school for all students. The US Office of Education in 1948 stated that:

"Secondary education ... in Europe is not based upon the purpose of providing equal opportunities to all youth ... only the intellectually superior and economically favored youth have the advantage of the kind of secondary education comparable to that available in our country. It is rather evident that a plan based on such selective factors is not in harmony with our democratic philosophy."

111

Essential to the non-selective nature of the high schools is the lack

of examination barriers to attendance at secondary school. Only a small number of specialised high schools have an entrance examination.<sup>112</sup>

As a result of this, it was estimated at the beginning of the 1960s that almost 9 out of every 10 American young people were undergoing instruction. The percentage is now closer to being universal. Such a percentage is unique in the world. It was also indicated that more than 35 per cent of American young people were in a college or university, whereas in 1910 only about 4 per cent of the youth were in college.<sup>113</sup>

The important fact is the opportunities that young Americans have to advance their education and thereby their intellectual, economic and social status in a flexible society. Some of their motivation and impetus, at least, is traceable to the high school.

Even in a non-selective system, however, the influence of social class persists. The ambitions of students are likely to be positively related to their home backgrounds. Working class students do less well at school than their ability would suggest that they should, and they go to schools where the climate of opinion and expectation is comparatively low.<sup>114</sup> The school's climate of opinion depends mainly upon the social background of its students and the condition of its district.

Roberts argues that the selective system, such as in England, makes it possible for the ambitions of entrants into employment to be consistent with the available job opportunities, whereas in a non-selective system as in America, "Such synchronization is impossible and there is an inescapable tendency for schoolchildren to become over-ambitious."<sup>115</sup> And this, in turn, means that many high school graduates "will find their ambitions frustrated when the time to start their careers arrives."<sup>116</sup>

Thus he concludes that,

"... a selective system of education is clearly the best way to prepare the young for their working lives in a stratified occupational structure. Non-selective schooling leaves the young unable to reconcile themselves to the types of employment available for them, whereas the products of selective systems of education have acquired ambitions consistent with the job opportunities that are available."  
117

But in a non-selective system such as in the USA, the ambitions that are fostered among students act as driving forces that are to some extent responsible for determining the shape of their careers. They also act as a driving force responsible for the struggles of students through the instructional process, to achieve as much success as their abilities permit. In this way the aspirations that young people acquire help to determine their educational achievements and thereby also help to shape their future careers. The ambitions of students in a selective system are unable to play such a positive role. In England where the selective system was dominant, as Roberts pointed out,

"... a child's progress is not directly dependent upon his ambitions, but upon his measured and tested ability and upon his past academic performance. Those who are selected at an early age for elite education are given a training ensuring that when the time comes they are qualified to enter jobs of the highest status, and the chosen elite is prepared for this type of employment regardless of whether the children involved initially aspired toward it."  
118

c) Administration

The Constitution contains no direct reference to education. But on the basis of the Tenth Amendment, education became a function of the States.<sup>119</sup> From the beginning of the republic to the present time, however, the federal government has undertaken various kinds of educational activities

through the work of its executive departments and the US Office of Education and the Supreme Court.

The Supreme Court in 1954, for example, interpreted the refusal to admit Negroes to public schools as unconstitutional. "Frequently its decisions have set precedents, at the normative level, for changes in local educational policy and practice."<sup>120</sup> Another important and direct role of the federal government is the allocation of funds for specific educational purposes.

There is a long-standing fear on the part of many citizens and educationists as to the possible assumption of direct or indirect control over some aspects of education by the federal government. It is this viewpoint which seems to motivate some of the opposition to federal financial grants to education.<sup>121</sup>

As a general rule, a state school system is under the control of a policy-making body known as the State Board of Education. The Board consists of members, usually administrators, who may be elected by the people or appointed by the governor. The highest professional executive is the State Commissioner. He is the chief of the State Department of Education, which consists of a staff of educational experts. The Commissioner and the Department of Education work together to put into effect the policies laid down by the State Board of Education. The Commissioner and the staff of the Department of Education, which is organised on the basis of scholastic level, subject matter, and other educational considerations, are concerned with a variety of matters, such as the distribution of state funds to the public schools, the certification of teachers and administrators, the recommendation of textbooks, the planning of research projects for study by staff members and others, the provision of advisory services to local

school boards, and other activities, depending upon the state.<sup>122</sup>

The local school board or board of education directs the public schools in the district. Its members, who are elected or appointed, are expected to have some educational background, a co-operative attitude, a knowledge of community resources and problems, and definite interest in the various aspects of education. It is understandable, however, that "not all school boards exhibit these qualities, and some may be motivated more by political, religious, economic, or other interests than by education."<sup>123</sup> Each large high school has a principal, assistant principals, and chairman of subject-matter departments. The local board is headed by a Commissioner who is elected by the board's members. The local board is usually charged with the responsibility of the formation of the general school policy, the raising of funds for school by levying of taxes, the supervision of school buildings and teaching equipment, and other functions which vary from district to district. The Commissioner and his staff, who are specialised in every curriculum field and every type of administrative service, set up the statements and interpretation of educational aims and objectives, the establishment of courses of study, the provision of information in line with the desirable practices of public relations.<sup>124</sup>

The existence of fifty distinct state systems of education is considered an advantage because it would discourage the misuse of education by centralised power. On the other hand, one can also note the lack of a uniform national standard of education. For this reason, there are many educationists who favour the establishment of a national board of education which would set standards for the entire country. On this subject, there has been a debate in the educational circles since the early 1960s.<sup>125</sup>

But who controls the curriculum content in the high schools?

In general, among the many groups in the USA which have a significant influence on the selection of curriculum content, the colleges and universities are prominent.<sup>126</sup>

College and university teachers influence the curriculum through their participation in setting university admission requirements and in serving as members of publications and other committees of national professional organisations, and also through their educational research studies.

It is also true that textbook writers and publishers, and producers of teaching aids have a powerful influence in determining what is taught at every level of secondary schooling.<sup>127</sup>

The parents, public opinion, and organised groups have brought about curriculum changes in the USA. For example, the automobile accidents and the ready availability of automobiles to young people have brought about great public pressure to make driver training a required subject in the high school.

Because citizens generally do not possess sufficient knowledge of the curriculum process to decide what should be taught and how it should be taught at particular levels, the system of curriculum committees at the local level was adopted as early as the 1920s. Ever since there have been thousands of committees operating throughout the country. The recommendations of these committees take into consideration all influences exerted upon curriculum planning.<sup>128</sup> However, parents have the right to send their children to schools "where they can demand the kind of education and discipline they think proper".<sup>129</sup> And this is the outcome of the deepseated belief that it is the right of every parent to have his child educated according to his

own lights. The people of a community can change the board of education if they are not satisfied with the curriculum and instruction in their schools.

Several states have the right to manage their own affairs. So the most clearly stated curriculum content is to be found in the state regulation and legislation. But legislation may vary from one state to another, and not only as to the number of subjects and courses required of all schools but also as to the extent to which content is specified.<sup>130</sup>

The local boards have also exercised considerable influence in curriculum decisions by setting graduation requirements, approving programmes of studies, adopting textbooks and teaching aids, and also by sometimes challenging the recommendations of curriculum committees and state legislation. For example, "the local board may require two units of American history instead of the one required by state law".<sup>131</sup>

But such influences do not finally determine what is taught in the classroom. However specific the textbooks, the American teacher is generally trained to use them as guides rather than prescriptions. The student not only has the choice in selecting his courses, "but also his classroom and extra-classroom activities".<sup>132</sup> This does not mean that the curriculum is planned by students, but it does mean that teachers are increasingly conscious that effective learning is self-motivated. Accordingly curriculum planning provides for many alternative curriculum activities from which teachers may choose in accordance with the recognised interests and abilities of their students.

The place of teacher education within the university structure is in itself an important factor in changing the curriculum. A change in the teachers' college programme may in turn lead to a similar change in the

secondary school curriculum and vice versa. For example, when schools stopped teaching Latin and Greek, colleges ceased to train teachers in those subjects.<sup>133</sup>

After the analysis of socio-economic, political and educational conditions in the USA, it might be fair to say that educating for the adaptability to changes in knowledge and skills requirements is thought to be vital. It is equally vital that education should provide opportunities for students to learn knowledge and skills needed in the making of democratic decisions. Did the curriculum at secondary level develop in such a way as to meet these requirements? The answer is the subject of the next chapter.

NOTES

1. Warner, W.L., et al., Democracy in Jonesville, New York, Harper, 1949, chapter IX; Richard Centers, The Psychology of Social Class, Princeton, Princeton University Press, 1949; Kahl, J., The American Class Structure, New York, Rinehart & Co.Inc., 1957, p.187
2. Kahl, op.cit., pp.187-8
3. Ibid., p.188
4. Ibid., p.190
5. Fitzgerald, S.F., 'The Rich Boy', in Duffey, B.J. (ed.), Modern American Literature, New York, Rinehart & Co.Inc., 1951, pp.46-7
6. See Mills, C.W., White Collar, New York, Oxford University Press, 1951.
7. Kahl, op.cit., p.194
8. Ibid.
9. Ibid., p.197
10. Riesman, D., et al., The Lonely Crowd, New Haven, Yale University Press, 1950. A more accurate picture of the values of the upper-middle class can be found in this book.
11. Kahl, op.cit., p.202
12. Ibid.
13. Ibid.
14. Mills, op.cit., p.182
15. Kahl, op.cit., p.203
16. Ibid., p.205
17. Ibid., pp.205-6
18. Walker, C.R. and Robert H.Guest, The Man on the Assembly Line, Cambridge, Mass., Harvard University Press, 1952, p.55
19. Chinoy, E., Automobile Workers and the American Dream, New York, Garden City, Doubleday, 1955, p.44
20. Kahl, J.A., Educational and Occupational Aspirations of 'Common Man' Boys, Harvard Educational Review, XXIII, 1953, p.202

21. Chinoy, op.cit., p.82
22. Genevieve Knupfer, 'Portrait of the Underdog', Public Opinion Quarterly, XI, Spring 1947, pp.103-14
23. Hollingshead, A.B., Elmtown's Youth, New York, Wiley, 1949, pp.110-11
24. Ibid.
25. Kahl, op.cit., pp.211-12
26. Davis, A., 'The Motivation of the Underprivileged Worker,' in William F.Whyte (ed.), Industry and Society, New York, McGraw-Hill, 1946, p.86
27. Extract from U.S.Census of Population, 1950, Vol.II, Characteristics of the Population, Part 1, U.S.Summary, Washington, Govt.Printing Office, 1953, Table 53.
28. Educational Policies Commission of the National Education Association, Education for All American Youth: A Further Look, Washington, D.C., National Education Association, 1952, p.7
29. Abrahamson, S., 'The Influence of Social Structure on Curriculum USA', in The Yearbook of Education 1958, p.393
30. Ibid.
31. Havighurst, R.J. and Neugarten, B.C., Society and Education, Boston, Allyn & Bacon, 1957, p.183
32. Abrahamson, op.cit., p.394
33. Kahl, op.cit., p.187
34. See Allison Davis and John Dollard, Children of Bondage, Washington, D.C., American Council on Education, 1940; August B.Hollingshead, Elmtown's Youth, New York, Wiley, 1949; and Robert J.Havighurst and Bernice Neugarten, Society and Education, Boston, Allyn & Bacon, 1957.
35. Quoted by Abrahamson, op.cit., p.395
36. Brickman, W.W., Educational System in the United States, New York, The Centre for Applied Research in Education, Inc., 1964, p.40
37. Ibid.
38. Abrahamson, op.cit., p.396
39. McClelland, D.C., et al., The Achievement Motive, New York, Appleton-Century-Crofts, 1953, especially Chapters II,V,VIII,IX.

40. The evidence on the differences in child-rearing practices between middle-class and working-class mothers is contradictory. See Robert Havighurst and Allison Davis, 'Comparison of the Chicago and Harvard Studies of Social Class Differences in Child Rearing', American Sociological Review, XX, August 1955, pp.438-42
41. OECD, Manpower Policy and Programmes in the United States, Paris, 1964, p.78
42. Ibid., p.79
43. De Carlo, C.R., 'Perspective on Technology', in Eli Ginzberg (ed.), Technology and Social Change, New York, Columbia University Press, 1964, p.35
44. Ibid.
45. Kahl, op.cit., p.104
46. Ibid.
47. Community Economic Development Efforts, Five Case Studies, prepared for the Committee for Economic Development, New York, Frederick A. Praeger, Inc., Publishers, 1966, p.12
48. Ibid., p.18
49. Lundberg, F., America's 60 Families, New York, Vanguard, 1937, pp.20-30
50. Ibid.
51. National Resources Committee, 'The Structure of Controls', in Class, Status and Power, Bendix and Lipset (eds), p.135
52. Ibid.
53. OECD, op.cit., p.79
54. Baker, W.O., 'The Dynamism of Science and Technology,' in E.Ginzberg, op.cit., pp.102-3
55. Fabrican, S., 'Productivity and Economic Growth,' in ibid., pp.126-7
56. Baker, op.cit., p.103
57. Ibid., p.104
58. OECD, op.cit., p.69
59. Ibid.

60. OECD, Economic Surveys 'United States', Paris, April 1972, p.35
61. OECD, The Growth of Output 1960-1980, December, 1970, pp.75-94
62. Kahl, op.cit., p.99
63. Hoyt, E., et al., American Income and its Use, New York, Harper, 1954, p.96
64. Ibid., p.107
65. Johnson, E.D., 'The Aerospace Industry,' in E.Ginzberg, op.cit., p.69
66. OECD, April 1972, op.cit., p.37
67. Kahl, op.cit., p.254
68. Goodman, L.H., Economic Progress and Social Welfare, New York, Columbia University Press, 1966, pp.193-4
69. Fabricant, op.cit., p.128
70. OECD, April 1972, op.cit., p.37
71. Bell, D., 'The Post-Industrial Society,' in E.Ginzberg, op.cit., p.50
72. Barker, op.cit., p.90
73. Ibid.
74. Ginzberg, E., 'Confrontations and Directions,' in E.Ginzberg, op.cit., p.151
75. Holmes, B., 'Social Change and the Curriculum,' in The Yearbook of Education 1958, London, Evans Brothers, 1958, p.379
76. OECD., April 1964, op.cit., p.103
77. Ginzberg, E., op.cit., p.151
78. Arden House Conference Discussion 'Secondary Education and the Development of Skill,' in Henry David (ed.), Education and Manpower, New York, Columbia University Press, 1960, p.97
79. Ibid.
80. UN, Demographic Yearbook 1970, p.105
81. Ibid., pp.105,126
82. Ibid., p.126

83. Extract from Statistical Abstract of the United States, 1940, table 101, and the 1955 issue, table 109.
84. Ibid.
85. Dropkin, S., Full, H., Schwarcz, E., Contemporary American Education, New York, The Macmillan Company, 1965, p.101
86. Brickman, op.cit., pp.31-2
87. Arden House Conference Discussion, op.cit., p.78
88. The National Manpower Council, 'Secondary Education and Preparation for Work,' in ibid., p.60
89. Brauner, C.J., American Educational Theory, New Jersey, USA, Prentice-Hall, Inc., 1964, p.11
90. Ibid., p.12
91. Lukell, S., 'The Future of American Politics,' in Larrabee, E. (ed.), American Panorama, USA, New York University Press, 1957, p.210
92. Smith, E.C. (ed), The Constitution of the United States, New York, Barnes and Noble Books, 1972, Section 2-1, p.137
93. Monroe, P., Founding of the American Public School System, New York, Macmillan, 1940, p.201
94. Ibid., p.202
95. Ibid.
96. Ibid.
97. Dropkin, op.cit., p.94
98. Holmes, B., 'Social Change and the Curriculum,' in the Yearbook of Education 1958, op.cit., p.379
99. Holmes, B., Problems in Education: A Comparative Approach, London, Routledge & Kegan Paul, 1965, pp.114-15
100. Ibid., p.116
101. Ibid., p.117
102. Dropkin, S., et al., Contemporary American Education, op.cit., p.90
103. Ibid.

104. Woody, T., Educational Views of Benjamin Franklin, New York, McGraw-Hill Book Company, 1931, pp.158-79
105. Dropkin, op.cit., p.100
106. Ibid.
107. Brubacher, J.S., A History of the Problems of Education, New York, McGraw Hill Company, 1947, pp.429-33
108. Editor's Introduction to The Yearbook of Education 1958, London, Evans Brothers, 1958, p.11
109. Ibid.
110. Brickman, W.W., op.cit., pp.48-9
111. U.S. Office of Education, Life Adjustment Education for Every Youth, Washington, D.C., Federal Security Agency, Office of Education, 1948, p.15
112. Brickman, op.cit., p.48
113. Ibid.
114. Roberts, K., 'The Organisation of Education and the Ambitions of School Leavers: A Comparative Review,' in Comparative Education, Vol.4, No.2, March 1968, pp.90-1
115. Ibid., p.92
116. Ibid.
117. Ibid., p.94
118. Ibid., p.93
119. Smith, op.cit., p.50
120. Holmes, B., Problems in Education: A Comparative Approach, op.cit., p.172
121. Ibid., p.37
122. Ibid., p.38
123. Ibid., p.40
124. Ibid., p.42

125. Ibid., p.53
126. Alexander, W.M., 'Who decides upon the content of the Curriculum in the U.S.A.,' in the Yearbook of Education 1958, op.cit., p.287. See also, Editor's Introduction to The Yearbook of Education 1958, op.cit., pp.i, 13-16
127. Alexander, op.cit., p.289
128. Ibid., pp.293-4
129. Editor's Introduction, op.cit., p.23
130. For more details, see: National Education Association, 'What Shall the High Schools Teach?', 1956 Year Book, Washington, D.C., The Association, 1956, chapter 111.
131. Alexander, op.cit., p.295
132. Ibid., p.296
133. Lieberman, M., 'Teacher Education and the Secondary School Curriculum - U.S.A., in The Yearbook of Education 1958, op.cit., p.321

CHAPTER 3  
CURRICULUM DEVELOPMENT  
IN AMERICAN SECONDARY  
SCHOOLS SINCE 1900

It is difficult to analyse the changes which have taken place in the high school curriculum during the twentieth century as one unit of time. Since the factors that affected the curriculum varied from time to time during this period, and the nature and extent of curriculum changes also differed from time to time, the pattern of development can be divided into three phases based upon the contextual causes and the nature of curriculum changes themselves. The first phase is the industrialisation and Americanisation period from about 1890-1920. The second phase is the general diversified period from about 1920-1950. The third phase is the national project period from about 1950-1970. After 1970 there has been a humanistic trend. Reference to it will be made without much analysis.

## I. THE FIRST PHASE 1890-1920

### 1. Curriculum Aims and Objectives

This curricular phase, although encompassing only a brief period, was outstandingly influential in shaping the character of American education. Discussions among the educationists revealed conflicts of purpose and confusions of aim. One could quickly enough gain agreement that the goal of the high school was 'preparation for life'. But like agreements on 'motherhood' and 'sin',<sup>1</sup> what this meant in practice was not entirely clear.

From the point of view of the Committee of Ten in 1893, the secondary school was viewed as an institution designed to prepare small segments of American youth 'for the duties of life' by improving their intellectual abilities. The Committee saw absolutely no conflict between this conception and that of the secondary school as a college-preparatory institution, for

the task of improving intellectual abilities centred squarely in the studies of the college. The Committee was interested primarily in improving intellectual ability by disciplining the mind, according to the encyclopaedic model of thought, and for this purpose all of the principal subjects would be of use.

"They would all be taught consecutively and thoroughly, and would all be carried on in the same spirit; they would all be used for training the powers of observation, memory, expression, and reasoning; and they would all be good to that end, although differing among themselves in quality and substance."

2

However, in this very short period, political, economic and social changes of the first magnitude were beginning to exert new demands on the school - demands destined profoundly to alter the outlook expressed by the Committee of Ten in 1893. Thirty years later the last frontier in the plains states was rapidly being settled and increased mechanisation of farming resulted in the application of many new machines and processes. In industry, science and invention spawned new technology that brought improved methods of production and increased output. Not only had the number of persons engaged in industry surpassed the number in agriculture, but the gross value of American industry had far outrun that of any other nation. The large amounts of capital required by expanding technology resulted in the formation of huge corporations, and the growth of industry brought about the urbanisation of America. The vocational training movement in America was given considerable financial support by the Smith-Hughes Act of 1917. So, American life in general and urban life in particular began to display a growing complexity which demanded ever higher levels of social and economic skill. Working in a factory, negotiating public transportation, buying and selling on credit, understanding intricate political organisation,

all necessitated abilities on the part of the average citizen which had simply not been called for in earlier days.

During the nineteenth century most immigrants had generally pushed into the agricultural areas. At the beginning of the twentieth century the 'new' immigrants tended to remain in the industrial areas rather than move to the agricultural areas.<sup>3</sup> Differing markedly among themselves in religion, languages, and custom, they seemed far more than earlier comers to settle in self-contained urban neighbourhoods. Very often the public school in a heterogeneous urban neighbourhood was the one place where the foreign-born might become conversant with American language, attitudes, beliefs and customs.<sup>4</sup>

In educational thought, progressivism manifested itself in the cry that universal schooling was not enough, that a certain kind of schooling was fundamental to democracy. Dewey in *Democracy and Education* (1916) carefully analysed the fundamental conditions of democracy and then sought educational arrangements which would nurture and support these conditions.<sup>5</sup>

It was also during this period that the scientific study of education began to get under way. Stanley Hall and his followers directed their attention towards the study of child development. Thorndike also carried on work enabling educators to subject education to scientific analysis, to study individual differences, and so on.

As a response to the new changes and the new demands of society, the Commission on the Reorganisation of Secondary Education published the report on the Cardinal Principles of Secondary Education in 1918, in which the main resources of educational aims and goals were laid down: that secondary education should be determined by the needs of society (the nature of society) to be served, the character of the individuals to be educated (the nature of

the learner), and the knowledge of educational theory and practice available (the nature of knowledge).<sup>6</sup>

The purpose of democratic education is to

"develop in each individual the knowledge, interests, ideals, habits and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends."

7

To give this proposition meaning, it is necessary to analyse the life activities of the average individual in a democratic society. The results of such analysis yield seven primary educational objectives: health, command of fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure, and ethical character.

The report is clear about a number of other things. It explicitly assumes that the vast social changes inherent in industrialism and the findings of the new psychology must be taken into account. It also assumes that marked changes in the secondary school population "can no longer be safely ignored." As for the ethnic diversity of the American people, it argues that "the school is the one agency that may be controlled definitely and consciously by our democracy for the purpose of unifying its people."<sup>8</sup> The report maintains that secondary education should be for all, and that entry into the secondary school should be governed by age rather than by academic achievements, and that the colleges should modify their entrance requirements to enable graduates of such secondary schools freely to attend. Finally, the report comes out in support of the comprehensive high school, embracing all curricula in one unified organisation, as "the standard type of secondary school in the United States". "Life in such a school", the report asserts, "is a natural and valuable preparation for life in a democracy."<sup>9</sup>

It is clear that the aims and goals of the high school had departed from the encyclopaedic school of thought to the aims and goals of pragmatic model. From an institution conceived for the few, the high school had become an institution conceived for all. From an adjunct to the college, it had become a preparation for life. From an institution restrictively concerned with the intellectual, the high school had become an agency with no less a goal than the amelioration of every individual and social need. From concentration on the past, the high school had become a preparation for present and future as well as for democratic participation.

## 2. Curriculum Content

### a) The Academic Disciplines

The high school replaced the academy as the dominant secondary institution in this curricular period. The Committee of Ten report emphasised that in 40 representative high schools nearly 40 subjects were taught. The Committee recommended the following subjects as appropriate for the high schools:

"1. Languages - Latin, Greek, English, German, and French (and locally Spanish); 2. Mathematics - algebra, geometry and trigonometry; 3. general history, and the intensive study of special epochs; 4. Natural history - including descriptive astronomy, meteorology, botany, zoology, physiology, geology, and ethnology, most of which subjects may be conveniently grouped under the title of physical geography; and 5. physics and chemistry."

10

These courses were recommended to be taught for both the college-bound and the non-college-bound. They became a powerful force influencing the secondary school curriculum until 1920. A study of offerings prepared by

Carl Tessen and Lester Herlihy provides information about high school curricula from 1890 to 1934.<sup>11</sup> Several generalisations can be made from this report. Latin continued to hold a strong position in the school's programme, and the modern languages were receiving increased attention. Greek all but disappeared.

In mathematics, algebra and geometry dominated with some attention to trigonometry. Arithmetic was disappearing as a field of study. Among the new subjects in the programme, the sciences led in numerical importance. Physical geography, physics, chemistry, physiology, botany, geology, zoology, astronomy and biology were generally available in high schools. However, zoology, botany and physiology were to show a decline in this period, as they were absorbed by the rapidly developing offering of general biology.

In social sciences, American history persisted as the most important subject taught. Course work in civil government held a favourable position. Foreign history was provided in some high schools. English (rhetoric, literature) was to improve its already significant status.

b) The Cultural Studies

The cultural studies as offerings in the high school have experienced a somewhat irregular trend in this period, possibly because the importance attached to these fields had been considerably less than in the academic areas.

Art, which had been established in the schools during this period, found recognition in the early years as painting, drawing, and modelling, and later as a form of creative expression. Music was accepted as having a place in the school's programme more stable than the position held by art.

Physical education was just beginning to become a well-established offering.<sup>12</sup>

c) The Occupational Studies

Agriculture, home economics, manual training, and to a lesser degree, bookkeeping were all generally recognised offerings of the high school in this period. None of these subjects, however, was to enjoy the popularity it had in the next period. In agriculture, major attention was being given to agronomy, animal husbandry, farm mechanics, and farm management. In home economics the focus was upon food, clothing, and home management. Manual training emerged in this period after experiencing some difficulties in being accepted as a general education offering in the high school. The idea was advanced that,

"... all of the manual arts, the mechanical processes, and the tools used in common in the trades and occupations should be arranged in a systematic course of instruction and incorporated into the general system of education."  
13

Clearly in this period there was a demand for trained mechanics to enter the trades and industry. The apprenticeship system was not able to cope with the situation. Neither were the elementary schools resolving the problem through their manual training programmes. To cope with the pressing requirements of the trades and industry meanwhile,

"private trade schools set the pace in contributing to the development of an educated labor force. Corporation schools formed industrial education programs appropriate for their corporate objectives and found their efforts amply rewarded."  
14

d) Student Activities

The notion that student activities had educative value and should be the direct concern of teachers and administrators was slowly gaining ground in the public school, especially during the later years of this period. A reflection of support for student activities could be drawn from two statements in the report on the Cardinal Principles of Secondary Education,<sup>15</sup> namely, the objectives of health (both mental and physical) and worthy use of leisure.

Provision for student activities was also evidenced by the physical facilities in school buildings constructed during this period. Athletics and playgrounds, gyms and so on were provided for recreational activities and team sports of football, basketball and baseball, as well as music and drama.

Curriculum Theory

At least until 1918, the content consisted of an encyclopaedic knowledge of the real world. Concentration was on humanities rather than natural sciences which were introduced later in this period. The content was determined before the teaching situation and in turn it was not built on the student's experiences. Extra-curricular activities had not been introduced until later in this period. The high school student

"was generally required to complete the prescribed academic subjects before choosing 'electives'. The required general education courses were receiving the bulk of the school's attention."

16

3. Organisation and Method

Until 1918 at least, the content was organised in the form of a subject-centred approach according to the encyclopaedic point of view.

Subject matter was first in importance and it was controlled by someone representing authority external to the learning situation. It was also logically organised, and lacked integration.

But the Cardinal Principles of Secondary Education Report of 1918 was significant in that attention was being focused on desired outcomes rather than on subject matter to be taught.

"Although [its] objectives gained immediate and wide acceptance, their intended purposes of bringing about interrelationship of subject matter and stimulating integrated and continuous educational processes were not achieved."

17

With additional knowledge regarding the nature of the learner, the 'whole child', the learning process, and techniques of instruction, the teacher needed to acquire new skills and understanding in the role he was to assume. Edwards stated that:

"These considerations led to demands that the entire system be re-examined and reorganized in the light of emerging concepts of democracy and in harmony with the new knowledge concerning the nature and methods of the learning process, human variability, and the social, mental, and physical development of the child."

18

The realisation that teachers needed to be college-educated stimulated the teachers college movement in this period.

The data quoted by Finney from the Annual Reports of the United States Commissioner of Education reveal that the number of teachers in the American public schools increased from 286,593 in 1880 to 604,301 in 1915; the number of students enrolled in the same period increased from 9,867,000 to 19,704,000.<sup>19</sup> These figures would indicate that staff increase was barely keeping pace with enrolments.

The curricular offerings that were becoming established in the schools for the first time, such as the sciences, home economics, industrial arts,

agriculture, bookkeeping, art, music, and physical education, required specialised kinds of instructional equipment, so laboratories, shops, kitchens, gymnasiums, art materials, and music instruments became increasingly important.

Inequality of educational opportunity during this period was reflected in provision of these facilities for learning as much as in the educational programme itself.<sup>20</sup> While in schools in the more favoured cities in some areas the authority was offering such facilities, in the schools in small towns and rural areas these developments were to come much later.

#### 4. The Evaluation System

In the early part of this period, the forms of evaluation consisted of oral recitation, paper and pencil examinations, since the major goal was to train the mind as the Committee of Ten pointed out in 1893. The forms of evaluation used in this period were attempts to measure and predict the outcomes rather than to diagnose and plan or replan the curriculum accordingly.<sup>21</sup> In other words, these forms of evaluation were summative rather than formative and initial.

The 'essay' type of examination in which the student was called upon to write about a number of topics or problems was being utilised to supplement the awarding of marks on the basis of teachers' observed impressions or oral examinations, and it was during this period that individual and group tests, objective examinations, and standardised achievement tests were developed.<sup>22</sup> But their limited use in the schools during this period had very little influence on practices and programmes. Their widespread use came later.

## II. THE SECOND PHASE 1920-1950

This curricular period extended from 1920 to 1950, a time in which American public education experienced a consolidation of many ideas formulated earlier. As in the period between 1890 and 1918, new social, economic, technological and intellectual forces were calling for new educational outlooks. The great immigrations were over. Industrialisation was entering upon a new era of automation and atomic energy. The United States had assumed leadership in a world whose centres of power were rapidly shifting. Technology had made possible the creation of new educational media.<sup>23</sup>

A period of financial prosperity ushered in this period, to be followed by depression and later World War II. The 1920s saw a rapidly expanding economy and an accompanying surge of interest in education. After the collapse of the stock market in 1929, the country was plunged into an economic depression of a scope previously unknown in its history. Education not only suffered from lack of financial support but also faced critics who challenged the purposes of American schools and their responsibilities to a society that appeared to be experiencing economic problems.<sup>24</sup>

Without question, the individual exerting the greatest influence on American educational thought during this period was John Dewey. Because of the impact of his work and writings, American schools early in this period became the focus of efforts to replace the traditional with the new. Far from being an absolute end in itself, scholarship was associated with human welfare. Knowledge had to be used. Dewey advocated that learning, to be most effective, must begin with an interest related to the needs experienced by the students. There were attempts, especially at the secondary level, to draw upon the respective disciplines in the solution of cultural problems.

The development of the 'problems of Democracy' course serves as an example.

As the country was emerging from some ten years of depression, it was drawn into the Second World War, during which human and financial resources were siphoned from public education. At the close of the 1940s and 1950s, education was to experience unprecedented criticism. During these periods of intensifying national stress, such as the depression, World War II, and with the launching of the Russian satellite Sputnik in 1957, essentialism rose to prominence. "National modes of insecurity and conservatism were reflected in national concerns for practical, specific education."<sup>25</sup>

This period was also marked by psychological concepts such as instinct, learning process, human growth and development, personality, and transfer of training. The rapid growth of anthropology had profoundly altered classical theories of human development, and all these provided the educationists with greater knowledge of school-age youth. As a result, practices in curriculum construction assumed unprecedented direction and dimensions. The traditional concept of the curriculum as consisting of a group of subject matters was discarded, and educational leaders came to define the curriculum operationally. In essence, it was to be composed of all student experiences under the guidance of the school. A change in purpose and practice was initiated.<sup>26</sup>

#### 1. Curriculum Aims and Objectives

Educational concepts such as the community school, education for life adjustment, education for all American youth, and education for the needs of the youth have as their focus the building of a wider bond among the

diverse elements of the American population.

Still searching for clarification of the aims and goals of American secondary education, the Educational Policies Commission of the National Education Association set forth objectives in 1937. The four main categories were: 1. self-realisation; 2. human relationships; 3. economic efficiency; and 4. civic responsibility.<sup>27</sup>

In 1944 the National Education Association's educational policy commission published 'Education for all American Youth'. This report exhibited the pragmatic and progressive approach to aims, since it emphasised the preparation of the student for productive life, democratic participation, the importance of science on human life, and the understanding of scientific methods and rational thinking. On the other hand, the report maintained and extended what had been stated in the Commission's reports of 1918 and 1937. It was in this 1944 report that the 'Ten Imperative Needs of Youth'<sup>28</sup> were set forth:

- "1- All youth need to develop saleable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life. To this end, most youth need supervised work experience as well as education in the skills and knowledge of their occupations.
- 2- All youth need to develop and maintain good health and physical fitness.
- 3- All youth need to understand the rights and duties of the citizen of a democratic society ...
- 4- All youth need to understand the significance of the family for the individual and society and the conditions conducive to successful family life.
- 5- All youth need to know how to purchase and use goods and services intelligently understanding both the values received by the consumer and the economic consequences of their acts.
- 6- All youth need to understand the methods of science, the influence of science on human life, and the main scientific facts concerning the nature of the world and man.
- 7- All youth need opportunities to develop their capacities to appreciate beauty in literature, art, music, and nature.

- 8- All youth need to be able to use their leisure time well and to budget it wisely, balancing activities that yield satisfaction to the individual with those that are socially useful.
  - 9- All youth need to develop respect for other persons, to grow in their insight into ethical values and principles, and to be able to live and work co-operatively with others.
  - 10- All youth need to grow in their ability to think rationally, to express their thoughts clearly, and to read and listen with understanding."
- 29

Social and political cohesion, not intellectual endeavour, was to be the new base. Emphasising the political and social aim of secondary education, the Educational Policies Commission in 1952 asserted that:

"In secondary school, no responsibility is so great as that of teaching the principles of the democratic way of life."  
30

The great success of the community school during the 1930s' depression had decreased afterwards, because with the increase in population, production, social mobility, and means of communication, the values of the small local community itself have virtually disappeared. The local community had become suburbia.

The advocates of the community school concept, despite the national emphasis on political and social cohesion which marks life adjustment and education for all American youth, still think of the community school as one "directly concerned with improving all aspects of living in the community."<sup>31</sup>

These new views on the nature of secondary education have grown out of the main stream of progressivism. Learning, for the progressive if it is to be significant must be meaningful, and meaningful learning must in turn follow pragmatic maxims. Dewey's method of learning through problem-solving has been used to justify a community school and a curriculum which

solves 'real-life' problems of youth and society. So the community problems were to be analysed, studied, and solved by the school.<sup>32</sup>

Life-adjustment education maintained Dewey's ideas about the real interests and needs of the pupil in combination with the social needs:

"There is no idea of permitting each pupil to take just what he pleases and only that. Quite the opposite is true. The welfare of society and the obligation of the individual for the group and for his own behaviour will not be neglected to foster irresponsible individualism."

33

However, an experimental project was carried out under the direction of the Progressive Education Association during the 1930s under the title of the Eight-Year Study. It attracted attention to, but perhaps had little influence upon, the trend of the American high school to drift back to a primary focus upon a college preparatory curriculum. The educational programme of 30 schools involved in the study exhibited varying degrees of 'progressiveness'. The conclusion reached after careful evaluation was, that students enrolled in a wide variety of secondary school courses designed to prepare them for successful living did as well or better in college than conventionally trained students. However, criticism continued to be exhibited against curriculum content, and the American high school continued to address itself to the college preparatory function.

The curriculum aims and goals identified so far can be characterised as: 1. comprehensive; 2. consistent with human rights and democracy; 3. consistent with the social needs; and 4. tending to the satisfaction of personal needs. But these aims, however, should be called aims and general goals but not specific objectives, and this will be elaborated later.

## 2. Curriculum Content

### a) The Academic Disciplines

This period was characterised by gradual change in the secondary high school from a narrow institution designed to educate college-bound youth to a broadly conceived one designed to develop citizens and workers as well.

There was phenomenal growth in the number of courses included in the educational programme. The emphasis on the academic areas declined in favour of cultural and vocational studies. Looms, Lide and Johnson pointed out that:

"An idea of changes in the relative emphasis placed upon the needs of academic and non-academic pupils with the advance of years may be had from a computation of the percentages of courses in the fields making up the two groups which were offered at each period. In 1906-1911, courses offered in English, social studies, mathematics, science and foreign languages (considered as the academic studies) constituted 76 per cent of the total number offered; in 1915-1918, they constituted 61 per cent; and in 1929-30, they constituted only 50 per cent of the total for all fields. The diminution for this group of subjects is due to the relatively greater number of courses in the fine and practical arts, or non-academic group, offered in later years."

34

The academic offerings in English saw a decline in British literature and greater emphasis upon American literature. Speech or oral communication became somewhat more predominant in the programme with grammar and composition continuing to receive attention. In the social studies, US history, world history, civil government, and geography were typical inclusions. A course entitled 'American Problems' or 'Problems of Democracy',<sup>35</sup> in which attention was directed to social, economic, and political problems in America frequently replaced separate courses in government, economics

and sociology for secondary senior high schools.

General science, which combined content from the physical and biological sciences, was the common offering in grade nine of the junior high school or the first year of the four-year senior high school. Biology enrolled a sizeable percentage of students at the tenth grade level. For the majority of students, contact with the sciences ended after grade ten; only a small percentage persisted in the sciences, enrolling in chemistry in grade eleven and physics in grade twelve. Health as an area of study increased markedly in this period, although it was frequently taught as a unit of a science course of physical education.<sup>36</sup>

The mathematics field was similar to the science field in that the less able student was provided little opportunity to continue work in this field after grade ten. General mathematics for the average student and algebra for the more able were the common offerings in grade nine. Geometry was selected by a sizeable number of students at the tenth grade but only a small percentage were enrolled in trigonometry and advanced algebra courses that were offered in grades eleven and twelve.<sup>37</sup>

Foreign language offerings in the American high school have been strongly influenced by the political climate in America at a given time. Firth and Kimpston stated that:

"German was the second most popular language in 1915, next to Latin, but it faded into insignificance during, and for a period after, World War I. There was some increase in classes of German by the middle of the 1930s, but this subject was virtually dropped from the educational program with the outbreak of World War II and held a minor place in modern language offerings at the close of the fourth curricular era. Latin persisted as the most prominent language in American high schools during the 1920s and 1930s. French was the second most popular language during the same period of time. By the close of the 1940s, Spanish was the most common offering, with Latin second and French third."  
38

b) The Cultural Studies

Modern art education in America may be said to date from 1920. The term self-expression entered the scene and the emphasis was on the learner. After 1920, it was believed by the progressivists that creative activity and the development of children's true interests could be relied upon to produce a better programme. So attention was focused upon the subject field of art, music, physical education, and driver and safety education in this period. All four became firmly established in American schools and experienced phenomenal growth.

Music was to show some increase in popularity over the previous period. In this period required course work in general music (singing, music reading, appreciation) was introduced into the curriculum.

"Unlike the music program of the present day, much of the offering was of the classical type and unsuited to students' interests and abilities. In addition, music was often relegated to a position of being extra-curricular, and no credit was granted to the student."

39

The growth of physical education in this period can be attributed primarily to legislation. In 1921, 17 states established laws requiring that the subject be taught. By 1930, such legislation had been passed in 39 states.<sup>40</sup> In this curriculum period, the new psychology served in attempting to develop a programme that centred on the complete human being, not just physical fitness or sports and games.

With the increase of automobile accidents and the ready availability of automobiles for young people, police officials, insurance companies, and eventually, public pressure brought attention to the need of a programme which would stress the importance of knowledge of safety rules, skill in handling a car, and the social responsibility of the driver.<sup>41</sup>

The earliest driver programmes of significance were established in a few high schools during the 1930s. By the end of the 1940s much progress had been made in establishing driver and safety education as a component of the secondary school programme.

c) The Occupational Fields

Attention had been given to curriculum developments in agriculture, business education, distributive education, home economics, and industrial arts during this curriculum period. Agriculture held an important position in the programme of high schools in the rural areas. Course work included animal husbandry, soils and crops, horticulture, and poultry. These courses were generally taught to farm boys in grades nine through twelve.

In addition to bookkeeping, a number of courses were offered in business education. Typing became the most popular elective in this field. Bookkeeping and shorthand vied for second place. Other courses, in order of student choice, were entitled 'General Business Training', 'Business Arithmetic', 'Business Law', and 'Office Practice'.<sup>42</sup> In 1922 bookkeeping and typing courses each enrolled 13 per cent and shorthand 9 per cent of all students.<sup>43</sup>

Distributive education programmes in the high school were slow in developing but experienced a real beginning during this curriculum period. No more than one per cent of the high school population was enrolled in distributive education during this period. Course titles in existing programmes included 'Retailing', and 'Salesmanship', and 'Advertising', and 'Cooperative store training'.

The industrial education received major support by the Smith-Hughes Act of 1917, the George-Read Act of 1927, the George-Ellzy Act of 1934,

the George-Dean Act of 1936, and the George-Barden Act of 1946. During the Second World War, the content focused on wood and sheet metal, the only readily available workshop supplies. The programmes also emphasised repair procedures, reflecting the difficulty of replacing equipment needed in wartime. Post-war programmes extended wartime considerations with offerings in aeronautics and electronics.

Home economics experienced a marked enrolment and programme increase in the early years of this curriculum period, a trend that was to continue. A high percentage of senior high school girls participated in home economics courses. Emphasis was still upon food, clothing, cooking and sewing.

d) Student Activities

During this curriculum period, "student activities achieved maturity, with general recognition of their importance in the education of adolescents."<sup>44</sup> In the last curriculum period, activity programmes had achieved limited acceptance, with emphasis placed upon speech and drama. By the close of this curriculum period, a widely diversified programme was in effect in the majority of high schools. In addition to the speech, drama and physical education, music became important as an interest, as well as a cultural study. Individual development included student councils, service clubs associated with the school facilities such as library and audio-visual aids, clubs associated with the academic disciplines, such as science, mathematics, and foreign languages, and special-interest clubs and so on.

The areas of knowledge identified so far are comprehensive. In a technical sense, there is a close connection between these areas of knowledge and the aims and goals identified in this curriculum period. In other words,

all, or at least most of all aims and goals which are proclaimed have corresponding experiences. In this sense, the content is valid since it promoted the outcomes that it was intended to promote. This content was varied enough to assure the total development of the student.

### 3. Organisation and Method

During the late 1920s and the 1930s, the flexible learning programme known as the activity approach was adopted in many areas.<sup>45</sup> As a result of the 1930s depression and the fear of war in the late 1930s, criticisms arose of the activity approach as being unsystematic, inconsequential, inefficient, and destructive of the traditional values of the curriculum. The criticism was led by William Bagly, of the teachers college, Columbia University, the leader of the essentialist movement. This movement caused John Dewey to write his 'Experience and Education' in 1938.

Memorisation fell into disuse because of the prevalent feeling that it contributed little to understanding. The application of child psychology, the principle of learning chiefly through direct experience, and the concern with the personality of individual children were more characteristic of the 1940s than ever before. And the child-centred approach, promoted by the progressive education association, was still strong, to judge from the principles expressed by the Educational Policies Commission's report of 1948:

"Since children learn what they live, the good school is a place where life is as good in quality as the community can devise and provide."

46

From the recommendation of the Eight-Year Study in the 1930s, the core approach was developed. The scheme of general education proposed by life-adjustment education was based on what was considered to be the 'real-life

problems' of society and was to be carried out by the core curriculum.<sup>47</sup>  
The development of core approach also influenced the assignment of staff as Firth pointed out:

"Teachers worked with fewer numbers of students generally and over longer periods of time. In addition, two or more teachers were occasionally assigned to work cooperatively to facilitate cutting across subject matter lines in the study of problems of social significance."

48

The pragmatic view was reinforced again in the late 1940s by the progress of the movement for the core curriculum which tied several courses together and obliterated subject-matter boundaries and which seemed to them to water down content.

As a result of the application of activity and core approaches, the audio-visual aids were developed and provided for instruction. Kinder stated that:

"The services turned out quantities of film and filmstrips, and they produced and utilised such media as flat pictures, maps, globes, posters, models, graphic portfolios, display boards, charts, and graphs. Mock-ups were used extensively, and audio devices were important in teaching foreign languages and morse code."

49

The specialists in the cultural areas of music, art, and physical education were replacing the regular classroom teacher for instruction in this area. The greater realisation by the American public of the value of education in the cultural area, coupled with the employment of specialists to teach in this area, brought increased attention to these subjects.

Since the core approach was built upon the students' interests and experiences, there was a sequence between the curriculum offerings. In other words, a kind of vertical integration between the knowledge offered to the students was achieved.

The core approach was also an attempt to establish a relationship among the different areas of knowledge, and this is the horizontal integration. The 'integration' and/or 'fusion' of content of two separate disciplines, such as mathematics and science or English and social studies, was also facilitated by a block of time scheduling. Firth stated that:

"In order to facilitate the establishment of relationships between two separate disciplines, they were scheduled in a way that enabled two teachers to point up relationships between the field of study."

50

#### 4. The Evaluation System

In practice, during this curriculum period the progress of measurement devices used by teachers moved forward on two lines; the improvement of 'essay' examinations, and the development of multiple-choice tests. These were used side by side with the oral examination of students, and the teachers' observed impressions. The multiple-choice tests, although stressing the acquisition of factual knowledge, made it possible to rule out the biases of the individual scoring the test.

Schools began to use the tests of mental ability on a much larger scale. Another measurement device developed during this period and put into rather widespread use was the achievement tests.

Standardised achievement tests for measurement in a variety of subject areas enabled the schools to make comparison of classes of children in the same school and in different schools. These examinations were used for the first time, as feedback or formative, since they were thought to provide schools with needed information about programme strengths and weaknesses.

### III. THE THIRD PHASE 1950-1970s

During the second half of the twentieth century both external pressures towards change and internal dissatisfaction with the ways in which needs were being met, have been imposing unprecedented stress on the curriculum.

The most striking characteristic of political forces in this curricular era has been increasing federal participation. The evidence of the national government's changing posture towards the schools has been for example the serious consideration given to the establishment of a separate department of education. The financial involvement of the federal government has increased from less than 1 per cent of the money spent on education in 1930 to 7 per cent in 1970.<sup>51</sup>

The National Defence Education Act of 1958, the Vocational Education Act of 1963, and the Elementary and Secondary Education Act of 1965, by underwriting specific programmes, directly reflect the influence of political forces on curriculum. Extensive growth has taken place in the U.S. Office of Education to implement the aims and projects established by Congress. It is becoming increasingly apparent that political forces are calling upon the schools to serve as principal change agents for the implementation of policies that are of national concern. After the launching of Sputnik (1957), the first Russian satellite, crash programmes in mathematics, sciences,<sup>52</sup> and foreign languages reflected a national concern about what was thought to be American lag in the space race, as the federal government moved from the vocational field into the academic disciplines.

With increased population mobility, the level of education received in any part of the country has become important to all. The ability of small local authorities to meet the rising costs of education has declined.

The few courses available to young people in school districts with limited financial resources and the inadequacy of financial resources for state and local curriculum development suggest the need for greater federal involvement and centralisation of authority to provide equality of educational opportunity.<sup>53</sup> Conversely, fears about centralisation are based upon the premise that curriculum decisions should be made by those most directly involved in the planning and carrying out of learning activities.

The effect of occupational demands and employment has operated on the curriculum indirectly, as a reflection of the needs of society. The time lag that has characterised recent education is perhaps more evident in the problem of keeping abreast of employment demands than in any other. Statistical information provided by business and the government can be utilised to keep schools informed of the total employment picture, but interpreting this information into programmes becomes infinitely more complex in a rapidly changing technological society.

It may be becoming apparent in an increasingly technological society that the focus of the secondary school must be upon a broad general education, with an understanding of occupational demands, rather than upon an attempt to prepare the secondary student for a specific type of work.<sup>54</sup> The sophistication of technology and the entrance requirements for colleges have stressed the academic disciplines. The rapidly increasing population, with movement to urban areas, requires more goods and services. The employment demands are for the more highly skilled. Both trends are resulting in greater emphasis being placed on vocational offerings in the secondary school. The increasing leisure-time and the prospect of earlier retirement and longer life spans have resulted in much attention being paid to the cultural area.<sup>55</sup>

Political and economic forces operate both directly and indirectly to influence the kind and quality of education provided for the student:

"They are intended to support a minimum level of program for all students in a local district or state, below which no school will be permitted to fall, and to guarantee each student an acceptable education, regardless of his family's size of financial circumstances."

56

The eclectic approach to both philosophy and psychology in American education has produced many inconsistencies. William H. Kilpatrick, a disciple of John Dewey, was a proponent of general education, not specialisation. He emphasised the education 'project' which stressed action rather than intellectual pursuits in the belief that 'we learn what we live'.<sup>57</sup> It was against such a background that James Conant conducted his investigations of the American high school during 1959-1961.

The writings of Jerome Bruner have stressed the importance of giving students an understanding of the fundamental structure of all subjects taught and have emphasised that earlier concepts about readiness to learn are defective.<sup>58</sup> Emphasis is also placed on the quality of instruction that is optimum for a given learner, and the ability of the learner to understand the nature of the learning task.

Jean Piaget in the field of cognitive development has provided the educationists with greater insight as to knowledge as it exists at different points in the development of the child. Skinner, among others, has contributed to an understanding of such concepts such as reward, reinforcement, extinction, retention, and efficiency of practice.

To the extent that psychology is a study of behaviour and learning results in modification of behaviour, new attention is being drawn to the writings of Robert Mager, James Pophan, and Benjamin Bloom and others.

Mager and Pophan have advocated the need for stating objectives behaviourally to provide the curriculum planner with a basis for content selection and for evaluating the learning process. Bloom and others classified the educational objectives and emphasised that a hierarchy of knowledge exists within the cognitive and affective domains.

### 1. Curriculum Aims and Objectives

Five academic disciplines constitute most required courses. These are English and language arts, foreign languages, mathematics, science, and social studies. The importance of these disciplines arises from the fact that they control the design of general education in the secondary high school.

As for English and language arts, no doubt that "English has evolved to a language arts matrix which includes the communication skills of reading, listening, speaking, and creative writing, as well as literature and linguistics."<sup>59</sup>

The major aims of the modern English curriculum are to prepare students to communicate more effectively by: a) developing habits of reading with understanding, b) learning principles and skills of interpersonal communication, c) understanding the role of the mass media in society and developing abilities to assess them critically, and d) responding to the values of literature.<sup>60</sup> The student must learn to reason and to think about what he reads, within the limits of his talent and experience. As for the aims of speech, they are:

- "a) to help students increase their oral abilities,
- b) to aid students in developing better understanding of speech skills and their effects on others."

One of the most complete statements of aims for the foreign language may be found in the list of primary linguistic objectives published by the New York State Education Department.

- "a) To understand a native speaker speaking at a normal tempo on a subject within the range of the pupil's experiences.
  - b) To speak sufficiently to make direct contact with a native on a subject within the range of the pupil's experiences.
  - c) To read with direct understanding material on a subject within the range of the pupil's experiences.
  - d) To write, without conscious reference to English, whatever the pupil can say."
- 62

The major aims of mathematics programme are:

- a) To develop an understanding of and competence in the process of elementary mathematics, elementary algebra, graphical methods, and simple statistics.
- b) To foster an appreciation of general proportion, geometric figures, and relationships among them.
- c) To study deductive thought as a method.
- d) To discover how mathematics can be used to contribute to personal and intellectual satisfaction and aesthetic values.<sup>63</sup>

Instruction in natural science has several aims: to develop attitudes and appreciations; to develop skills of inquiry; and to develop a foundation in the subject matter itself.<sup>64</sup> To develop the spirit of science; for this, students must learn to make decisions, always on the basis of incomplete evidence, intellectual devices, and means of gauging results. The new projects in science do not seek to produce only more physicists, biologists or chemists, but to produce a person whose approach to life is rational. The courses develop also the concept that man can have significant influence on his environment through technology and that he is the master

of the machine. So a science background is important for the potential scientist and non-scientist, for the college-bound and the non-college-bound.

A definite statement of goals for social studies has been identified by the National Council for Social Studies as follows:

- "a) Recognition of the dignity and worth of the individual.
  - b) The use of intelligence to improve human living.
  - c) Recognition and understanding of world interdependence.
  - d) The understanding of the major world cultures and culture areas.
  - e) The intelligent uses of the natural environment.
  - f) The intelligent acceptance, by individuals and groups, of responsibility for achieving democratic social action.
  - g) Increasing the effectiveness of the family as a basic social institution.
  - h) The effective development of moral and spiritual values.
  - i) Achievement of adequate horizons of loyalty.
  - j) Widening and deepening the ability to live more richly."
- 65

The cultural studies, which provide general education until the senior high level include art, music, and the performing arts (dramatics and dance), physical education, health education, as well as safety education and driver education. This cultural area should be taught with the following aims in mind:

- a) To develop primarily the purpose of appreciation in general.
- b) To develop interest in skills in one or more media of artistic expression that might carry over to leisure and hobby aspects of life.<sup>66</sup>
- c) To provide musical activities in which each student learns cooperation with others and gains an awareness of his own individual worth.
- d) To develop taste for the appreciation of excellence in the theatre.
- e) To provide experiences which will help increase the student's under-

standing of others.<sup>67</sup>

- f) The improvement of physical, moral, mental social and spiritual fitness of the individual.<sup>68</sup>
- g) To create a respect for, and understanding of, safety rules, laws, and practices.
- h) To develop knowledge and skill applicable to all traffic situations.
- i) To develop knowledge and skill which may be applied to emergency health problems.<sup>69</sup>

The occupational studies include agriculture, business education, distributive education, home economics, industrial arts, and vocational trade and technical education. This area should be taught with the following intentions in mind:

- a) The preparation for allied careers in agricultural mechanisation, supply, processing, and so on.
- b) To prepare youths to meet their personal needs as consumers.
- c) To provide a background of information that will enable them to perform their citizenship duties more effectively.
- d) To train youths for vocations.<sup>70</sup>
- e) To qualify youths with social competencies and with the basic skills in computations and communications.<sup>71</sup>
- f) Improve the quality of family living.
- g) Develop abilities needed for the occupation of homemaking.<sup>72</sup>
- h) Develop understanding and appreciation of basic industrial processes.
- i) Develop skills in using basic materials, tools and machinery.
- j) Provide opportunity for creative expression and discovery of talents.<sup>73</sup>

These stated aims and goals are undoubtedly consistent with the human rights, democracy, the social needs, and with the individual needs as well.

From the point of view of Mager, Popham, Bloom and others, these are aims and goals but not objectives. Because of the vagueness of these kind of aims and goals, teachers in English and language arts, for example, have been content oriented, thinking in terms of literary works or grammatical facts rather than specific desired changes in student performance.

So there has been felt to be a need for stating objectives behaviourally to provide the curriculum planner and the teacher with a basis for content selection, suitable method, and for evaluating the learning process as a whole.

Within the social studies field, too, there is an increasing tendency towards the definition of objectives in terms of desired behavioural changes. The objectives have been made more explicit, and values, attitudes, appreciations, and other manifestations of the affective domain have received greater consideration. Such cognitive skills as critical thinking have been stressed.

New offerings have become available as the result of projects sponsored by the federal government. In social studies objectives have tended to be categorised in three levels: a) objectives for the school, b) objectives for social studies in general, and c) objectives for specific courses. Objectives for the class are then stated behaviourally in relation to the concepts and generalisations, for example, "students will be able to use the concept 'social class' in grouping people who lived in 1900". Skill objectives, like generalisation objectives, are stated very specifically and in behavioural terms, for example, "students will be able to identify statements of fact and statements of opinion concerning people in social classes other than their own". Some curriculum developers, however, have had difficulties in relating concepts and generalisations to behavioural objectives.

## 2. Curriculum Content

### a) The Academic Disciplines

The five academic disciplines considered in this section are English and language arts, foreign languages, mathematics, science, and social studies.

In an attempt to limit the scope of the English curriculum, the Commission on English, College Entrance Examination Board (CEEB) made the following recommendation in 1965: "That the scope of the English program be defined as the study of language, literature and composition, written and oral."<sup>74</sup> While the elementary school has focused upon communication skills - speaking, listening, writing with special attention to the teaching of reading - the secondary school has overemphasised literature.

The freedom of the teachers to choose content and to design their own programmes, and the absence of well-outlined programmes have led, to some extent, to the absence of sequence. Herbert Muller described the content of English as "a fantastic hodgepodge".<sup>75</sup>

Because of the central role of language in human experience, interdisciplinary humanities courses are found in many schools. Their purpose is to integrate material from social sciences, literature, and the arts. The older teaching approach stressed content and prescribed procedures and techniques, the newer one stresses a choice of content and identifies instructional objectives.

Measuring outcomes has always been a difficult task for the teacher of English. Because of the variety of knowledge, understanding, and skills sought, tests vary in type and length. Traditionally, the essay test has

been used, but even in the area of literature some objective items have proven useful. It should be noted, however, that objective testing leaves much to be desired in certain areas such as the evaluation of the student's ability to interpret literature for himself, for it may instead evaluate his ability to recall another interpretation rather than his own. So this objective testing is not comprehensive, and all evaluation instruments are summative but not formative, since they attempt to measure and predict outcomes rather than to diagnose and modify the curriculum process if it is necessary.

Foreign languages as a subject area originally included only Greek and Latin. Latin is still offered in restricted fashion, despite the rise in modern languages, notably French and Spanish. German has also achieved popularity throughout the century, while Italian is taught in selected sections. More recently additions to public school language programmes have been Russian and Chinese.

The recent weakening and elimination of university foreign language requirements is probably the most important influence on the foreign language curriculum. For the first time, foreign languages are considered electives not only in the high school but at the college and university level as well.

The sequence of courses in a particular language has traditionally been based upon the sophistication of the material to be translated. While courses in the modern languages tend to use increasingly difficult materials as students progress through the sequence, there is no pattern requiring the reading of specific works in specific years. The absence of such an established pattern requires that scope and sequence be based upon another factor, such as fluency in speaking the language.

There is general agreement that communication is the ultimate goal.

It is also agreed that a student should first hear a foreign language and then speak what he hears, in the same manner as a child learns his native tongue. This active approach has led to such practices as language laboratories, structural drill, and mimicry-memorisation of full sentences in the context of a situation.

The strongest interdisciplinary relationship of a foreign language is probably to another language. The study of Latin may provide a basis for subsequent success in learning other Romance languages such as Spanish, Italian and French. However, language courses can be matched with special courses in the culture of the people who speak it. Hence integrated courses are becoming increasingly popular. For example, advanced students in some schools may choose to study biology in German, art history in French, or geography in Spanish.<sup>76</sup>

In spite of using valid and reliable objective tests, they are still not comprehensive nor formative. Many educationists advocate the application of evaluation in terms of behavioural changes, seeing the need for tests that measure changes in student performance.

In mathematics, courses are usually classified as elementary mathematics which include algebra, geometry, trigonometry, and analysis, with occasional classes in calculus and statistics. The separate courses are being replaced by a unified approach built on basic principles or concepts. Various aspects of the subject are being integrated into mutually reinforcing mathematical segments.

After the USSR's success in the space race in 1957, a number of projects in mathematics have been established by several universities throughout the USA. The School of Mathematics Study Group (SMSG) was established in 1958 at Yale University. The SMSG approach emphasises that the concepts of

mathematics are part of the whole of the discipline, not unique to any subdivision such as geometry or algebra. The courses are organised into units, each of which presents topics and problems for analysis. Topics reappear at various points in the sequence, requiring increasingly greater sophistication and deeper treatment.<sup>77</sup> The National Defence Education Act of 1958 made possible the improvement of teacher training in mathematics, science and foreign languages. There are general mathematics programmes for the non-college-bound, and specialised programmes for the college-bound students.

The methods used in teaching the 'modern' mathematics may be summarised as discovery, problem solving, and investigation. Opportunities to learn through several senses and through using objects or diagrams are provided. Activities are changed frequently, and directions are simplified.

Through mathematics the other sciences are finding solutions to problems that have previously not yielded to their own descriptive techniques. The need for the use of mathematics in science classes is accepted by teachers of both subjects, but students often do not recognise or cannot handle mathematical processes outside the mathematics classroom. But a few attempts have already been made.

The use of standardised tests in evaluation evidenced that students involved in modern mathematics programmes do as well as those in a traditional programme and in addition learn concepts that were not a part of the traditional programme.

Programmed instruction may be helpful to average and high achieving students but disadvantageous for slow learners.<sup>78</sup> Use of television in mathematics instruction seems to yield non-significant differences from traditional methods. Experimenting with objects, asking questions, and

rearranging data are activities which should precede study of formal definitions, rules and proofs.

Science courses are mainly classified under conventional headings. Material from previously separate subjects of botany, zoology, and aspects of physiology continue in a single combined biology course. Chemistry, physics and general science constitute the other standard categories. More recent additions to secondary school curricula are courses in 'Earth Science' (physical science and biological science), 'Life Science', and human biology, as well as advanced courses in biology and physical sciences for the college-bound students.

The teaching of elementary science, however, varied considerably due to preferences for or against certain topics by individual teachers and lack of consensus on the appropriate content to be provided in certain grades.<sup>79</sup> In the attempt to provide structure to the field of science during this curriculum period two projects are particularly popular: the Science Manpower Project which was organised at Teachers College Columbia University in 1956 with the support of 34 American industries, and the Science Curriculum, K-12 approach advocated by the National Science Teachers Association. The guidelines were introduced to help teachers and curriculum planners in selecting appropriate content and method, and planning and defining procedures for attaining goals of science education.<sup>80</sup>

However, the absence of definite patterns of content led to the absence of sequence in many cases in secondary school.

Methods of teaching science are placing less emphasis on accumulation of factual information and more in inquiry and discovery. They seek to develop better understanding of the structure of science and stress science as a method of inquiry rather than as a body of knowledge. The scientific

method is applied through techniques such as:

"Use of expressions that indicate doubt (we do not know; the evidence about this is contradictory; it is not certain how this happens)."

81

Laboratory work, instead of being used merely to verify material presented, tries to encourage meaningful investigation and open-ended experiments. Team teaching, field trips to explore aspects of biology, and television also play important roles in the teaching of science. For all these reasons, the content data and the methods of teaching are, to a great extent, consistent with the previously stated science aims and goals.

The evaluation of the traditional programmes has traditionally been directed towards the lower levels of cognitive domain, with little or no emphasis on the higher levels of cognitive behaviour. In the newer projects of science, however, standardised tests, and multiple-choice questions encourage more complex thinking and increase creativity. Feedback is collected in order to evaluate more accurately the existing courses and to guide further development of the programmes. This discrepancy is possibly attributable to the fact that traditional measurement focuses on rote learning or recall, while the newer programmes stress conceptual behaviour and critical thinking. In an attempt to correlate the learning process with desired outcomes, special examinations, based on the redefined objectives of the programmes have been developed by the Commission on College Entrance Examination Board.

"There is confusion about the nature and hence the purpose of social studies."<sup>82</sup> But in general, they are a collection of separate but somewhat related disciplines including history, geography, economics, political science, sociology, anthropology, and psychology.

The secondary school is marked by an increasing number of social studies offerings: world history, economic and world affairs courses have increased as a response of the increasing role of the USA in the world, as interest in 'American Problems' courses has declined.<sup>83</sup> The few elective opportunities at secondary level include civics and geography in grade nine, world history has predominated at grade ten, American history at grade eleven, and 'American Problems' courses at grade twelve. The most common electives are geography at grade ten, economics at grade eleven, and psychology, sociology and world history at grade twelve.<sup>84</sup>

During this curriculum period, many studies and projects have been initiated in an attempt to revise this curriculum. Goodlad has found that there are more new projects in the social studies than in any other area.<sup>85</sup> New trends have also emerged, such as the increasing interest in the history and culture of non-Western societies; emphasising recent history, for example, the stress is upon the 20th century and the role each nation has to play now and in the future; the study of geography of the world; the study of communism and totalitarianism has received a great deal of attention in recent years. This study includes the advantages and disadvantages of democratic and non-democratic governments. Another recent development deals with the appropriate treatment of minority groups. So the social studies have been one of the most responsive areas to both internal and external changes during this curriculum period.

The variety of social studies objectives necessitates using various methods for attaining them. Most of the recent trends in methods have the broad objective of helping individual students become independent thinkers, able to make appropriate decisions, and to apply scientific techniques to social problems so that they can deal with the rapidly changing nature of society.

In recent years, emphasis has been on teaching inductively, or assisting the student to arrive at generalisations from specific data. This is to be done, according to Bruner, through discovery or intuitive formulations by students.<sup>86</sup> The inquiry method has also been emphasised. Inquiry is the art of curiosity, a way of knowing, the asking of questions. As a reflection of Dewey's problem-solving method, the inquiry method promotes not only inductive thinking, but deductive and evaluative thinking as well, through student examination of the consequences of hypotheses, solutions, and the like.

A number of recent projects in social studies instruction have attempted some sort of integration of the social science disciplines. The basic combination, however, has been between social studies and English/language arts. This had been done by the broad-field or fused approach in primary education, and by the core approach in the junior high school. Senior high school offerings are more likely to be separate one-semester courses in a particular subject.

Compared to the interest manifested in objectives of social studies, there has been very little concern regarding assessment of student progress towards these objectives.<sup>87</sup> This may be due to the vagueness and broadness of the statement of objectives. If the objectives of a class are stated behaviourally, in terms of the desired behavioural changes in certain areas of the content, reliable tests should be relatively easy to construct. Statements of behavioural changes to be internalised by teachers and students can be translated into many test forms. However, while behavioural changes in relation to knowledge and skills are easily translated, those in relation to values are not, and many problems lie ahead. Examinations and tests in this field are judging only the outcomes (not in their relation

to the objectives) rather than diagnosing the curriculum process.

b) The Cultural Studies

In this section, in addition to the cultural studies of art, music, and the performing arts such as dramatics and dance, it will include physical education and health education, as well as safety education and driver education.

Dewey sees art as the quality which involves action; art is not the product of action alone but of the quality of the experience pupils undergo.<sup>88</sup> In recent years art education has begun to assert itself as an important - even critical - part of the school curriculum. This trend may act as a balance to the earlier emphasis on science and mathematics. Following the pragmatic and progressive view, art has encompassed objectives for both the individual and society. For the individual, art curriculum makes an important contribution to the development of creative thinking. It has included expressing oneself, participating appreciation, utilising leisure, and discovering special talent. It has also included efforts to relate to community needs as well as to participate in the industrial and commercial development of society.<sup>89</sup>

Art in secondary school includes 'Fundamentals of Structure', 'Basic Principles of Design and Drawing' and 'Craft Design'. Specialised electives are available as well. The general courses are cognate in nature, such as 'Art History', 'Art Analysis and Application', and the world of art. In recent years, emphasis has been placed upon the introduction of film making to the classroom.

Though there seems to be some consensus among teachers as to general objectives in art education, there is less agreement on content, and from

all indications found there is hardly any agreement at all on methodology, that is, how the content is to be taught. So many methods are available to interpret colour, line, texture, form, and so on. Characteristics of a sound art programme include balance of activities, variety of media, experimentation in techniques, increased attention to the product, and encouragement of personal style.<sup>90</sup>

As Hurwitz pointed out:

"Art teachers are working more closely with colleagues in the fields of drama, social studies, and reading. And as a consequence, students are being urged to think and behave as illustrators, architects, and even city planners."  
91

In music specialised activities are afforded in senior high school in the following areas: a) Music Study - theory, music reading, harmony, orchestration, and conducting; b) vocal music - voice, vocal ensemble, choir, individualised technical instruction, and vocational orchestra. In the general education of music such cognitive courses as 'Music History', 'Music Literature and Analysis', and 'The World of Music' are offered.

However, in music as in art, there is hardly any agreement on the content or on the method that the content is to be taught. Variety of ways in teaching the music programme are used. Singing of interesting songs of all classifications, enough voice training to enable each student to use good tone quality, coordination of subject matter with pupils' in-school and out-of-school interests. All these teaching techniques are used.<sup>92</sup>

Evaluation in arts generally is focused on the creative progress. Progress is measured in terms of development. But the development is based on a comparison of one student's product with those of others in his group. It is recognised that paper tests can measure the 'content' aspects of art education programme, but the fact that valid and reliable measures

should indicate the progress of students towards competence as consumers and producers of art is stressed. And pupils can be evaluated on the basis of their individual progress in arts and music according to their own abilities, interests, and contribution to the class.

Drama has traditionally been included in the fine arts because, like music, art, dance, and literature, it focuses on man's cultural heritage. Since the development of the public schools drama has been an outgrowth of English, literature, and speech activities. However, music has not yet integrated with other courses. It can be introduced as an integral part of nearly any subject in the curriculum. For example, it can be adapted very readily to the teaching of literature through the use of folk songs of the particular period being studied, or it can be used in teaching of science in units dealing with sound waves and acoustics. Integration of music with English, social studies, arts, and foreign languages permits curriculum development which can bring music into the lives of greater numbers of students.<sup>93</sup>

Physical education, as has been shown, aims at the development of physically, mentally, emotionally, and socially fit citizens through the medium of selected physical activities. The programme involves organised instruction in health matters, coordination of experience with school health services. Attention has also been given to sex education primarily because of an increase in social disease and unwanted pregnancies. Health education also faces the difficulty of internal rationale. For many years, this portion of the curriculum has been expected to deal with the evils of drugs, tobacco, and alcohol. Hence, as Tanner notes, the schools are becoming the 'logical focus' for a national programme of mental health.<sup>94</sup>

The role of women in American society is undergoing significant change.

Women's participation in competitive sports is becoming ever more acceptable. Therefore, girls' athletic programmes are developing at a fast rate, especially in the areas of gymnastics, track and field, and swimming.

The term 'movement education' refers to that part of physical education programme emphasising helping the student to learn about his unique movement behaviour. The new direction that movement education presents puts emphasis upon the development of the total individual for all movement situations, whether in a laboratory or in the swimming pool, game field, or dance studio. The focus is upon understanding and controlling the body movements, or as referred to, 'body management'.<sup>95</sup>

Individualised instruction is achieved through grouping in classes and within a class. Homogeneous grouping is done on the basis of ability, physical fitness, interests, size and combination of all these factors. Teaching by television is also being used increasingly, and this has enabled experts to reach classrooms. The problem-solving approach, such as in sports analysis, allows the students to decide the basis for self-improvement. Flexible scheduling allows more choice among elective offerings. Sex education is conducted in small groups with emphasis on open discussion.

Integration between this group of subjects has been debated. Some feel that physical education and health education are so unique in their content and method, and this produces pressures to identify each course as a separate entity. Others believe that the courses of common concern are sufficient for this aspect of the curriculum to be structured in an integrated fashion.<sup>96</sup>

In evaluation the trend has been towards assessing improvement in

accordance with stated objectives, possibly through a single comprehensive report of a student's progress once or twice a year. However, the evaluation instruments used are both objective and subjective, reliable and unreliable. For example, in physical education, student progress can be based upon self-evaluation, skill test scores, written tests on each sport covered, teacher observation, effort, attitude, participation and so on.

Evaluation of health and sex education is best measured in terms of the affective rather than the cognitive domain. A measurable decline in unwanted pregnancies and social diseases is also feasible.

The field of safety and driver education has been built around safety and self-preservation in all aspects of life: in leisure-time, in school, in the home, on the highway, and in vocational activities. Organised safety instruction evolves from concepts of anticipation and prevention of accidents as applied to all situations.

Both safety education and driver education programmes have grown in recent years. While the two undoubtedly complement each other, many believe that each is sufficiently strong to stand alone, and a separate field of driver and traffic safety education is emerging. As Tanner pointed out:

"Although some secondary schools offer a separate course in safety, the problem of accident prevention is relevant to so many areas of the curriculum that it is unrealistic to compartmentalise the treatment of safety within a single course."

97

A course in driver education is not designed for those who want to obtain a driver's licence but is designed to equip all students with positive attitudes, knowledge, and skills about safety on the highway. It includes not only learning to operate an automobile but all "those learning experiences ... [which help] students to become good traffic citizens and to use the motor vehicle safely and efficiently."<sup>98</sup>

The problem of integration here could be attributable, perhaps, to the fact that no single subject can cover this field. Moreover, there would also be the problem of finding a teacher qualified to teach safety in all its aspects. Some educationists, therefore, feel that all teachers should use opportunities to present safety implications in their fields.

Summative evaluation is carried out in terms of teacher observation of student behaviour, skill and participation. Possibly a comprehensive report of a student's progress is written once or twice a year.

To sum up, the unifying focus of the cultural studies traditionally has been the development of performance skills. Although this aspect continues to receive attention, attitudes, appreciations, and greater subject matter knowledge are being given greater emphasis in programmes designed for all students rather than only those with demonstrated talent or ability.

c) The Occupational Fields

This section focuses upon the occupational fields of agriculture, business education, distributive education, home economics, industrial arts, and vocational trade and technical education.

Thirty states had established agriculture courses in their public schools prior to the passage in 1917 of the Smith-Hughes Act. At present, more than 10,000 schools in the United States provide this type of education.<sup>99</sup> The traditional method of designating courses in agriculture as 'Crops and Soils', 'Livestock', 'Farm Management', etc. is disappearing as agriculture has become more specialised. As farming becomes more technical and productive, modernised agricultural courses reflect increased mechanisation and sophistication and incorporate biological and physical

science in content. In Virginia, there is a pilot programme where agriculture and distributive education are cooperating in projects of agri-distributive education.<sup>100</sup> There have been increased pressures to supply practical arts courses for an agricultural avocation as well as agribusiness courses to educate agriculturally oriented business trainees.

Methods used in the teaching-learning processes can be characterised, according to the pragmatic and progressive view, by such terms as problem solving, work experience, work-study, job analysis, and 'learning through doing'. The core approach is also used for students who plan to attend post-secondary schools and begin employment at the technical level. The successful teacher is a director of the process rather than a lecturer.

Both formative and summative evaluations are being used. Since the passage of the 1968 amendments to the Vocational Education Act of 1963, continuous assessment is mandatory, with state and national evaluations being required at the end of each five-year period. The outcome of these evaluations must be used in programme development, beginning at the local level and approved at the state and national levels.

The term 'business education' is used to identify that part of the field of education which deals with business experiences for both specialised occupational and general uses. From the 1920s, the development of business education has paralleled the development of business and management. Recent advances in technology, accelerated by war and the space race, and economic pressure, have made it difficult to keep up. Emphasis is, however, being placed upon the identification of basic concepts that reflect the demands of a complex, continuously changing society.

Vocational courses in business include typewriting, shorthand, book-keeping, office procedures, and retailing. The non-vocational courses

include economic geography, consumer economics, economics, and business law. A comparison of course titles from earlier curriculum periods with those of the present day would seem to indicate that little change has taken place, but a comparison of texts from then and now would reveal vast changes in content, organisation, and method. The change in the general business course, as Wanous notes, "no longer is it a course in which remedial instruction is given on the basic skills or in which bus schedule reading and other similar trivia are covered."<sup>101</sup> Coverage includes content from economics, business law, consumer economics, merchandising and general business.

A newer project funded by the U.S. Office of Education through the Center for Research in Vocational and Technical Education at Ohio State University aims to "the development of behavioural objectives which will be derived by analysis of the performance requirements observed in current and emerging office activities."<sup>102</sup> In his comment on this new project Crumley predicts that:

"At its completion, we will have the behavioural objectives of office occupations education based on what actually goes on in an office and stated in simple, measurable terms of behavior. Around these behavioral objectives, we will build our future curriculums."  
103

There has been overlapping between business education and social studies, particularly economics. General mathematics also often includes topics such as taxation, investments, and insurance that can be considered business education. Some of this duplication will be reduced as general mathematics courses become better defined.

With the great increase in the amount of knowledge to be covered in business education, a continuing need is for speeding up the learning. Less

attention is paid to memorisation and repetitive learning. To include creative thinking and the ability to adapt to change, there is more emphasis on problem solving, use of analysis, comparison techniques, and critical evaluation. Some form of work experience is becoming mandatory, with widespread curricular effects. Strong efforts have been made to individualise instruction. The teacher assists students as they work individually, and each student is tested when he feels he has accomplished the stated objectives for a unit.<sup>104</sup>

The assessment process has not yet been attaining its anticipated results. It is still carried out through the teacher's observation, and the student's progress in economic competence and skill. This is reported by the teacher from time to time.

Distributive education is relatively new and not widely known. At secondary level, it was originally limited to the training of sales people for work in stores. The first major breakthrough was the recognition that wholesaling also has training status for students, followed by learning experiences in various service establishments, speciality stores, outside selling and finally, marketing.

Some of the courses or units offered in distributive education classes are salesmanship, occupational relations, career development, occupational adjustment, applied economics, business mathematics, visual merchandising, advertising, business law, pricing techniques, inventory and stock control, record keeping, and buying.<sup>105</sup>

The main criteria for determining the content of distributive education classes are the local needs of the students. Therefore, the most important aspect of distributive education is the cooperative programme, which enables students to learn to relate classwork to business through a cooperative

agreement between the school and employers. Students receive part-time vocational instruction in the school and on-the-job training through part-time work experience. The two experiences being planned and supervised by school and employer so that each contributes to the student's development in his chosen occupation.

The courses and units included in distributive education are interdisciplinary in nature. The teacher-coordinator utilises information from various other courses in the school because it often relates to the subject matter being taught in the class, particularly home economics, vocational agriculture, and vocational office training. The student can see how much material relates to the business world through his part-time, on-the-job training, and ideally becomes more highly motivated in the various school courses.

Teacher-coordinators of distributive education employ methods of instruction that utilise application, participation, and practice. Techniques used to assure individual application to employment requirements may be termed the cooperative method or the project method. The block-time approach with laboratory and simulation activities designed to implement individual student development is also being studied as an alternative to the cooperative plan. This approach is used in situations where the advantages of actual employment as an element in the instructional programme is limited.<sup>106</sup>

Besides the common evaluation for classroom purposes, a distributive education programme does a separate appraisal of the student on the job. Many types of techniques have been used, but the most effective and accurate has been a rating sheet to be filled out by the supervisor (the person who directs the training on the job).

In home economics, the focus is on the activities of the home and the life of the family, and more recently, the preparation for employment in occupations involving home economics knowledge and skills has been emphasised. Therefore, home economics has moved far beyond the earlier emphasis on cooking and sewing. Today, the curriculum includes these aspects of family living:

- "a) Family relationships and child development.
  - b) Consumption and other economic aspects of personal and family living.
  - c) Nutritional needs in the selection, preservation, preparation and use of food.
  - d) Design, selection, construction, and care of clothing, and its psychological and social significance.
  - e) Textiles for clothing and for the home.
  - f) Housing for the family, and equipment and furnishings for the household.
  - g) Art as an integral part of everyday life.
  - h) Management in the use of resources, so that values and goals of the individual, the family, or of society may be attained."
- 107

In senior high school, home economics is an elective. Typically girls attend home economics while boys are in industrial arts. At this level, courses are designed for those who plan to become homemakers soon after graduation, those who are interested in occupational home economics, or those who plan to specialise in a certain area - foods, clothing, child care, or the like. There are also courses at this level for college-bound girls and boys. The emphasis in these courses is on the preparation for marriage, family living and health, consumer education, management and housing.

While some psychomotor skills are emphasised, nowadays greater emphasis is being placed on cognitive and affective domains. Home economics is experiencing greater interdisciplinary relation with other subjects, such as biology, sociology, psychology, physics, chemistry, industrial arts and agriculture. Fleck stated that:

plastics, wood, or metal shops to be sold. The trend is for more relations with the science courses.

While there are numerous approaches to the teaching of industrial arts, such as American Industry Project, and the Galaxy Approach,<sup>110</sup> the emphasis is upon the problem-solving and the project-centred method of teaching. Authorities in the industrial arts programme are advocating the teaching of a basic, general curriculum which is applicable to a broad cluster of occupations rather than attempting to teach all the specialised skills needed for a specific one. The evaluative instruments used in the previous branches in the occupational field have been usually utilised in the industrial arts.

Traditionally vocational training for specific occupations has been placed in the last three years of the high school curriculum, partly because the Smith-Hughes Act of 1917 specified that federal funds were to be spent on students over 14 years of age. Today there is widespread disagreement about the placement of vocational education. Some educationists feel that it should be provided as early as age 12, or whenever potential drop-outs can be identified. Others feel that because occupations are becoming more complex and most students will have to prepare for more than one job, vocational education should be considered totally post-secondary. This opinion is consistent with the fact that many students do not make a vocational choice before completing high school. Many large cities have provided separate academic and vocational high schools. However, most districts continue to offer vocational programmes within the comprehensive high schools.

Nevertheless, a significant development affecting placement is the increased involvement of the federal government and industry in the educational process. Cooperative programmes between the school and businesses are becoming

common practice. Local needs of industry are considered in many of the programmes planned in the local school systems, and some courses at the post-secondary level use occupational analyses to determine what knowledge and skills will be taught.

The content, therefore, is determined by an analysis of what the worker must know and be able to do in order to succeed in a particular occupation. Students in vocational trade programmes spend half of each school day in shop classes and the rest in academic subjects and courses related to the trade. Trade sequences are offered in automobile mechanics, aviation mechanics, building construction, machine shop, cosmetology, dressmaking and power sewing, radio-television servicing, printing, and photography. Students in these sequences are often enrolled in applied mathematics, and trade science courses in which content is geared to activities in the shops. <sup>111</sup>

In technical programmes, students spend two periods each day in shop classes. Technical sequences are offered in electrical (and electronics) and mechanical (basic machines, construction and design) categories.

The relationship between shop classes and other subjects such as mathematics and trade sciences are very evident. There is a relationship between vocational curricula and representatives of various trades and industries, and employment services.

Because of the overlapping between many courses and topics in the occupational fields, the recent occupational 'mix' programmes, which combine two or more vocational areas into a single pattern, have been developed. For example, the combination of basic electricity, electronics, auto mechanics, or diesel mechanics in one programme, a combination of agriculture and business in agri-business programmes, and the agriculture-

distributive education programme, etc.

Discovery and inquiry techniques are used in much of the laboratory work, such as in electronics. Programmed instruction materials are recommended for use in vocational areas.<sup>112</sup> Classes are usually quite small, and students frequently work as teams so that beginners learn from the more advanced.

The assessment of outcomes here includes the performance skills of the student and the tangible product which he has fashioned as an individual or in cooperation with his group. Techniques are needed to evaluate knowledge of the occupations and behaviour in regard to attitudes and values.

While the trend towards identifying structure is not so evident here as in the academic and cultural areas, it can be seen in some subjects. Programmes in this area consist of various balances of demand in mental and manual abilities, thus offering opportunities for some students that would be completely lacking were such subjects not included in the curriculum like that in the general secondary school of Egypt. They are also intended for the non-college-bound students.

There is an increasing tendency for meeting the changing needs of the individual and, according to Leighbody, there is an increasing tendency

"... to recognize as vocational education any planned educational experience which is designed to prepare the learner ... to maintain himself throughout an ever-changing occupational life."

113

#### d) Student Activities

Student activities comprise an aspect of the curriculum which is

voluntarily engaged in by students, receives the approval and sponsorship of the faculty, and provides no academic credit towards promotion or graduation. The various activities can be listed under nine headings as follows: a) group guidance and the home room, b) student council and related service organisations, c) departmental and special-interest clubs, d) athletics and outdoor education, e) musical organisations, f) speech and dramatic organisations, g) publications, h) assemblies and jointly sponsored activities, and i) commencement and social activities.<sup>114</sup>

Frederick asserts that:

"If student activities are properly managed, they will contribute to the total educative experience by 1) reinforcing classroom learning, 2) supplementing formal studies in the required and elective curriculums, 3) aiding total life adjustment, 4) integrating learning, and 5) democratizing school and American life."

115

In an effort to bring balance to school life, curriculum content, and student development, recent progress has been made in the student activities programme. Although the learning experiences made available through student activity programmes differ among schools, commonalities can be identified. Group guidance and the home room are vehicles through which student organisation is facilitated. Students may be assigned to home rooms on the basis of grade, interest, and ability. However, Bent and Unruh suggest that each home room should contain a cross-section of the student body - that is, different grade levels, both boys and girls, and a variety of capacities, talents, and interests should be represented.<sup>116</sup>

The National Association of Secondary School Principals (NASSP) sponsors student councils nationally and provides model constitutions and by-laws necessary for effective organisation. In addition, the NASSP "suggests

policies and activities, defines the sphere of influence of councils, promotes an interchange of ideas between schools through district and state conferences, and promotes the organization of councils in all high schools."<sup>117</sup>

An integral part of every high school curriculum is the athletic programme, which operates under the title of varsity and intramural sports. The former involves those students who are especially adept in some particular sport. The second fosters participation by more students and de-emphasises the spectator aspect. While it may be thought that football, basketball, etc. are exclusively varsity-oriented, they serve equally well as intramural activities.

The publication of newspapers, magazines, yearbooks, handbooks, and special interest leaflets receive the attention of a number of students and school personnel. Clubs organised for publication purposes serve students with a variety of interests, including creative writing, critical reading, art, business management, and other journalistic endeavours such as printing production.

While some student activities are unique to this area of the curriculum, many stem from organised courses. As an example, the science fair is more typically associated with the science clubs than with the science courses. There is an important tie between the athletic or sports activities embraced by this programme and the curriculum in physical education, health and recreation. In many communities the pattern of social development is significantly influenced by parties, dances, and similar activities conducted under the auspices of the public school.

More frequently, activities are planned during the school day. It usually is a fixed rather than a floating period, occurring first in the

morning and/or in the afternoon. There is a growing trend towards scheduling intramural athletics during regular class sessions. However, the scope and sequence of student activity programmes are not well defined, and the student councils, home rooms and clubs, will not guarantee desirable outcomes in the programme. Such organisations merely provide the framework around which programmes are developed. Constructive programmes with well defined objectives, selected learning experiences, defined scope and sequence, and able in meeting present and probable future needs, should be planned by a central planning committee with the help of student council and the Parent-Teacher Association. Plans should be projected for at least one term and preferably for the academic year.

The evaluation process consists of reports written by the teacher once or twice a year about the student's progress. But the evaluation process here must be carried out with special reference to the desirable objectives of the programme. Moreover, the efficiency with which the various activities are carried through must receive close evaluation. An assessment must be comprehensive, continuous and valid. The results must be studied carefully and used as the basis of programme improvement.

### 3. Organisation and Method

As can be seen from the analysis, in this curriculum period the breaking away from a focus on teaching as the imparting of subject-matter approach along a standard practice in the conventional classroom toward increased attention to the learning process of the individual is apparent. Thus in all areas it is believed that compartmentalised learning is reduced and the ability to associate related ideas acquired, the amount of time allotted to any one 'field' is longer, topics studied are more general and understanding

of broad fields of knowledge is emphasised.

The Eight Years Study, which was carried out by the Progressive Education Association, recommended the core approach. The core approach at secondary level is usually organised on the basis of units or problems or projects.<sup>118</sup> Although the outline of the core approach is set up in advance, it is left flexible so as to allow for student interests and planning.

The activity approach, established by John Dewey, was based on needs and interests of pupils. There has been the prevailing misconception that this curriculum approach is weighted heavily towards more physical activity. The idea, therefore, failed to include the second part of the activity, the intellectualising phase, or making use of what was learned. In the late 1950s, therefore, the school was accused of being too permissive, too out of date, and even negligent of teaching basic skills and the hard-core subjects. Bender and John pointed out that,

"... the launching of Sputnik (1957) the first Russian satellite, redirected thinking toward the classical subject-centred curriculum, at least in the areas of mathematics and the physical sciences."  
119

This was directly related to the approach of the essentialist model, which focuses more on the intellectual side of the child, and did not centre directly on his social and psychological sides.

However, the core approach has been used in most areas of the country. Team teaching has been practised. It involves two or more teachers, co-operatively planning, instructing, and evaluating one or more student groups in order to take advantage of the special competencies of the team members. Teams operate in much the same manner whether their members come from one subject area or cut across two or more fields. The members usually meet

each day to discuss a variety of subjects. An English 'team', for example, may have teachers with specialisations in literature, dramatics, composition and linguistics; a social studies team may have individuals with preparation in history, political science, sociology, and economics. Another basis for forming a team is provided by the special competencies of teachers for working with a particular mode of instruction.

Anderson reports that team teaching does not suffer by comparison with conventional operations as determined by usual indices. Data from standardised tests on pupils' achievement are no less satisfactory under team teaching, while according to Anderson, "there are some slight indications that team teaching is particularly beneficial to markedly advanced and retarded pupils."<sup>120</sup>

However, since the teacher is most likely instructing five or more different groups of students each day, the possibility of learning to know any individual student well is not great. Subject-matter correlation among the various fields will obviously suffer, as each teacher brings expertise to only a single subject area. The problem of providing for student differences remains great.

#### 4. The Evaluation System

In the former curriculum period (1920-1950), observed impressions, oral examinations, and subject matter tests gave way to teacher-made 'essay' and 'objective' multiple-choice examinations. Greater utilisation of intelligence testing and the introduction of achievement testing also characterised this era.

Nowadays evaluation of student progress has a broader concept. In addition to mastery of information and skills, the school is concerned with

the evaluation of student growth in social relationships, critical thinking, creative expression, interests, and attitudes.<sup>121</sup> Increasingly, the purposes of evaluation are to provide for the collection of information that will help educationists determine the degree to which students are progressing towards the objectives of the curriculum. Evaluation also assists teachers in determining the effectiveness of activities and methods in helping the student to achieve curriculum aims and goals. Thus assessment is being seen less as a final measurement device for the assignment of grades and more as a means of securing needed information for planning curriculum and guiding instruction. In other words, examinations have become less summative and more formative. Intelligence and achievement tests have been used in assisting the school to define objectives and select curriculum content.

To sum up, Chauncey and Dobbin state that,

"The particular uses of tests in teaching fall into six fairly distinguishable categories: tests are used to judge capacity to learn, to guide teaching, to check learning progress, to discover learning difficulties, to improve teaching techniques, and to assess teaching effectiveness."

122

To this list can be added their influence on curriculum materials. In many instances, curriculum materials are selected because they will enable students to show up well in an existing testing programme.

The trend towards self-evaluation leads to examinations on the honour system; so that the most significant contribution to any test is to assist the student in self-appraisal. The individual must ultimately learn to judge his own competencies and to plan his educational career accordingly.

The classification of tests falls rather comfortably into the categories of intelligence, achievement, aptitude, and interest measurements. Because

these tests are popular, national norms are available to provide a broad basis for comparison. A standardised test, for example, contains uniform content and requires that uniform procedures be carried out when administering the instrument. Information on a nationwide scale is provided by tests developed by publishing companies. The competition of individual students in examinations prepared for determining the potential success at college and university provide another index. States and local districts also have testing programmes of considerable scope and merit. The demand of governmental agencies at all levels to provide data on the student progress and the rise of special-interest groups seeking drastic changes and reforms also have an effect on the selection and use of evaluation materials.

It is not uncommon for examination schedules to be publicised several days in advance to allow students, teachers and parents to make appropriate plans. In some cases, the papers are opened only in the testing situation, and students are not permitted to carry any materials in or out of the room. The trend towards self-evaluation has allowed students in testing situations to communicate with each other. Another option is the take-home test, which may be completed over a period of one night or several days.

In spite of that curriculum goals and aims stress higher levels of thought at the cognitive, affective and psychomotor domain, they are not clear and not stated in behavioural terms. So the vagueness of aims and objectives has forced many tests to measure the subject-matter achievement only, with little stress on attitudes, values and skills. This means that many tests are not comprehensive. About the failure of achievement tests to measure all programme objectives, and methods of instruction, Thelen stated that:

"Actually achievement tests typically used in schools are notoriously insensitive to instructional methods; as a result there is not a close relationship between the qualities of learning processes and measured 'achievement'. It is possible that what is measured and called achievement represents only a trivial and inconsequential part of the educational outcome. It is even possible that important things were learned but were not measured at all."  
123

It is generally recognised that existing instruments for evaluating student progress tend to focus only on the cognitive achievement. The need to develop instruments that measure all objectives of the school, including the more complex mental processes, is very real. The lack of such instruments conceivably causes schools to continue to stress the acquisition of subject-matter content, at lower levels of the cognitive domain, at the expense of the higher cognitive thought processes and the furthering of student growth in the development of attitudes and values.

While schools generally have been highly effective in administering tests, they have been less effective in feeding the results to those who can use them for reinforcing the strengths and diagnosing the weaknesses of the educational programme.

While locally prepared tests are more likely to take into account the objectives of the teachers, they are usually not so well constructed as those prepared at national or state level, by specialists employed by educational agencies or commercial firms. Teacher-made examinations lack demonstrated reliability and validity, and they often fail to provide immediate reinforcement of learning.

#### IV. CONCLUSION

From the analysis of the curriculum throughout the three eras, we can conclude the following trends:

1. The development of federal involvement and centralisation of authority to provide equality of educational opportunity. Cowen states that:

"The thrust toward desegregation in American education, and equality of educational opportunity generally, is still strongly backed by Federal money."  
124

Federal government provided less than one per cent of the money spent on education in 1930, but this proportion increased to seven per cent in 1970.<sup>125</sup>

2. The tendency is also towards a minimum level of programmes for all students throughout the country, in which no school will be permitted to fall below this level, as a national concern. Recent decisions of the U.S. Supreme Court and current legislation have revealed many manifestations of a national curriculum. However, much of the similarity in present programmes was accomplished through the adoption of standard textbook systems nationwide and the comparable education of teachers in all parts of the country.

3. The focusing in secondary education is towards a broad general education with an understanding of employment demands and economic needs, rather than upon the preparation of the student for specific work. Even the vocational courses have changed in emphasis, instead of preparing a student for a specific job, the emphasis is upon the development of certain skills that can be used in several occupations.

4. More courses are being offered for women because more of them are entering the business world. More mechanical devices are being used in the classroom in response to the automation of business and industry.

NOTES

1. Cremin, L.A., 'The Revolution in American Secondary Education, 1893-1918,' in Dropkin, S. et al., Contemporary American Education, New York, The Macmillan Co., 1965, p.153
2. United States Bureau of Education, Report of the Committee on Secondary School Studies 1892, "Committee of Ten Report", Washington, D.C., Government Printing Office, 1893, p.52
3. Ravage, M., An American in the Making, New York, Harper and Brothers, 1917, p.61
4. Cremin, op.cit., p.158
5. Dewey, J., Democracy and Education, New York, The Macmillan Company, 1916, p.115
6. National Commission on the Reorganisation of Secondary Education, Cardinal Principles of Secondary Education, Washington, Government Printing Office, 1918, Bulletin No.35, p.1
7. Ibid., pp.5-10
8. Ibid., p.20
9. Ibid., p.26
10. Report of the Committee on Secondary School Studies, op.cit., p.1415
11. Jessen, C.A. and Herlihy, L.B., Offerings and Registration in High School Subjects, Bulletin 1938, No.6, Washington, D.C., US Government Printing Office, 1938, pp.28-9
12. Ibid.
13. Barlow, M.L., History of Industrial Education in the United States, Peoria, Ill., Charles A.Bennett Co.Inc., 1967, p.35
14. Ibid., p.49
15. Commission on the Reorganisation of Secondary Education, op.cit., p.1
16. Firth, G.R. and Kimpston, R.D., The Curricular Continuum in Perspective, Itasca, Ill., F.E.Peacock Publishers, Inc., 1973, p.65
17. Ibid., p.61
18. Edwards, N. and Richey, H.G., The School in the American Social Order, 2nd edn, Boston, Houghton Mifflin Co., 1963, p.638

19. Finney, R.L., A Brief History of the American Public School, New York, The Macmillan Co., 1924, p.190
20. Firth, et al, op.cit., p.64
21. Bender, L. and John, E., Teaching and Learning, Philosophical, Psychological, Curricular Applications, New York, Macmillan Publishing Co.Inc., 1975, p.54
22. Ibid., p.55
23. Dropkin, et al., op.cit., p.168
24. Firth, et al., op.cit., p.81
25. Bender, et al., op.cit., p.33
26. McNally, H.J. and Passow, A.H., Improving the Quality of Public School Programs, New York, Teachers College, Columbia University Press, 1960, p.33
27. Firth, et al., op.cit., p.82
28. Educational Policies Commission of the National Education Association, Education For All American Youth, Washington, D.C., N.E.A., 1944,
29. Ibid.
30. Educational Policies Commission of the National Education Association, Education For All American Youth: A Further Look, Washington, D.C., N.E.A., 1952, p.19
31. Hanna, P.R. and Naslund, R.A., 'The Community School Defined,' in National Society for the Study of Education, The Fifty-Second Yearbook, Part II, 1953, p.52
32. Mehl, B., 'Political and Social Cohesion in Secondary Education in the United States,' in the Yearbook of Education, 1958, op.cit., p.134
33. Quoted by Douglas, H.R., in Education for Life Adjustment, New York, The Ronald Press Company, 1950, p.49
34. Looms, A.K., Lide, E.S. and Johnson, B.L., The Program of Studies, National Survey of Secondary Education, Monograph No.19, U.S.Office of Education Bulletin No.17, Washington, D.C., U.S.Government Printing Office, 1933, p.165
35. Firth, et al., op.cit., p.90
36. Ibid.

37. Ibid.
38. Ibid., p.91
39. Ibid.
40. Ibid., p.92
41. Alexander, W.M., 'Who Decides upon the Content of the Curriculum in the U.S.A.,' in The Yearbook of Education 1958, London, Evans Brothers, p.286
42. Firth, et al., op.cit., p.92
43. David, H. (ed.), Education and Manpower, New York, National Manpower Council, Columbia University Press, 1960, p.108
44. Firth, et al., op.cit., p.97
45. Brickman, W.W., Educational System in the United States, New York, The Centre for Applied Research in Education, Inc., 1964, p.19
46. Education Policies Commission, National Education Association, Education for All American Children, Washington, D.C., N.E.A., 1948, pp.7-8
47. Spears, H., The High School for Today, New York, American Book Company, 1950, p.102
48. Firth, et al., op.cit., p.85
49. Kinder, J.S., Audio-Visual Materials and Techniques, (2nd edn), New York, American Book Co., 1959, pp.22-3
50. Firth, et al., op.cit., p.84
51. Holmes, B., 'American and English Education Compared,' in Trends in Education, 1976, 3 September, 1976, Department of Education and Science, England, 1976, p.6
52. Brickman, op.cit., pp.30-31
53. Holmes, 'American and English Education Compared,' op.cit., pp.6-7
54. Firth, et al., op.cit., p.126
55. Ibid., p.123
56. Ibid.
57. See Conant, J.B., The American High School Today, New York, McGraw-Hill Book Co.Inc., 1959; Education in the Junior High School Years, Princeton, N.J., Educational Testing Service, 1960; and Slums and Suburbs, New York, McGraw-Hill Book Co.Inc., 1961.

58. See Bruner, J.S., The Process of Education, Cambridge, Mass., Harvard University Press, 1961; and Toward a Theory of Instruction, Cambridge, Mass., Harvard University Press, 1966.
59. Neagley, R.L. and Evans, N.D., Handbook for Effective Curriculum Development, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1967, pp.297-98
60. Miller, J.E., Literature in the Revitalized Curriculum, Bulletin of the National Association of Secondary School Principals, Vol.51, April 1967, pp.25-38
61. Firth, et al., op.cit., p.368
62. New York State Education Department, French for Secondary Schools, Albany, N.Y., Bureau of Secondary Curriculum Development, 1960.
63. Weiss, S., Innovations and Research in the Teaching of Mathematics to the Terminal Student, Mathematics Teacher, Vol.60, October 1967, p.615
64. Medelsky, L., Science Teaching and Testing, New York, Harcourt, Brace and World, 1965, p.363
65. Fraser, D.M. and McCutchen, S.P., Social Studies in Transition: Guidelines for Change, Washington, D.C., National Council for Social Studies, 1965, pp.11-52
66. Douglass, H.R., The High School Curriculum, New York, Ronald Press Co., 1964, p.510
67. Peluso, J.L., A Survey of the Status of Theatre in United States High Schools, Washington, D.C., Office of Education, U.S. Department of Health, Education and Welfare, 1970, p.51
68. Douglass, op.cit., p.360
69. Bent, R.K. and Kronenberg, H.H., Principles of Secondary Education, New York, McGraw-Hill Book Co., 1961, p.33
70. Bent, R.K. and Unruh, A., Secondary School Curriculum, Lexington, Mass., D.C.Heath and Co., 1969, p.172
71. Office of Education, U.S.Department of Health, Education and Welfare, Distributive Education in the High School, Washington, D.C., Government Printing Office, 1969, p.9
72. Hill, A., 'Home Economics Education,' In American Vocational Journal, Vol.42, March 1967, p.38
73. Wilber, G.O. and Pendered, N.C., Industrial Arts in General Education, Scranton, Pa., International Textbook Co., 1967, p.53

74. Commission on English, College Entrance Examination Board, Freedom and Discipline in English: Report of the Commission on English, New York, 1965, p.13
75. Muller, H.J., The Use of English: Guidelines for the Teaching of English from the Anglo-American Conference at Dartmouth College, New York, Holt-Rinehart & Winston, 1967, p.4
76. Firth, et al., op.cit., pp.383-4
77. Goodlard, J.I., The Changing School Curriculum, New York, The Fund for the Advancement of Education, 1966, pp.23-6
78. Brown, K.E. and Abell, T., 'Research in the Teaching of High School Mathematics,' Mathematics Teacher, Vol.59, January 1966, pp.53-7
79. Pella, M.O., 'Development of Concepts in Elementary Science,' Science Education, Vol.33, No.4, October 1949, pp.269-72
80. Lockard, J.D., 'The Secondary School Curriculum Projects,' Science Teacher, Vol.32, May, 1965, pp.48-9
81. Schmah, J.J., Biology Teachers' Handbook - BSCS, New York, John Wiley & Sons, Inc., 1963, pp.40-1
82. Engle, S.H., 'Objectives of Social Studies,' in Byron Massialas and Fredrick R.Smith (eds), New Challenges in the Social Studies, Belmont, Cal., Wadsworth Publishing Co., 1965, p.1
83. Jones, E., 'Social Studies Requirements in an Age of Science and Mathematics,' Social Education, Vol.27, January 1963, pp.17-18
84. Moreland, W.D., 'Curriculum Trends in the Social Studies,' Social Education, Vol.26, February 1962, pp.73-6,102
85. Goodlard, op.cit., p.56
86. Bruner, op.cit., p.13
87. Gross, R.C., and Allen, D., 'Problems and Practices in Social Studies Evaluations,' Social Education, Vol.31, March 1967, pp.207-9
88. Dewey, J., Art as Experience, New York, Minton, Blach & Co., 1934, p.214
89. De Francesco, I., Art Education: Its Means and Ends, New York, Harper & Brose, 1958, p.8
90. Ibid., p.339
91. Hurwitz, A., 'The Motion Picture: A Major Art Form,' School Arts, Vol.67, October 1967, p.9

92. Sur, W. and Schuller, C.F., Music Education for Teenagers, New York, Harper & Row, 1966, p.47
93. Ibid., pp.73-241
94. Mackenzie, M.M., Toward a New Curriculum in Physical Education, New York, McGraw-Hill Co.Inc., 1969, p.33
95. Tanner, D., Secondary Curriculum: Theory and Development, New York, The Macmillan Co., 1969, p.354
96. Porter, L., Movement Education for Children, Washington, D.C., American Association of Elementary-Kindergarten-Nursery Education, 1969, pp.5-6
97. Tanner, op.cit., p.355
98. Stack, H.J. and Elkow, J.D., Education for Safe Living, 4th edn, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1966, p.59
99. Krug, E.A., The Secondary School Curriculum, New York, Harper & Row, 1960, p.499
100. Wilson, E., Off Farm Programs, American Vocational Journal, Vol.41, February 1960, p.37
101. Wanous, S.J., 'Secondary School Programs,' in Price, R.G. (ed.), The Emerging Content and Structure of Business Education, 8th Yearbook of the National Business Education Association, Washington, D.C., 1970, p.313
102. Locke, R.W., 'The Systems Approach for Preparing Students for Office and Distributive Occupations,' in Price, op.cit., p.283
103. Crumley, M., Business Education in Transition - Tomorrow, Business Education Forum, Vol.24, February 1970, p.3
104. Maynes, F.B., The Accounting Classroom: People, Activities, Content, Business Education Forum, Vol.24, December 1969, p.17
105. Office of Education, U.S. Department of Health, Education and Welfare, Distributive Education in the High School, op.cit., pp.18-22
106. Wallace, H., 'Block-Time Approach in Distributive Education,' in Price, op.cit., p.276
107. Fleck, H., Toward Better Teaching of Home Economics, New York, The Macmillan Co., 1968, p.25
108. Ibid.
109. Berger, E.G., 'Spin-off from,' Industrial Arts and Vocational Education/Technical Education, Vol.58, September 1969, pp.30-2

110. For more details about those two approaches, see: Orville, W. Nelson, The American Industry Project, Menominee, Wis., Stout State University, February 1967, p.5; Carl H. Turnquist, The Galaxy Approach to Education for the World of Work, School Shop, Vol.25, November 1965, p.25
111. Coe, B.D., Vocational Education in the High School, Theory into Practice, Vol.3, December 1964.
112. Lundy, L.L., Programmed Instruction and its Application to Teaching Industrial Arts, Industrial Arts and Vocational Education/Technical Education, Vol.58, June 1969, pp.37-9
113. Leighbody, G.B., 'Vocational Education,' in Unruh, G.G. (ed.), New Curriculum Developments, Washington, D.C., Association for Supervision and Curriculum Development, 1965, pp.79-80
114. Miller, F.A., Moyer, J.H., Patrick, R.B., Planning Student Activities, Englewood Cliffs, N.J., Prentice-Hall Inc., 1956, pp.xiv-xvi
115. Frederick, R.W., The Third Curriculum: Student Activities in American Education, New York, Appleton Century-Crofts, Inc., 1959, p.55
116. Bent, R.K. and Unruh, A., Secondary School Curriculum, Lexington, Mass., D.C. Health & Co., 1968, p.140
117. Ibid.
118. Albery, H., Reorganization of the High School Curriculum, revised edn, New York, Macmillan, 1953, pp.194-5
119. Bender, et al., op.cit., p.44
120. Anderson, R.H., 'Team Teaching,' in Dropkin, et al., op.cit., p.393
121. American Association of School Administrators, Testing, Testing, Testing, Washington, D.C., 1962.
122. Chauncey, H. and Dobbin, J.E., Testing: its Place in Education Today, New York, Harper & Row, Publishers, 1963, p.83
123. Thelen, H., 'The Evaluation of Group Instruction,' in Educational Evaluation: New Roles, New Means, 68th Yearbook of the National Society of the Study of Education, Part II, Chicago, University of Chicago Press, 1969, p.138
124. Cowen, R., 'Current Trends in American Education,' in Trends in Education, op.cit., p.13
125. Holmes, B., 'American and English Education Compared,' in ibid., p.6

PART THREE

Curriculum development is subject to a great many socio-economic, technological, political, and even educational pressures. The presence of these pressures and their influence must be recognised and acknowledged. Some curriculum changes of recent years have been prompted by a concern over problems of social class differences, the social mobility function of education, and this continues to be a major source of pressure on curriculum planners - not least through the work of those sociologists who have recognised that one major source of social inequality is the curriculum itself.

There is no way which curriculum planners should ignore regarding the economic and technological changes in society. As the Crowther Report in 1959 pointed out, education has to be seen, at least in part, as a national investment from which society is entitled to expect some return. For the most part, that return ought to take the form of the output of a sufficient number of young people who have acquired the knowledge and skills that society needs to maintain and extend its development. Technological change leads to changes in the attitudes and institutions of society and thus to another source of pressure on the secondary school curriculum. The establishment of democratic institutions demands that the curriculum should provide opportunities for young people to learn skills needed in the making of democratic decisions. This is also an important source of pressure on the secondary school curriculum.

Now, what exactly are the contextual causes which are strongly active in creating pressures and demands on the secondary school curriculum? What are these demands and pressures? The answer to this question is the subject of Chapter 4. Did the curriculum of the grammar school respond to such demands? If it did, to what extent? If it did not, then why?

The answer to such questions is the subject of Chapter 5. Curriculum development will be analysed in Chapter 5 for the second level of education, with especial reference to the grammar school which embodied well the theory of curriculum which dominated educational practice in England since World War II.

CHAPTER 4  
THE CONTEXTUAL VARIABLES IN  
ENGLAND SINCE THE SECOND WORLD WAR

## I. SOCIAL CHANGE

### 1. Social Classes

In the twentieth century sociologists and social psychologists have devoted a great deal of attention to the concept of social class and its significance in society, but the fundamental problem of determining the criteria which distinguish one class from another is still unresolved, and it is difficult to find a definition and form of measurement which would be universally acceptable.

Occupation may well be one of the determinants of social class and there is evidence to suggest that different occupations have varying degrees of social ranking,<sup>1</sup> but it does not follow that persons in the same occupation comprise a unified group or class. In England, however, most of the people have to rely on income from occupation to provide their material standard of living, and even though some occupations have a relatively high prestige and in comparison with other occupations a low rate of earning power, there is undoubtedly a connection between occupations and standards of living which may in turn influence the membership of a social class. What then are the patterns of occupational groupings in England?

The method adopted by the census authorities is to group occupations into five social classes as follows:<sup>2</sup>

1. Upper class or class 1 - professional and similar occupations. For example, civil service administrative officers, secretaries and registrars of companies, ministers of religion, lawyers, doctors and professional engineers.
2. Upper-middle class or class 2 - intermediate occupations, for example, farmers, retailers, local authority officers, pharmacists, teachers, etc.

3. Lower-middle class or class 3 - skilled occupations, for example, coal-miners, most factory workers, shop assistants, most clerical workers.

4. Upper-lower class or class 4 - semi-skilled occupations, for example, plumber's labourers, locomotive engine firemen, bus conductors, domestic servants, etc.

5. Lower class or class 5 - unskilled occupations, for example, dock labourers, costermongers, window cleaners, etc.<sup>3</sup>

This social class grouping provides a convenient arrangement of the unit groups of the occupational classification into five social classes based on general standing in the community, economic circumstances not being taken into account unless they are reflected in the occupational classification.

From 1931-51 the proportion of occupied and retired males allotted to each class has not varied greatly, as shown in Table 1. The main positive trend is towards a reduction in classes 4 and 5, and an increase in class 3, which is what could be expected from the changing pattern of occupational distribution during the 1940s.

The social class distribution of the population as a whole (as distinct from occupied males) is determined in the censuses by allocating heads of households to each of the five social classes. The proportion in each class is similar to that shown in Table 1 and, broadly, in 1951 half the households were in class 3, just under a quarter in classes 1 and 2, and just over a quarter in class 4 and 5.<sup>4</sup> The ages and material status of the persons in each class are also given and regional variations are shown in the county reports, so that a great deal of useful data introduced to give a more elaborate sub-division of occupations by socio-economic groups. Thirteen

socio-economic groups are now identified as can be seen in Table 2.

TABLE 1: SOCIAL CLASS DISTRIBUTION OF OCCUPIED AND RETIRED MALES  
IN ENGLAND AND WALES AT THE CENSUSES OF 1931 AND 1951

Class	1931		1951	
	No. (000's)	%	No. (000's)	%
1	336	2	494	3
2	1,855	13	2,146	14
3	6,848	49	8,041	52
4	2,552	18	2,433	16
5	2,459	18	2,258	15
TOTAL	14,050	100	15,374	100

Source: The 1951 Census, Occupation Tables

**TABLE 2: SOCIAL CLASS AND SOCIO-ECONOMIC DISTRIBUTION OF PRIVATE HOUSEHOLDS IN ENGLAND CLASSIFIED ACCORDING TO THE SOCIAL CLASS OF THE HEAD OF THE HOUSEHOLD AT THE CENSUS OF 1951**

Social Class			Socio-economic group			
No. (000's)	%		No. (000's)	%	%	
1	357	3.3	(3) Higher Administrative, Provisional and Managerial workers, including large employers	357	3.3	3.3
2	1928	18.4	(1) Farmers	235	2.2	
			(4) Intermediate Administrative, Professional and Managerial workers, including teachers	1209	11.5	
			(5) Shopkeepers and small employers	522	5.0	18.7
3	5257	50.0	(6) Clerical workers	555	5.3	
			(7) Shop assistants	331	3.2	
			(8) Personal Services	438	4.2	
			(9) Foremen and Supervisors	422	4.0	
			(10) Skilled workers	3660	34.8	51.5
4	1697	16.2	(2) Agricultural labourers	434	4.1	
			(11) Semi-skilled workers	1146	10.9	15.0
5	1267	12.1	(12) Unskilled workers	1158	11.1	
			(13) Armed forces and other ranks	39	0.4	11.5
	10506	100		10506	100	100

Source: Extract from Cole, G.D.H., 'Studies in Class Structure,' 1964, Table 1, p.153, and Marsh, D.C., The Changing Social Structure in England and Wales 1871-1951, London, 1958, p.196, Table 48.

Objections can be raised against this method of division, but it has the merit of breaking up the five broad classes into major sub-groups, thus social class 1 is covered by socio-economic group 3; social class 2 contains socio-economic groups 1, 4 and 5; social class 3 contains socio-economic groups 6,7,8,9 and 10; social class 4 contains socio-economic groups 2 and 11; and social class 5 contains socio-economic groups 12 and 13.

In 1947 the broad income ranges assigned to each class were: class 1 over £1,000 per annum, class 2 between £650 and £1,000, class 3 from £350 to £650, class 4 from £225 to £350, and class 5 not more than £225 per annum. By 1955 the ranges of income per annum which it was suggested might be typical of the head of the household in each class were: class 1 probably more than £1,300, class 2 between £800 and £1,300, class 3 between £450 and £800, class 4 between £250 and £450 and class 5 probably less than £250.<sup>5</sup> Approximate measurements of these kinds have their value not only as markers of social class but of the rate of change in incomes receivable as well.

However, the ownership of property is unevenly distributed. Of all adults over twenty-five years of age in England and Wales in 1954 the richest one per cent owned 43% of the total private property and the richest ten per cent owned 70%.<sup>6</sup> Do those who possess this high percentage of property also possess high social prestige?

In Britain, of a total of twenty-six million incomes noted from tax returns in 1960 eleven million of these were less than £500 per annum, and half a million or about 2% of the total number of incomes were greater than £2,000 per annum.<sup>7</sup> Do those who possess high incomes also possess high social prestige?

It seems that those occupations which are rated more highly in social

prestige tend to be those which command high monetary return. Income and property ownership are only two of the social differences which appear to be related to differences in social rank in England. Occupation is associated with different chances of living and dying and sickness and health.<sup>8</sup> Those occupations which carry higher prestige than others tend to be positively privileged in their physical life chances: their children are less likely to die in infancy; they appear less susceptible to many physical diseases; they are less likely to die between the ages of twenty and sixty-four; and when they become mentally ill, they are more likely to be treated by more highly qualified practitioners for a longer period of time.

In Cauter and Downham (1954) study of Derby it was found that 58% of the working class belonged to no clubs or associations as opposed to 42% of the middle class.<sup>9</sup> However, this data show differences in patterns of associations in the two large occupational groups. For example, 68% of the manual workers were members of trade unions and professional bodies while the corresponding figure for non-manual workers was 43%. But manual workers seem to join the less formal association, the one which requires less conscious effort at sociability because the members are friends, neighbours, workmates. The less formal association by definition has a relatively flexible authority structure and is not involved in long-term planning. A member does not feel compelled to attend every meeting but can drift in and out as the spirit moves, and as the membership is drawn from a relatively small geographical area, members are likely to know each other and are less likely to be of different social classes.

In those associations where the membership cuts across class boundaries, leadership positions tend to fall to non-manual workers. Thomas Bottomore<sup>10</sup>

found that higher occupational groups contributed more than their share to leadership positions as judged from their percentage of the membership. The difference is greatest for class 1 which provides 16.6% of the members, but 62% of the officials, and class 3 which provides 60.4% of the members but only 18.2% of the officials.<sup>11</sup>

## 2. The Influence of Social Structure on Grammar School and its Curriculum

There is undoubtedly a connection between the formal education one receives and the social class to which one belongs, or hopes to belong, and surveys have shown that a considerable proportion of the population believes that education is one of the most important criteria of social class.<sup>12</sup> Certain occupations demand particular kinds of education and, therefore, entrance into them is dependent, in part at least, on the opportunities for obtaining that kind of education. If occupation is a determinant of social class then clearly the distribution of educational opportunities will have a bearing on the nature and size of social classes.

In 1954 data have shown that substantially large proportions of children of professional, managerial and executive fathers attended independent schools than did those with fathers in lower status classes. While 55.1% of the children from the first social class attended independent primary schools and 44.9% attended elementary schools, only 1.1% of children from the lower class attended independent schools and 98.9% of them attended elementary schools.<sup>13</sup>

Further significance of these different educational chances is evident in progression to secondary education; for those who attended elementary school, 9.7% went to secondary grammar or boarding schools whereas 72.3% of those who attended independent primary schools did so.<sup>14</sup>

The proportions of the 10-11 age group of children in each occupational group selected for admission to grammar schools give what may be called the 'class-chances' of a grammar school education. The following are the figures for boys in 1953 in Middlesborough:<sup>15</sup>

Professional workers, business owners and managers	68%
Clerical workers	37%
Foremen, small shopkeepers, etc.	24%
Skilled manual workers	14%
Unskilled manual workers	9%
	<hr/>
The average	17

As might be expected, there were in this area considerable disparities in the chances of boys from different social classes. In general, the sons of manual workers had a chance below average, and the sons of non-manual workers had a chance above average, of being selected for grammar schools. The sons of clerks had four or more times as good a chance as the sons of unskilled manual workers, and two to three times the chance of sons of skilled workers. The son of a professional or business man had more than seven times the chance of the son of an unskilled worker, and almost five times the chance of a skilled worker's son.

Halsey and Gardner in 1953 have found that:

"Working class boys who do attend these schools [grammar schools] are most likely to be from small families than large families, and whatever the size of their families, tend to be eldest children rather than of later birth order and neither of these conditions applies to the middle-class boy."

16

As for the entrance to a grammar school, two steps were required, first a recommendation from the primary school headmaster, and second the

success in preliminary tests in English and arithmetic. It is sometimes suggested - and there is some evidence in support of the theory - that when IQ is held constant there is a correlation between socio-economic status and performance in attainment tests. This is based on the assumption that English and arithmetic tests reflect social and cultural influences to a greater extent than do intelligence tests. From an enquiry made by Floud and others in West Hertfordshire and Middlesborough in 1953, they concluded that:

"... neither subjective bias nor diversity of performance in attainment tests, relative to intelligence, is in fact prejudicing the chances of working-class children. The present differences in proportion of the contribution of the various occupational classes to the grammar school intake can be explained almost entirely in terms of the unequal distribution of measured intelligence."

17

The social distribution of successful candidates in the selection tests has been shown to be closely related to the social distribution of measured intelligence. But this does not dispose of the problem of equality of educational opportunity. Measured intelligence is well known to be largely an acquired characteristic. It is important, therefore, to throw light on the influence which certain elements of a child's environment have on his chances of selection for a grammar school.

The education, attitudes and ambitions of parents are left as the only clearly distinguishing characteristics of successful candidates and the only consistent environmental influences on the rate at which children in every social class succeed in obtaining grammar school places. The family size, home environment, and school condition are also important in the same way.

There is evidence to prove that the parents of successful children are on the whole better educated than those of unsuccessful children. As can

be seen from Table 3, the percentage of fathers and mothers who had selective secondary schooling and some further education was nearly twice as high amongst the successful as amongst the unsuccessful children, and the same is true in varying degrees at each social level. The mothers of successful working class children moreover had frequently before marriage followed an occupation 'superior' to that of their husbands.

**TABLE 3: EDUCATION OF PARENTS OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES FOR GRAMMAR SCHOOL PLACES**

	Father's education				Mother's education			
	Selective Secondary		Some further education		Selective Secondary		Some further education	
	S*	U*	S	U	S	U	S	U
Middle-class	85%	36%	77%	63%	83%	63%	49%	26%
Lower middle-class	49	36	44	41	51	32	50	10
Working-class	14	10	32	18	31	14	22	13
All	38	17	45	25	44	20	31	18

S\* and U\* indicate successful and unsuccessful children. The percentage is based on inquiry made in South West Hertfordshire in 1952.

Source: Floud, J.E., and Halsey, A.H., and Martin, F.M., Social Class and Educational Opportunity, London, Heinemann, 1956, p.101

Not surprisingly, these better educated parents of successful children, as indicated in Table 4, were to a marked degree more interested in an ambition for their educational future than were the parents of unsuccessful children. They had a better knowledge of the rather complex procedure employed in allocating children to the different types of secondary school and had more frequently visited the child's primary school to discuss his

secondary education with his teacher. They showed a clear awareness of the long-term importance of selective secondary education and expressed a marked preference for the grammar school. As compared with the parents of unsuccessful children, they favoured a longer school life, preferred further education of the academic type for their children and looked forward to seeing their children enter non-manual rather than manual occupations.<sup>18</sup>

TABLE 4: ATTITUDES AND PREFERENCES OF PARENTS OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES FOR GRAMMAR SCHOOL PLACES

Social class	'preference' for G.S.		'strong preference' for G.S.		Have discussed child's S.Ed. with Primary School teacher		Contemplate leaving age of 18	
	S%	U%	S%	U%	S%	U%	S%	U%
Middle-class	81	82	68	63	71	55	79	51
Lower middle-class	84	58	68	61	72	57	51	27
Working-class	80	41	51	21	59	30	44	16

Source: Floud, et al., op.cit., p.102

Thus, the favourable attitudes of their parents to their education distinguished the successful from the unsuccessful children for grammar school.

In 1950 Martin found significant differences with regard to aspirations for children amongst parents: 76% of these classified as professional middle class wanted their children to stay at school at least until 18 years of age, whereas only 29%<sup>19</sup> of those classified as manual working class wished this for their children.

It is perhaps a well-established fact that, for whatever reason, children from large families score less well on the average in intelligence tests than children from small families even at the same social level.<sup>20</sup>

Floud pointed out that,

"... 17 per cent of the children of unskilled workers with families of only one or two children were successful, as compared with 2 per cent of those whose families numbered five or more."

21

Home background handicap must be partly responsible for the lower general rate of success on the part of children from working-class families. It may be true that the pace of post-war social reform has been uneven; school building is not always accompanied by re-housing and does not always serve the more prosperous and ambitious working-class families, and the spread of middle-class attitudes in educational matters among working-class parents does not necessarily wait on improvements in their material environment. There is something to be gained, therefore, from an attempt to compare the relative strength of these influences on children's performances in the examination at 11+.

An analysis<sup>22</sup> which related rates of success in the competition for grammar school places to indices in turn of the material environment of the schools, the degree of their overcrowding and the economic status of the populations served by them showed the relation with the last variable to be closest. Poor homes and poor schools are frequently associated. Even within the same social class, poor homes imply a lower average level of measured intelligence amongst the children who are plainly unlikely to proceed to the grammar schools in the same proportion as those reared and educated under more favourable circumstances.

It would be reasonable to expect that primary schools of all types

(poor, medium, good) would have most success with pupils from 'wholly favourable' homes; least success with those from 'wholly unfavourable' homes; and greater success with the children of educationally aware parents in poor circumstances than with those from merely comfortable homes. But obviously this pattern can only hold if the economic circumstances of educationally aware parents are not too severe. Even when poor conditions at home were associated with poor conditions at school, if parents' attitudes were 'favourable', they prevailed in producing a rate of success (19 per cent) higher than that of children attending the same schools from more prosperous but less ambitious or enlightened homes (13 per cent).<sup>23</sup>

Material conditions in their homes do not, at a given social class, distinguish the successful from the unsuccessful candidate in the selection examination. At a given social level, the children who secure grammar school places are not those whose parents earn the highest income, nor those who enjoy superior standards of housing. On the other hand, differences in the size of the family, and in the education, attitudes and ambitions of parents are reflected in the examination performance of children in all classes.

Since the abolition of fees in 1945, the number of working-class boys entering the grammar schools each year has been increasing fast. Nevertheless, the probability that a working-class boy will get to a grammar school is not strikingly different from what it was before 1945, and there are still marked differences in the chances which boys of different social origins have of obtaining a place.

Since the war the tendency towards a longer school life has been very marked. The leaving age was raised to 15 in 1947 and to 16 in 1972. As many as 20 per cent of the children who entered grammar schools in 1947

stayed at school until after 18 years old, as compared with 15 per cent of those who entered in 1945.<sup>24</sup> It is worth noting, however, that although the proportions of premature and early leavers are smaller than they were, the absolute number of leavers is considerably greater owing to the expansion of secondary education since 1944; the problem therefore remains acute both for the schools and from the point of view of the loss of qualified manpower to the national economy.

From a study of the grammar school intake of 1946 the Central Advisory Council concludes that about 5,000 boys and 5,000 girls had the capacity to take advanced sixth form courses, but they left school before doing so.

"If all these boys and girls had completed advanced courses, the number of boys who in fact did so would have been increased by about half and the number of girls by about two-thirds."

25

It is worth noting that the proportion of premature and early leaving is higher among working class children than their fellows from middle and upper classes.

Attitudes towards education varied amongst children as well as their parents. Of 317 boys in their third year of secondary education, two-thirds of the middle and working class boys having IQs of over 115, 62% of the middle class boys said that they would like to stay in school after they were sixteen if they were free to do as they wished, whereas only 45% of the working class boys expressed such a desire.<sup>26</sup> As for the select minority who enter grammar schools, "It is well known that up to 60 per cent of them leave the grammar schools before they are 17."<sup>27</sup>

The proportion of students entering universities from South West Hertfordshire, for example, was doubled and that from Middlesborough was trebled after the war. However, the proportion of boys working-class of

origin leaving with school certificates was barely changed in either areas; the gap which existed before the war in Middlesbrough between the record of achievement in the school certificate examination of the sons of professional and business parents and that of the sons of working class parents has been widened, whilst in South West Hertfordshire such a gap has appeared for the first time.<sup>28</sup>

Although traditional ways of life are found at all social levels, that found amongst manual workers seems most likely to restrict horizons, reduce the scope of experimentation and limit the chances for new experiences. The orientation of the English school is predominantly that of the middle class. To attain a great security of employment, a higher standard of living and to realise the values of achievement, individualism, rationality, honesty, and responsibility, a manual worker must climb the educational ladder, yet, as Owen pointed out,

"... his traditional way of life works against this through the way he is socialised and the close-knit network which protects him but also acts as a barrier to change."

29

As a reflection of their future, middle class families have generally tended where appropriate to defer present gratification in the interests of greater rewards later on; and the socialisation of their children has sought to secure the internalisation of this principle. Working class families, on the other hand, have traditionally and realistically had a present rather than a future time orientation, and the deferred gratification implication in the policies and attitudes of schools and teachers has therefore tended to be not merely unfamiliar but also unacceptable to many children whose early socialisation has taken place in a working class setting.<sup>30</sup>

Concerning language and the lack of generalising words in one's vocabulary, Basil Bernstein in 1958, 1959, has produced evidence for the existence of two speech codes, which involve not only words but also the way the words are organised. Bernstein's evidence seems to indicate that lower working class children have access only to a public language while others have access to both a public and a formal language (the result of an elaborated speech code).<sup>31</sup>

Whereas a public language tends to limit curiosity by the use of a relatively few traditional, idiomatic phrases, a formal language is a more adequate vehicle for exploration and experimentation.

It has become rather apparent that children of those higher social backgrounds enter the school with an advantage in verbal abilities and find themselves competing in a situation far more comfortable to them than to their peers of lower social backgrounds.

It can be said that the working class children may experience school difficulties as a result if the school (as usually happens) is working on particular assumptions linked with contemporary middle class child-rearing arrangements.

## II. SOCIAL MOBILITY

Social stability and social mobility are two sides of the coin of social placement because the two methods of recruitment to occupational positions are by direct inheritance of a position by the son and by movement into the position either from above or below. If this movement occurs within an individual's life span, it is referred to as 'intragenerational mobility', if it occurs within two or more generations, the term applied is 'inter-generational mobility'.

Data collected in the late 1940s show similarities in intragenerational mobility for non-manual and manual workers taken as broad groups but variations amongst subdivisions of these groups; the professions were the most static with 80%<sup>32</sup> of professionals having begun and remained at that level. The least stable group was unskilled workers of whom only 26%<sup>33</sup> who started in unskilled work stayed in unskilled work.

The measurement of mobility between generations is a very difficult task. From the late 1940s data, it can be seen that the proportion of sons of fathers with non-manual occupations who moved to manual work (49%) was higher than that of sons of fathers in manual occupations who moved to non-manual work (20%).<sup>34</sup> These figures indicate that the downward mobility was higher than upward mobility in England and vice-versa in the USA. This finding has to be reconciled with many others which point to the conclusion that sons of non-manual fathers have greater chances of upward mobility and fewer chances of downward mobility than do sons of manual fathers.

A national sample of some 10,000 adult men and women, selected so as to be representative of the different regions, of urban as against rural dwellers, was interviewed in 1949.<sup>35</sup> When an analysis was made showing that the proportion who had remained in the same category as their fathers, the highest percentage (47%) was amongst routine non-manual and skilled manual work.

Of 1,243 directors in British industry questioned by Copemen in 1955, 51% were sons of businessmen, 22% sons of professional and administrative workers and only 8%<sup>36</sup> originated from the lower middle and working classes.

The general picture that emerged for Britain in the late 1940s and in the 1950s was of a society in which, in overall terms, there was a good deal of movement up and down the social scale, but where, nevertheless,

there were marked differences between the various social strata in the degree to which sons found themselves in jobs of similar social status to their fathers. Thus, looking at the top layers, it was still possible for fathers to buy for their sons the kind of education which would ensure that they did not fall down the ladder; or looking at the bottom layer, there was a very marked tendency for the sons of unskilled manual workers to fail to pull themselves up the ladder, and to stay in work of low status.

Several possible explanations can be given to this stability:

a) part of it may be artificial in that the youngest adult men in the data had not yet reached the peak of their careers in some cases, and so their experience could represent a slight underestimate of the true amount of their social mobility; b) though the educational chances of working-class boys undoubtedly showed some relative improvement over the period, they still remained low in absolute terms. Moreover, improved education by itself was often not enough to ensure upward mobility; sons born into the higher status classes still had the double premium of a good education plus a father well placed to help in many other ways; c) while educational opportunities were undoubtedly expanding, the educational requirement of high status jobs was also becoming more stringent, and to some extent this latter development neutralised the former so far as the chances of upward mobility were concerned; d) it has to be remembered also that the adult representative in this data had been educated before the benefits of the 1944 Education Act were available. As will be shown shortly, a more recent enquiry does in fact show a significant increase in social mobility.

The British situation can be brought up to date by looking at a few of the preliminary findings of an Oxford University study using a national adult sample of 1972 and designed to ensure comparability of data with the

earlier 1949 enquiry. Both upward and downward mobility seem to have increased significantly in the intervening period. At the top of the social scale, the sons of fathers in professional and administrative occupations were evidently finding it a good deal more difficult to remain in the same socio-economic category as their fathers, than their predecessors of 20 years earlier had done. At the same time, the social origins of those in this top category had become a great deal more varied. Thus while in 1949, 47 per cent of the men in Class 1 had had fathers in that top category, in 1972 only 15 per cent<sup>37</sup> of their counterparts had fathers in that top category.

Britain can be categorised as having both high upward manual to non-manual mobility and high downward non-manual to manual mobility, whereas the United States is characterised by high upward but low downward mobility. It is worth noting that Miller takes the view that, as an index of fluidity, downward mobility is more significant than upward. He said:

"A society which is dropping sons born in advantaged strata out of these strata has more openness than one which brings up talented manual sons, but safeguards the privileges of the already advantaged."

38

By way of explanation of the greater downward mobility at the later by comparison with the earlier data, in the form of a larger proportion of sons of high status fathers failing to cling to high status positions themselves, a few relevant points can be made. First, both the number and the proportion of places in higher education and in the scarcer forms of secondary education which could be bought, were smaller at the later date. Second, the number of high status occupations, entry to which could be secured on a social status rather than a paper qualification basis has diminished. Third, competition, both for educational places and for entrance

to professions, had clearly become keener. For all these and other reasons, the ability to ensure that one's sons did not fall down the social ladder had shifted from being open to well-to-do fathers generally to only being available in the case of the really wealthy.

Four major forces influence the chances of social mobility, these forces are:

1. Technological change
2. Demographic change
3. Political change
4. Educational change

#### 1. Technological Change

Following the destruction of the Second World War, a number of Britain's industrial competitors concentrated on building up new capital equipment making use of the latest research and invention. In general, the degree to which the economy has altered and adapted itself to new conditions during the last few decades is none the less remarkable.

By the outbreak of the First World War, British industry had certainly settled into a fossilised pattern from which adjustment was only begun during the inter-war period; the extent to which the process has been completed under the stimulus of the Second World War, technological developments and growing world trade can be seen from a comparison, made by Donaldson, between the present pattern of industrial output and that of the pre-1914 period. It was during this earlier period that Britain enjoyed the fruits of a head-start in the industrial revolution. He stated that:

"About a third of world industrial exports then came from this country, of which some seventy per cent were coal, iron, and steel, or textile products. The

prosperity of the economy rested heavily on these three great staple industries, which employed a quarter of the labour force and produced nearly half of British industrial output."

39

Today, employment out of a much expanded labour force, has fallen substantially in the case of coal-mining and drastically in the textile industry. The other old staple, iron and steel, although relatively less important, has recovered under the stimulus of demand from the new industries which have since developed. Nearly a quarter<sup>40</sup> of manufacturing workers are now employed in engineering, electrical goods, and shipbuilding industries, with their highly variegated output of products which fifty years ago were largely unheard of.

A further 10 per cent<sup>41</sup> find employment in the production of vehicles, which, in their greater homogeneity, have the only real claim to being a new staple industry. A simple comparison of the industrial pattern now with that of the earlier period is hampered by the breakdown of traditional classification of 'industries', which has resulted from the far reaching technological changes of the past few decades. The development of petro-chemical products, synthetic fibres and plastics have all served to blur previous lines of demarcation. Cole stated that:

"These developments bring the academic scientists much closer to industry: they make scientific research and the testing out of its results on a commercial scale essential links in the chain of efficient production in more and more industries, and they create the need, not only for many more scientists and higher technologists, but also for a host of trained persons to assist them both in the research station and in the factory."

42

Parallel with these changes in the occupational and output pattern of industry has been a reversal of its earlier geographical distribution. Location was originally heavily concentrated on the coalfields, and it was

the development of a new source of energy, electricity, which first released industries to locations closer to the final consumer markets - in particular London and the south-eastern areas. The ties to particular locations have since been loosened further by the immense expansion in the use of oil since 1938,<sup>43</sup> the post-war development of nuclear energy, and the increased use of man-manufactured 'raw materials'.

a) The Large-scale Production

In the first period, the typical manufacturing firm was a fairly small business owned and managed by one or few men. Today, most of the goods in shops are manufactured by huge companies each employing thousands of workers and owned by a large number of shareholders.

An obvious explanation for the growth of firms is that as the population increased and people became better off there was a rising demand for products of all kinds. The main reasons for the growth in the size of firms is that, in many industries, large firms are more efficient. They consequently produce more cheaply and can sell at a lower price. They give more opportunities for division of labour, the use of machinery, and other ways of increasing efficiency. This also enables more to be spent on research and technical progress. In these circumstances, as Marder pointed out,

"... small firms find themselves unable to compete with the giants. The small ones are either eliminated or swallowed up or they join together to become large themselves."

44

This has happened in modern industries such as motor vehicles and chemicals.

During 1967-8 alone some 10 per cent of private industrial assets changed hands.<sup>45</sup> The evidence suggests an increase in the pace of concentration to the point where, in 1968, the fifty largest firms accounted for

no less than 42 per cent of the net output of the economy and 37 per cent of employment.<sup>46</sup>

Nevertheless, in manufacturing, there are still many small factories or workshops to be seen. A report on small firms published in 1971 showed that a total of 1¼ million firms classed as small produced between them 19 per cent of Britain's output and employed 29 per cent of the working population. The classification of small firms included manufacturers employing less than 200 and retailers with annual sales below £50,000.<sup>47</sup>

A relatively few giant organisations produce the bulk of the nation's output and provide jobs for a majority of the population. Yet small firms still outnumber the large. This is illustrated in Table 5.

TABLE 5: SIZE DISTRIBUTION OF MANUFACTURING ESTABLISHMENTS IN BRITAIN

Size: number of employees	Number of establishments	% of total establishments	% of total employment
Under 25	59,000	64	7
25-500	28,000	33	44
500-2,000	2,400	3	28
over 2,000	409	-	21

Source: Marder, K.B. and Alderson, L.P., Economic Society, London, Oxford U.P., 1975, p.68

b) The Reorganisation of Economy

Control over economic resources may either be left in private hands under a system of private enterprise or it may be exercised by the state on behalf of the community as a whole. In the former case, the use made of resources depends on the mechanism of the market. In the latter case,

it is determined by central planning. In practice, most economies fall between these two extremes, involving elements from each, and this is the mixed economy.

During the nineteenth and the beginning of the twentieth century, the economic resources had been dominated by the private sector. The public sector - including central and local government together with the nationalised industries - now accounts for nearly half the total spending on goods and services of all kinds.<sup>48</sup> At the same time, there remains a substantial private sector of business where market forces continue to operate though influenced by the government through taxation and other policies.

Several public enterprises were started by conservative governments between the two world wars, but most of Britain's large nationalised industries were created by Labour governments after the Second World War.

The British Broadcasting Corporation was set up in 1926 to provide radio programmes. Its television service started in 1936. Independent television began in 1954<sup>49</sup> and is now under the Independent Broadcasting Authority.

As for electricity, the national grid for distribution of electricity from the power stations has been built up since 1926. Nationalisation was extended to the power stations in 1947.<sup>50</sup> Current is now supplied by electricity boards and the central electricity generating board.

London Transport was brought under public ownership in 1933. Railways and road-haulage contractors throughout the country were nationalised in 1947,<sup>51</sup> but road haulage was mostly restored to private ownership after 1953. Railways are now run by the British Railways Board. Since the Transport Act of 1968, there has also been a National Freight Corporation to coordinate road and rail freight services, and a National Bus Company

operates nationalised bus services mainly in country areas.

Civil aviation has been nationalised since 1946. Britain's airlines were divided between two corporations - the British Overseas Airways Corporation and British European Airways - now under the control of the British Airways Board. However, a few private companies still exist.

The Bank of England was nationalised in 1946. It had previously been owned by private shareholders. Coal mining was placed under the National Coal Board by the Nationalisation Act of 1946. Gas was nationalised in 1948<sup>52</sup> when the industry was placed under a central gas council, and other gas area boards.

Iron and steel were first nationalised by an Act of 1949. The industry was denationalised in 1953 and then renationalised under the present British Steel Corporation in 1969.<sup>53</sup>

The Post Office is one of the oldest examples of public enterprise. Since 1969 its management has been reorganised under the Post Office Board.<sup>54</sup>

The main reason for nationalising an industry is to enable the government to control it in the interests of the public. The main objection to nationalisation is that it loses the urge for efficiency claimed on behalf of private enterprise. Whether this problem has been solved in Britain is open to argument, but the attempt to solve it has led to the development of a particular form of organisation for nationalised industries. This is the public corporation.

A public corporation is the structure adopted for Britain's nationalised industries. Its essential feature is that the management of the industry is in the hands of a small board appointed by the government and under a limited degree of government control. This limited degree over public corporations is exercised by government ministers, by Parliament and by consumers themselves.<sup>55</sup>

Members of Parliament can question the Minister on the policies of nationalised industry, though questions are not normally allowed on details of management. Ministers and MPs are supposed to represent the interests of the public. Public corporations may also be influenced by the views of ordinary people expressed through newspapers, radio and television.

c) Progress in Agriculture

During the 1950s the volume of net agricultural output increased by rather more than one-third.<sup>56</sup> This has been achieved largely through widespread improvements in technology resulting in marked increases of efficiency in crop and animal production. Cereal yields, for example, have increased by one-third as a result of better varieties, the development of chemical control of pests, diseases and weeds and improved husbandry.

These developments in combination with the mechanisation of agriculture have resulted in an annual growth in labour productivity of about 4 per cent in 1954-60 and about 6 per cent in 1960-64,<sup>57</sup> and above 6 per cent afterwards. The rate of increase in labour productivity in agriculture is much higher than the average improvement in manufacturing industries and double the rate of improvement in the economy as a whole.

In the mid-1960s agriculture produced about 3.5 per cent of the gross domestic product and employed a similar percentage of the working population.<sup>58</sup> In 1974, it produced less than 2.5% of the gross domestic product, and employed only 3%<sup>59</sup> of the working population. However, about half the requirements of food and feeding stuffs are still imported from abroad.

What are the implications of the technological changes that have taken place in industry and agriculture after the Second World War? The answer to such a question will be outlined in Chapter 6.

d) Economic Growth

During the Second World War, the national income rose sharply, but this increase contributed little to the welfare of the people, due to the use of an excessive part of the resources and production for military purposes.

National income in 1974 was something over six times as large as in 1945<sup>60</sup> - not, of course, that this meant that people were six times better off. It should be taken into consideration that a very large rise in prices had taken place and that the population among which the national income was shared had increased by about 10 per cent. However, bearing in mind both facts, it is undeniable that real national income per head in 1974 was almost double what it had been just after the war.<sup>61</sup> There is no doubt, therefore, that the standard of living of the majority has substantially increased.

Britain's rate of economic growth in the 1960s and 1970s averaged about 3 per cent a year. This is considerably less than most other industrial countries such as USA, Germany, France, and Japan.<sup>62</sup> Britain's slow growth compared with that of other advanced industrial countries could be attributable to two main factors: the capital and investment factors, and the human factors.

Since a country's productive capacity can be increased by adding to and modernising its capital (factories, machines, etc.) the proportion of national resources devoted to capital accumulation or investment is obviously important to growth. In this respect, Britain has noticeably lagged behind many of its rivals. For instance, between 1967 and 1971 the proportion of domestic output devoted to investment was 35 per cent in Japan, 26 per cent in France, 25 per cent in Germany and only 21 per cent in Britain.<sup>63</sup> The

result is that some areas of industry fail to make use of the possible advances in technology or do so too slowly.

There are so many influences that cannot be calculated. For example, how can one measure the effect of the educational system on the efficiency and productivity of labour? The application of technology depends to a very large extent upon engineering. The Fielden Committee reported in 1963 that,

"... many of the weaknesses of British industries and their failure adequately to meet foreign competition can be attributed to a shortage of engineers and to insufficient attention to the importance of engineering design."

64

There is evidence that the engineering professions generally, and design activity particularly, are failing to attract a sufficient share of the ablest school leavers and university graduates. An industrial inquiry revealed in the 1960s, the rapidly growing demand for skills of many types and the danger that growth will be held back by shortage of these skills.<sup>65</sup> Marder in 1975 added some other human factors, and remarked that:

"Britain's slow growth rate is often blamed on human factors including the attitudes of trade unions and workers, or, alternatively, inefficiency and lack of initiative on the part of managements."

66

## 2. Demographic Change

Since people are both consumers and producers, population has a double significance for economists. Changes in the size and composition of the population therefore have important economic and social effects. Natural increase or decrease of population is the balance between births and deaths. Migration is the balance between immigration and emigration. These bases should be borne in mind.

Britain's death rate has remained fairly steady at about 12 per thousand since the Second World War. The birth rate rose rapidly during the war, reaching a peak (20.7) in 1947. The trend was downward between 1947 and 1955 (14.4). It rose steadily until 1964 (18.7), but then resumed its decline and reached 16 per thousand in 1971, and this has continued into the 1970s. See Table 6.

TABLE 6: UNITED KINGDOM POPULATION TRENDS

Year	Birth Rate	Death Rate	Rate of Increase	Total Population in millions
1931	16	13	3	46.0
1947	20.7	-	-	-
1951	16	13	3	50.0
1955	15.4	-	-	-
1964	18.7	-	-	-
1971	16	12	4	55.6

Source: Extract from Hagenbuch, W., Social Economics, Cambridge Economic Handbooks, Cambridge, Nisbet & Co.Ltd., 1965, Table 1, and Marder, K.B., et al., op.cit., p.21

The trend of the birth rate suggests the possibility that Britain's population might cease to expand and even begin to decline at some time in the future. The consequence of such a decline should be considered.

Migration affects the size of the population through the balance between immigration and emigration. In Britain there has been an excess of emigration,<sup>67</sup> but migration in general has only been a minor influence on the total numbers. The flow of Commonwealth immigrants into Britain, which began in the late 1950s, was soon checked by the adoption of strict

immigration controls. However, immigration has played an important part in the development of the USA.

In the 1960s, immigration into Britain from the Commonwealth countries was largely due to the attraction of a higher standard of living. The question of immigration controls has risen again since 1976 under pressure of the increasing rate of unemployment.

The so-called 'brain drain' of British scientists and doctors to the United States, especially in the 1960s, and to Canada, Australia, and Holland in the 1970s, is explained by the attraction of higher salaries, lower taxation, and superior facilities for work. This trend has two unfavourable consequences: it reduces the number of most needed people, "and it lowers the proportion of the working to the dependent population."<sup>68</sup>

a) Age and Sex Distribution

A useful classification of the population is into three broad age groups - those below school-leaving age, the working age group, and those above retirement age. The main dividing lines between these groups, in the United Kingdom, are the minimum school-leaving age of 16 and the retirement age of 65 for men.

Since Britain's population growth is chiefly due to a falling death rate, with people living longer, the largest increase has been in the group above retirement age. Its proportion of the total population has more than doubled since the beginning of this century.<sup>69</sup>

Both pensioners and children are dependent on the working population to supply the products they consume. While the children group in the UK in 1960 was lower (22.63%) than its correspondent in the USA (27.16%), and about half of its correspondent in Egypt (42.22%), the retirement group in

the UK was higher than both countries (10.83 in the UK, 8.18 in USA, 3.48% in Egypt).<sup>70</sup>

As long as the birth rate was declining in the 1950s, there was a falling proportion of dependent children to offset the increase in the retired group. Thus, the proportion of working to dependent people did not alter substantially. But with a somewhat higher birth rate in the 1960s, the proportion of children as well as pensioners, has increased and the working age group has correspondingly decreased. Thus, the percentage of population between 15 and 65 fell from 63.8 in 1951 to 59.7 in 1971.<sup>71</sup> The raising of the school-leaving age to 15 in 1947, and to 16 in 1972, must also further reduce the working age group. However, this age group is now expected to rise as a proportion of the total population during the last part of this century. This is because, with the birth rate now falling, there will be a decline in the below-working-age group.

Women outnumber men in Britain's population because they live longer on average<sup>72</sup> and also fewer were killed in the two world wars. However, male births have exceeded female births over a number of years and males are consequently more numerous in all age groups up to about 45. If the present sex ratio of births continues, men will eventually outnumber women in the population as a whole. Nevertheless, women will remain in a majority among the very old as long as their average expectation of life exceeds that of men.

As well as influencing the birth rate, sex distribution also affects the economy through the labour supply. Since women retire earlier than men and fewer are generally at work, a country with a relatively large number of women is likely to have a smaller working population. In Britain today, as the proportion of men rises, one can expect the benefits of a larger working population.<sup>73</sup>

b) The Working Population

The working population of a country consists of all its inhabitants who are either at work or offer themselves as available for work. Out of a total United Kingdom population of 55 million in 1971, there were 33 million in the working age group and a working population of 25 million.<sup>74</sup>

For the purpose of looking at its industrial distribution, the working population is conveniently classified into three main groups - primary, secondary, and tertiary industries.

The primary industries are generally concerned with obtaining food or raw materials. They consist of agriculture, forestry, and fishing, together with mining and quarrying. An outstanding feature of industrial distribution in the UK is the small percentage of workers in the primary industries, see Table 7. The proportion of the working population employed in these industries has fallen almost continuously since the beginning of this century. The decline is explained by the contraction of employment in agriculture and coal mining, the two main industries in this group.

TABLE 7: DISTRIBUTION OF EMPLOYMENT IN U.K.

Type	% in 1961	% in 1972
Primary	6	4
Secondary (manufacturing and construction)	46	41
Tertiary (services and public utilities)	48	55

Source: Marder, K.B., et al., op.cit., p.31

The diminishing role of agriculture in the British economy reflects the trend towards industrialisation over a long period of history. The number of farm workers has also fallen in the twentieth century because of difficulties facing the industry through foreign competition. Though British farmers have received substantial assistance from the government since the Second World War, the number employed in the industry has continued to fall, rural workers being attracted by the higher wages and better conditions to be found in towns. Agricultural production has in fact increased in recent years, but this has been achieved by mechanisation and higher productivity per worker.

Coal mining has declined because of competition from other sources of energy such as electricity and oil. Britain's coal production has been falling since the 1950s, and the industry has drastically reduced the size of its labour force.<sup>75</sup> Because of the oil crisis in 1973, coal was again in demand and the decline in manpower was likely to be checked. However, the rapid increase of oil production from the North Sea in 1976-77 makes the continuous falling of coal production and its workers possible.

The secondary industries cover the whole range of manufacturing and also building and construction. Although there has been a reduction in the percentage of the total working population engaged in manufacturing in recent years, see Table 7, the large number employed in this group reflects the importance of manufacturing in the highly industrialised British economy. But considerable changes have taken place in the composition of the group since the beginning of this century. In particular, the old basic industries such as textiles and shipbuilding have declined in importance as employers of labour compared with the modern technological or science-based

industries such as motor vehicles, engineering and chemicals.

Concerning the labour force required for these industries, forecasts showed in 1965 that demand for administrative, technical and clerical staff was expected to grow slowly. The demand for highly qualified manpower such as scientists, technologists, and technicians was expected to increase four times as fast as the administrative, technical and clerical group as a whole. The demand for skilled operatives was growing as well.<sup>76</sup>

Industrial inquiry made at mid-1960s suggested that:

"... there will be increasing demands for certain types of qualified engineers (especially electrical and electronic and those concerned with production problems); mathematicians; chemists and physicists; technicians; work study engineers ... and computer programmers in general; instrument mechanics, and electrical and electronics craftsmen."

77

The forecast shortages of skilled and qualified manpower emphasise the need to raise the quality of the labour force through improved provision for education and training. Here the question is, did the educational system develop in such a way in response to this need? Or, did the curriculum change to meet this need? The answer to such a question will be found in Chapter 6.

As for tertiary industries, perhaps the most striking fact revealed by the figures of industrial distribution is the importance of this group in the economy today. Services have been the most rapidly expanding part of the economy and now employ more workers than there are in manufacturing. There has been a substantial growth in numbers of nearly every category in this group. A notable exception is in the number of domestic servants, a category which once provided the main opportunities of employment for working women.

In general, the growth of the service industries is a reflection of the development of society. The growth of the welfare state and the educational system has meant an expanding demand for doctors, nurses, social workers and teachers. State intervention in the economic and social life of the country has likewise resulted in an expanding number of civil servants and local government employees. The numbers engaged in banking, insurance, accountancy, law and other professions have multiplied with the growth of business and trade. At the same time, rising standards of living have been accompanied by an expanding demand for services concerned with such things as entertainment, travel, and catering.

### 3. Political Change

In respect to political change, three main changes which have become apparent since the Second World War will be analysed. They are: the change of international powers, the change of balance in parliamentary membership of the two major British political parties, and inconsistencies between domestic and foreign policy.

Since the Second World War Britain has gradually lost her colonies in the world.

"The emancipation of former subject nations and the rise of competitive industry abroad, together with shifts in the seat of technological initiative and military power, made Britain seem for a while to be in the position of a retired warrior whose vocation and savings had gone."

78

Consequently, under these difficulties, the United States since the war has exercised the role of leadership in world affairs that Britain and France previously played.

By losing her colonies in the world, Britain has lost in turn a great

deal of raw materials, investments and markets. A relatively growing distancing has been recognised between Britain and the USA, Japan, and Western Europe in general.<sup>79</sup> Under all these pressures Britain had to communicate and co-operate with her European neighbours. Her final abandonment of an attitude of isolation came when the election results brought her into the European Common Market in 1975.

The inclusion of Britain into the European Community emphasises different kinds of learning including a more competent study of foreign languages. King pointed out that:

"It became clear that a much higher proportion of the population was going to need a 'Secondary education' ... [and] a widespread and continuous commitment to technological and commercial retraining, and a far greater reckoning together of all needs and all resources."

80

The implications of these changes for the curriculum will be analysed in Chapter 6.

Before the Second World War the government had been most of the time in the hands of the Conservative Party, which held a clear preponderance over other parties. During wartime, it had been for five years in the hands of a Coalition with a Conservative Prime Minister, but with the leading members of the Labour Party occupying the key economic positions in home affairs.<sup>81</sup> After that, for six years it was in the hands of its principal rival - the Labour Party. Ever since, the situation has reversed and the Labour Party has a clear preponderance over other parties.

The social composition of parliament has changed.<sup>82</sup> The Parliament of 1918, elected after the enfranchisement of the older women; the Parliament of 1935, which seemed the most suitable after the franchise had been extended to women on the same terms as men; and so did the Parliament of 1950.<sup>83</sup>

Representation of the hereditarily titled class, country gentlemen, bankers, and upper class professionals, in the House of Commons fell almost continuously,

"and had its most dramatic decline between 1935 and 1950. The number of military and naval officers fluctuated considerably; but it too fell off sharply in 1950."

84

The other professions together with scientists and technologists have come to contribute a large quota to both the main party groups.

This change of composition of parliament has always been in favour of the Labour Party. Thus, it came to power immediately after the war with support from all sections of society as well as from organised labour and the co-operative movement.<sup>85</sup> The party asserted in its programme, from the beginning, the importance of domestic reform in general and of education and health services in particular.

Changed world conditions after the war, and the balance between the two major political parties have made the pursuit of consistent policies in Britain a difficult task. This was made worse during the 1950s and 1960s, by the apparent inconsistencies between domestic and foreign policy.<sup>86</sup> Successive governments have increasingly been allowed public opinion to participate in domestic policy. As for foreign policy, Holmes indicates that:

"Until relatively recently the executive has reserved the right to pursue foreign policy in comparative independence of public opinion ... the freedom of the Crown and government in foreign policy was not radically affected until the Labour Party became powerful."

87

In domestic policy, after the war labour unions demanded reduced hours of work, higher wages, and increased social benefits without committing themselves to higher productivity. Britain's economic difficulties vitally

affected her ability to have an independent foreign policy. At the same time there was a disagreement about "the economic necessity of maintaining Britain's imperial lines of communication and about the contribution of the empire to her economy." 88

The inconsistency between domestic and foreign policies, and the lack of national unity about the economic policy have created a demand on secondary schools in general and on their curricula in particular. This demand is how "to wean a population generally away from conceptions of personal and national interest more appropriate to a previous epoch." And how to enable them to participate actively in foreign as well as in domestic policy?

#### 4. Educational Change

##### a) Administration

Locke was the only one of the great philosophers of the eighteenth century whose ideas on education formed the basis for the philosophy of education of the period of enlightenment. As far as the educational control was concerned,

"Locke's repugnance of state intervention was accepted only in England; on the Continent, as well as in Scotland and Ireland, state control of education was acknowledged as a necessary means of liberating the individual citizen from dogmatic indoctrination by the Church."

89

The survival of ancient foundation schools with the tradition of independence has had its effect upon the outlook of the English teaching profession, and has assisted it in resisting centralising and authoritarian tendencies among administrators and teachers.<sup>90</sup> It is commonly stated that

the English educational system is based, to a large extent, upon the freedom of the individual school and teacher. This arises from the fact that power in this system is widely distributed, and it is this which ensures a high degree of freedom for the individual teacher.

Accepting Holmes's argument, three levels of control should be distinguished: the public interest, the managerial, and the technical. Each level is identified by the roles practised by its members. The public interest roles are practised by a group of elected and appointed individuals serving on Committees, boards, or in institutions. The managerial roles are played by administrators and inspectors, and the technical roles are played by teachers.<sup>91</sup>

At the public interest level most aspects of educational policy are debated and formulated. The Minister of Education is the highest position in this level. He has the responsibility before the national assembly. Parliamentary debate "is often about general principles rather than local issues."<sup>92</sup> Parents' and pupils' demands, in general, find their expression rather indirectly at this level. The socio-political and educational needs are generally expressed through the advisory council, and advisory reports such as the Hadon report in 1926, the Spens report in 1938, and the Norwood report in 1943.

The 1944 Education Act was a logical result of the former reports. This Act, which was essentially a coalition act, to which all the main parties assented, lays down the organisation of education in distinct and progressive stages. The Act makes it the duty of the Minister to promote public education and to secure its effective execution by local authorities under his control and direction. The local authorities are responsible for the provision of facilities in their areas and have to submit to the Minister

for approval their development plans.<sup>93</sup> It says, for example, that it is the duty of local education authorities to provide education for all children in accordance with their ability and aptitude and that they should organise this education in distinct stages, primary and secondary. But it does not say how the appropriate form of education is to be provided. It says nothing about what types of secondary school should be provided, nor how they should be organised. But this opened the door for some local education authorities to think of comprehensive schools.

The local authorities, then, are the main policy-makers in matters beyond those of the broadest issues. The composition of the local councils reflects national trends. National policy, therefore, tends to be debated at the local level. However, the majority of local councils may represent the opposition party in Parliament. This case exists now; since the government is Labour, but the majority of the local councils were won by the Conservative Party in the second half of 1977. The 1944 Act did not modify the principle by which the Ministry of Education employs the teachers, lays down no syllabus, and prescribes no books.<sup>94</sup> Most of these have been done by the local and school authorities. However,

"... there is a national salary scale for teachers in publicly maintained schools, there are national entrance requirements to training colleges, and the status of qualified teachers is a national award."

95

The Ministry, however, exercises a vast and far-reaching influence over the schools through Her Majesty's Inspectors. The uniform minimum standards are, to some extent, maintained by those inspectors. They are usually more concerned with the academic affairs, and more closely in touch with the schools and teachers (technical level) than national level. Most of these inspectors are university graduates, trained in classics or arts at

either Oxford or Cambridge.<sup>96</sup> At this managerial level, the national and local inspectors provide

"... methods of describing and assessing the system and the institutions within it, the evidence they gather contributes to the support and development of schools and teachers, and points to any remedial action if a school is consistently less than satisfactory."

97

Inspectors have no control over the curriculum. This is the responsibility of the headmaster, although he is bound rather closely by university entrance requirements. "The principle is that inspectors should do no more than advise teachers and headmasters."<sup>98</sup>

At present, the Ministry of Education, on the line with Labour ideology, is trying to gain more control, especially over the area of curriculum. The Secretary of State in 1977 stated that:

"It would not be compatible with the duty of Secretaries of State to 'promote the education of the people of England and Wales', or with their accountability to Parliament, to abdicate from leadership on educational issues which have become a matter of lively public concern. The Secretaries of State will therefore seek to establish a broad agreement with their partners in the education service on a framework for the curriculum, and, particularly, on whether, because there are aims common to all schools and to all pupils at certain stages, there should be a 'core' or 'protected' part."

99

Coming back to the technical level, decisions about the general policy in a school have traditionally been regarded as the responsibility of the head of the school and the head-teachers. In making these decisions, they have always been subject to important economic, social and professional pressures. It has been regarded as an important part of their job that they in co-operation with teachers should assess what qualities, skills, areas of knowledge, etc. the pupils in their schools should acquire, and they have been expected to do this on the basis of their own knowledge and experi-

ences of children of the society and of the traditional values of their culture.

In some countries like Egypt, political influence on education is quite direct and decisions about curriculum content, methods and even balance of subjects and allocation of time are made centrally, leaving individual schools very little discretion. Proposals for the introduction of such control in some areas of curriculum in England and Wales are currently being made.

Finance too is a crucial factor. The way in which the money allocated to a school is spent is a matter for the government, and the granting of additional money for specific projects is a way for controlling the curriculum content. Since the war, the financial support for education has increased from the national government. Thus, over the years, there has been a growth in power of central authorities. This has been in part because of the increased cost of educational facilities and the diminishing ability of local authorities to meet the rising cost of education.<sup>100</sup>

"When a large proportion of the total cost of education is raised through national taxation considerable power rests in the hands of the public interest group and with the top levels of the managerial group."

101

One of the main sources of direct influence on curriculum of the secondary school is the academic influence. There are several aspects to this. First, universities and higher institutions are exercising a great deal of control over what is taught, especially in grammar school, through the entry requirements they set for admission to their courses. However, it would be a great mistake for curriculum planners to ignore the needs of those who wish to leave at age 16. The second aspect of this influence is felt most obviously through the control exercised by the universities over

the content of examination syllabuses. "Indeed, it is the public examination which is recognised by all teachers as the most obvious source of external control over the curriculum."<sup>102</sup> The third aspect is that what is done in schools depends very much on what the teachers have been prepared for by their initial courses of education, so that the kind of course offered by the institutions of teacher education has always had an impact on curriculum development. In addition to that, the teachers themselves of course have exercised a great deal of control over the curriculum through their involvement in the planning and construction of it.

The influence exercised by public examination syllabuses on the secondary school curriculum highlight the close interrelationship of examination and curriculum and the need for the planning of both to be done together. This in turn would suggest that it is important that teachers should be more closely involved in the planning and conduct of public examinations.

The traditional and long established means for assessing the performance of the educational system as a whole rests with Her Majesty's Inspectorate and, more recently, with local education authority advisory services. They provide developed methods of describing and assessing the system and the institutions within it. The evidence they collect contributes to the development of schools and teachers, and points to any remedial action if a school performance is less than satisfactory. It is the function of the local educational authorities to decide how to apply the results of inspections by local inspections. In contrast, the conclusions reached by H.M. Inspectorate must be capable of being related nationally to the educational system.

As for the local educational authorities, it is an essential part of

their responsibility for educational standards that they must be able to identify schools which consistently perform poorly, so that appropriate remedial action can be taken. Such assessment depends partly on the results of the examinations, and on a detailed knowledge of the circumstances of the schools by the authorities' inspectors and advisors. Such self-assessment may be undertaken by the schools themselves. The scope here is for the authorities to try to achieve a greater degree of uniformity in their approach to the assessment of schools.

In more specific terms, examinations may be internal, conducted by the pupils' own school and teachers as in the 11+ examinations and in the periodic internal school examination; external, conducted by an outside examining board, as in the General Certificate of Education (GCE); or internal, with external moderation, allowing the examinations to be set and marked internally but the results being moderated by external assessors. The latter procedure has been introduced into sixth-form secondary school examinations, especially the Certificate of Secondary Education (CSE).

b) Selective System

Since 1902 three clearly distinguishable types of post-primary education have developed in England and Wales: the recognised secondary schools (which were all grammar schools), the group of quasi-vocational schools generally known as Junior Technical Schools, and the various kinds of Senior Elementary Schools. The reorganisation of post-primary education recommended by the Hadow Report in 1927, which required a complete break for all pupils over the age of eleven plus. This report reflected the Labour Party's belief that education should be tiered, with the primary stage being replaced at eleven by the secondary stage, and the secondary stage at a later

date by a further stage of education. The reorganisation of secondary education recommended by this report began and proceeded steadily throughout the 1930s. By 1938, 63.5 per cent of pupils aged eleven or over were in reorganised schools.<sup>103</sup>

So the grammar schools were those which had previously been officially recognised secondary schools. The secondary technical schools comprised the schools previously known as junior technical, junior art, and junior commercial schools. The secondary modern schools were the promoted elementary schools.

The Committee of the Spens Report in 1938 discussed the desirability of establishing multilateral schools, large institutions with the three types of school brought together on the same campus, but rejected them as running contrary to the English tradition of small schools. The committee argued that a careful study led them to believe that the schools "ceased to correspond with the actual structure of modern society and with the economic facts of the situation."<sup>104</sup> However, the Committee strongly advocated the tripartite system of grammar, technical, and modern schools.

The Norwood Report in 1943 argued that there were three types of pupils ideally suited for these three types of education and accepted the idea of a tripartite organisation of secondary education: grammar, technical, and modern schools.<sup>105</sup> The 1944 Education Act did not change the tripartite system, however, it made a period of full-time secondary education compulsory for all children. By raising the leaving age from 14 to 15 (with provision for a later raising to 16) it ensured that the period of secondary education should not be less than three years, and by permitting the education of 'senior pupils' to continue until the nineteenth birthday made it possible for any pupil to stay in a secondary school for seven years, or even rather more.

The Act also gave the local authorities the obligation to secure the provision of different kinds of secondary education. It gave them also the right to devise means of discovering what particular kinds of secondary education children seem most suited for. This obligation has not been removed by the reorganisation of secondary education on comprehensive lines. From 1945 onwards the selection machinery was adopted to serve as the means of allocating pupils to appropriate secondary schools.

But, most unhappily, for many years these three types of school have been accorded very different degrees of esteem. The grammar school has easily stood highest, as the gateway giving access to professional and executive ranks in employment. The technical school has been regarded as a 'second-best' for those who failed to join the grammar school. The modern schools have been devoted to the academically less able pupils. The result has been, as Dent pointed out that "the educational implications were inextricably entangled with the social and economic implications."<sup>106</sup>

c) The Effects of Selection

This selective system has taken care of training statesmen, diplomats, and administrators. Not surprising that most of these men admitted to the usefulness of retaining such a highly selective system of secondary education. The political leaders, the party leaders, and the members of the House of Commons are still heavily representative of the public/grammar schools, the publicly financed academic schools.<sup>107</sup> Outside observers were sometimes puzzled to find these schools called 'public', when they were in fact for the children of the upper business and professional classes, especially for those who were intended to enter a profession requiring higher education. Holmes, in 1965, pointed out that,

"the system restricts entry into positions of leadership no less than it reduces occupational choice and provides a criterion of social class."

108

With respect to the equality of educational opportunity, the gap is still wide between the top and the bottom of the social scale. An attempt was made to follow through life all babies born in a week in Britain in 1946, and it was found that even as early as when these children got to primary school, the gap in attainment between the two groups had begun to widen. A later follow-up of these children suggested that this trend continued also into secondary schooling.<sup>109</sup>

In 1973, the General Household Survey came up with the finding that 59 per cent of all grammar school pupils came from the three white collar social groups.<sup>110</sup> And so the trend continues from primary school to secondary school and then to higher education. The survey has again commenced on the "greater propensity for students from non-manual backgrounds to stay on at school and go to college."<sup>111</sup> The result of these barriers is that many people live in socially separate communities with different lifestyles, culture and aspirations.

In order to create a classless society, it is not enough to see that opportunity goes to those who have the wit and the will to use it well. A study made in 1969 suggested that, while 63 per cent of the manual working couples wished for grammar school education for their children, only 9 per cent of these children were actually attending grammar schools. But a control group of white collar workers, 77 per cent of the parents expressed a preference for grammar schools and 33 per cent of their children had achieved this.<sup>112</sup>

In a selective system like that in England a student's conception of

his own success will be limited by the type of schooling that he is selected for. Students who are selected to grammar schools develop occupational aims in line with their educational status, "whilst children who are allocated to secondary modern schools rarely think of themselves as being capable of doing anything other than manual work."<sup>113</sup>

There is evidence of the relationship between levels of aspiration and type of school attended. An investigation made in 1960 showed that,

"even with IQ held constant, children in grammar schools were more ambitious than their counterparts at secondary modern schools, thus proving that educational discrimination rather than natural differences in ability is the factor that determines the level at which a young person's ambitions settle."  
114

By this arbitrary selection, pupils with similar abilities and attitudes may be allocated to different types of secondary schools depending upon their luck and their social background.

This system has also been criticised as a contributor in slowing down the economic growth rate, productivity, or as preventing the effective and rapid introduction of new scientific techniques. For example, in 1965 Holmes pointed out that:

"Many of the basic issues in political and economic affairs have been complicated by an educational system which tended to maintain traditional social values. Labour was suspicious, management often unimaginative, yet the country's need for greater productivity demanded a far greater measure of co-operation than occurred."  
115

In 1973, Lawton pointed out that:

"On purely economic grounds, there have been good reasons for the structural changes and ... curricular changes in the educational system. It is, at least, possible that the rate of technological change has been delayed to some extent by the slow rate of adjustment of the educational system."  
116

According to Roberts's argument, "the economic system has little direct influence upon education but that its influence is mainly through other institutions,"<sup>117</sup> particularly the political institutions and the social classes and the ideologies associated with them. He asserted that "these mediating processes may not only obstruct but also distort the demands of the economy".<sup>118</sup> The result is the educational system failing to respond adequately to the economic requirements. What is the role of curriculum process in this? The explanation will be found in the next chapter.

d) The Reorganisation of Secondary Education

After the Second World War, the demand for education grew under the impetus of both arguments; education as a human right, and education as a form of investment for economic growth.<sup>119</sup> The educational policy of the Labour Party has been based on human rights, social justice, and equality of educational opportunity. According to this policy, the party advocated the breaking down of distinction between elementary and secondary education. The party also condemned the selection at 11+ as being socially unjust.

Conservative policy has, consciously or unconsciously, been based on the Platonic view that there are three types of children to suit three types of schools and three types of curricula. This policy was advocated by both the Spens Report in 1938 and the Norwood Report in 1943.<sup>120</sup> The Conservative policy intended to increase the pool of talent by gearing the schools rather closely to the occupational needs. This policy has been supported by strong tradition that children should be educated according to their parents' wishes.

In line with the Labour Party policy,

"the socio-political reformers demanded 'secondary education for all'. Progressive educationists agreed that secondary education as a human right should be made freely available and stressed the interests of each individual child in their desire to introduce more active methods of teaching and learning."

121

The socio-economic and educational reformers attacked the academic secondary schools and the attitudes and beliefs attached to them, and also the methods in which they were run.<sup>122</sup> The aim of course was to change or reorganise secondary education.

The 1944 Education Act abolished elementary schools and added the comprehensive schools and thus classified post-primary schools as grammar, technical, modern and comprehensive schools.<sup>123</sup> After the war, however, the demand for grammar school places was as before. The parents who had their education at grammar schools were aware of the economic and social advantages of these schools, thus they wanted to educate their children at these schools. Despite the economic undesirability of white-collar jobs, and the shortage of technicians, engineers and skilled workers, these schools after the war still retained considerable social prestige.

In the Newsom Report of 1963, there was a slight ideological shift, moving away from elitist notions to ideas of social justice and equality. A brief statement about the general aim of the report is contained in its introduction:

"We are concerned that the young people whose education we have been considering should receive a greater share of the educational resources devoted to education than they have in the past."

124

A few years later the Plowden Report took this point even further in its discussion of 'educational priority areas' and 'positive discrimination'.

But the shift was at the level of structure rather than curriculum.

The comprehensive school was officially defined in 1947 as a secondary school "intended to provide for all the secondary education of all the children in a given area without an organisation in three sides."<sup>125</sup> Few schools have been completely introduced in the terms of this definition. Many are single-sex schools. Up to 1970, many did not include all the most able pupils in their area because parents sent them to nearby grammar or independent schools.

In 1962, only 4 per cent of all secondary school pupils were enrolled in comprehensive schools.<sup>126</sup> But in 1965 the Labour government requested local authorities to submit plans for reorganising their schools on comprehensive lines. In 1970 the Conservative government rescinded the request.<sup>127</sup> But this did not significantly slow down this trend. In 1971, therefore, some 30 per cent of the secondary school population were in comprehensive schools.<sup>128</sup> The number of schools increased from 262 in 1965 to 1,145 in 1970, to 2,878 in 1976. The number of pupils increased from 239,619 to 937,152 to 2,753,327 respectively, see Table 8.

Today, therefore, the situation has gradually altered, though the preference for grammar schools has not been entirely removed. The opening access of secondary education for all children from different social levels, the reorganisation of secondary education on comprehensive lines, the introduction into secondary modern schools of academic courses similar, to some extent, to those given in grammar and technical schools, the changes in the subjects of examinations and in the values assigned to them, and finally the growth of the newer universities, all these have thrown the higher grades of political careers and civil services much more widely open to sections of middle and lower-middle-class families.<sup>129</sup>

Maintained Secondary Schools (excluding middle)	1950	1955	1960	1965	1970	1972	1973	1974	1975	1976
<b>Modern</b>										
Schools or departments	3,227	3,550	3,837	3,727	2,691	2,218	1,915	1,509	1,216	1,002
Pupils	1,095,247	1,234,174	1,637,879	1,555,132	1,226,619	1,085,850	965,753	856,749	697,850	589,286
Teachers	47,112	56,770	74,281	78,567	65,259	58,698	54,146	46,655	38,702	33,217
Pupils per teacher	-	21.7	22.1	19.8	18.8	18.5	17.8	18.4	18.0	17.7
<b>Grammar</b>										
Schools or departments	1,192	1,180	1,268	1,285	1,038	893	819	675	566	477
Pupils	503,008	528,455	676,881	718,705	604,916	540,049	496,766	411,195	343,658	295,162
Teachers	26,451	29,195	36,365	41,879	36,940	32,784	30,569	25,481	21,367	18,176
Pupils per teacher	-	18.1	18.1	17.2	16.4	16.5	16.3	16.1	16.1	16.2
<b>Technical</b>										
Schools or departments	301	302	251	172	82	58	43	35	29	23
Pupils	72,449	87,366	101,913	84,587	43,700	33,271	25,321	21,144	18,049	15,002
Teachers	3,851	5,083	5,517	4,965	2,719	1,982	1,540	1,287	1,102	906
Pupils per teacher	-	17.6	18.5	17.0	16.1	16.8	16.4	16.4	16.4	16.6
<b>Comprehensive</b>										
Schools or departments	10	16	130	262	1,145	1,591	1,835	2,273	2,596	2,878
Pupils	7,988	15,891	128,835	239,619	937,152	1,337,242	1,580,406	2,136,958	2,459,648	2,753,327
Teachers	383	807	6,709	13,403	53,732	77,710	94,564	124,282	145,506	164,364
Pupils per teacher	-	19.7	19.2	17.9	17.4	17.2	16.7	17.2	16.9	16.8
<b>Other Secondary</b>										
Schools or departments	35	96	315	417	324	266	245	183	155	93
Pupils	16,991	48,928	181,650	221,011	197,038	180,082	171,043	124,552	100,097	59,642
Teachers	863	2,535	8,719	11,922	10,986	10,397	10,102	7,271	5,949	3,594
Pupils per teacher	-	19.3	21.0	18.5	17.9	17.3	16.9	17.1	16.8	16.6
<b>All Maintained Sec. Schools</b>										
Schools or departments	11,765	5,144	5,801	5,863	5,280	5,026	4,857	4,675	4,562	4,473
Pupils	1,695,683	1,914,814	2,723,158	2,819,054	3,009,425	3,176,484	3,239,289	3,550,598	3,619,302	3,712,419
Teachers	78,660	94,390	131,591	150,736	169,636	181,571	190,921	204,976	212,626	220,257
Pupils per teacher	-	20.3	20.7	18.7	17.7	17.5	17.0	17.3	17.0	16.9

Source: School Statistics, Vol.1, Table 3, p.6

The explosion of scientific knowledge during the war and the great role which is played by scientists, technicians and skilled workers have made successive governments increasingly dependent on the judgments of scientific 'experts' about the consequences of policy. This, in turn, increased the chances of those people to ascend to the higher levels of the civil and political careers.<sup>130</sup>

In 1970 Parkinson has shown that Labour Party policy has often resulted in a view of comprehensive education expressed in meritocratic rather than egalitarian terms, concentrating on better opportunities to become unequal rather than on equality.<sup>131</sup> But the most acceptable is the evidence provided by researches such as Benn and Simon in 1970<sup>132</sup> who have demonstrated that not only is the number of comprehensive schools increasing, but also that comprehensive schools are now tending to move away from meritocratic to more egalitarian positions.

"In other words, more and more comprehensive schools are abolishing selection and streaming in the early years and wish to preserve mixed-ability groups and a common curriculum for as long as possible."  
133

In brief, during the 1960s the growth of comprehensive schools, as common secondary schools, theoretically presenting equal educational opportunity or equally fair chances for all pupils but which were far from successful in practice. Julienne Ford in 1969 and others pointed out that if comprehensive schools simply operated a tripartite system under one roof, very little was gained by abolishing selection at 11+.<sup>134</sup> During the 1970s the debate has been increased about the secondary school curriculum. For example, "How can we have genuine comprehensive education unless schools transmit a common culture?" "What is the point of common schools without common curriculum?"<sup>135</sup>

NOTES

1. See Hall, J. and Jones, D.C., 'Social Grading of Occupations,' in the British Journal of Sociology, Vol.1, 1950; and Young, M. and Willmott, P., 'Social Grading by Manual Workers,' in the same journal, Vol.III, No.4, 1956.
2. Cole, G.D.H., Studies in Class Structure, London, Routledge & Kegan Paul, 3rd Impression, 1964, p.45
3. Ibid., pp.150-1
4. Ibid., p.152
5. Marsh, D.C., The Changing Social Structure of England and Wales 1871-1951, London, Routledge & Kegan Paul, Ltd., 1958, p.199
6. Harbury, C.D., Descriptive Economics, London, Pitman, 1962, as referred to by Owen, C., Social Stratification, London, Routledge & Kegan Paul, 1968, p.9
7. Ibid.
8. For more details, see Heady, J.A. and Heasman, M.A., Social and Biological Factors in Infant Mortality, London, HMSO, 1959; Logan, W.P.D., Morbidity Statistics from General Practice, London, HMSO, 1960.
9. Cauter, T. and Downham, J.S., The Communication of Ideas, London, Chatto & Windus, 1954, as referred to by Owen, C., op.cit., p.65
10. Glass, D.V. (ed.), Social Mobility in Britain, London, Routledge & Kegan Paul, 1954, as referred to by ibid., p.66
11. Ibid.
12. Cauter and Downham, op.cit., as referred to by Marsh, op.cit., p.200
13. Glass, op.cit., as referred to by Owen, op.cit., p.51
14. Ibid., p.52
15. Floud, J.E. (ed.), Halsey, A.H. and Martin, F.M., Social Class and Educational Opportunity, London, William Heinemann Ltd., 1956, p.42
16. Halsey, A.H. and Gardner, L., 'Selection for Secondary Education and Achievement in Four Grammar Schools,' British Journal of Sociology, iv, pp.60-75
17. Floud, J.E., et al., op.cit., pp.57-8

18. Ibid., p.88
19. Glass, op.cit., as referred to by Owen, op.cit., p.67
20. See Nisbet, J., Family Environment, London, Eugenics Society, 1953, for a comprehensive review of the relevant data.
21. Floud, et al., op.cit., p.91
22. For a detailed exposition of the method and findings, see Halsey, A.H., Education and Social Mobility with Special Reference to the Grammar School since 1944, Unpublished Ph.D. thesis, University of London, 1954.
23. Floud, et al., op.cit., pp.110
24. Central Advisory Council for Education (England), Early Leaving, London, HMSO, 1954, Table A, p.5
25. Ibid., p.59
26. Bene, E., 'Some Differences Between Middle-Class and Working-Class Boys in Their Attitudes Towards Education,' British Journal of Sociology, X, pp.148-52
27. Floud, et al., op.cit., p.113
28. Ibid., p.122
29. Owen, C., op.cit., p.62
30. For fuller discussion of these issues see Kelsall, R.K. and Kelsall, H.M., Social Disadvantages and Educational Opportunity, London, Holt, Rinehart & Winston, 1971.
31. Bernstein, B., 'Some Sociological Determinants of Perception,' British Journal of Sociology, pp.159-74, ix, 1958-1959; 'A Public Language: Some Sociological Implications of a Linguistic Form,' British Journal of Sociology, 1958-1959, x, pp.311-26
32. Lipset, S.M. and Bendix, R., Social Mobility in Industrial Society, Berkeley and Los Angeles, University of California Press, 1959, as referred to by Owen, op.cit., pp.70-1
33. Ibid., p.71
34. Ibid.
35. Glass, op.cit., as referred to by Kelsall, R.K., op.cit., p.106
36. Copeman, G.H., Leaders of British Industry, London, Gee, 1955, as referred to by Owen, op.cit., p.72

37. Kelsall, R.K., et al., Stratification: An essay on class and inequality, London, Longman, 1974, p.110
38. Miller, S.M., in Heller, C.S. (ed.), Structural Social Inequality, New York, Collier-Macmillan, 1969, p.340
39. Donaldson, P., Guide to the British Economy, Great Britain, Penguin Books, Fourth Edn, 1976, p.81
40. Ibid., p.82
41. Ibid.
42. Cole, op.cit., pp.35-6
43. Donaldson, op.cit., p.82
44. Marder, K.B., and Alderson, L.P., Economic Society, London, Oxford University Press, 1975, p.61
45. Donaldson, op.cit., p.84
46. For more detailed account, see Aaronovitch, S. and Sawyer, M.C., 'The Concentration of British Manufacturing,' London, Lloyds Bank Review, October 1974.
47. Marder, et al., op.cit., p.67
48. Ibid., p.6
49. See Donaldson, op.cit., pp.103-19
50. Marder, et al., op.cit., p.56
51. Ibid.
52. Ibid.
53. Ibid.
54. Ibid.
55. Ibid., p.58
56. First Secretary of State and Secretary of State for Economic Affairs, The National Plan, London, HMSO, September 1965, p.136
57. Ibid.
58. Ibid., p.135
59. Donaldson, op.cit., p.120

60. Ibid., p.182
61. Ibid., p.183
62. See *ibid.*, pp.183-5; Marder, *op.cit.*, p.234
63. Ibid., pp.234-5
64. Secretary of State for Economic Affairs, *op.cit.*, p.49
65. Ibid., p.10
66. Marder, et al., *op.cit.*, p.235
67. Hagenbuch, W., Social Economics, (Cambridge Economic Handbooks), Cambridge, Nisbit & Co.Ltd., 1965, p.36
68. Ibid.
69. Ibid., p.39, Table 11.
70. C.A.P.M.S., Population and Development, A Study on the Population Increase and its Challenge to Development in Egypt, Cairo, C.A.P.M.S., June 1973, Table 2.1.1, p.43
71. Marder, et al., *op.cit.*, p.23
72. C.A.P.M.S., *op.cit.*, Table 2.1.1, p.43
73. Bowen, I., provides a useful classification of the forces determining population change in his Population, (Cambridge Economic Handbooks), 1954, Table 1, and pp.10-12
74. UN, Demographic Year Book 1970, as referred to by C.A.P.M.S., *op.cit.*, Table 1.3, p.24
75. Marder, et al., *op.cit.*, p.32
76. First Secretary of State, et al., *op.cit.*, p.40
77. Ibid.
78. King, E.J., Other Schools and Ours: Comparative Studies for Today, London, Holt, Rinehart & Winston, Fourth Edition, 1973, p.196
79. Ibid.
80. Ibid.
81. Cole, *op.cit.*, p.101
82. Ibid., pp.134-5

83. Ibid., p.134
84. Ibid., p.136
85. Holmes, B., Problems in Education: A Comparative Approach, London, Routledge & Kegan Paul, 1965, p.112
86. Ibid.
87. Ibid.
88. Ibid., p.113
89. Hans, N., 'The Philosophy of Enlightenment and Basedow's Philanthropian,' The Yearbook of Education, 1957, London, Evans Brothers Ltd., 1957, p.376
90. Fisher, N., 'Expediency,' (The Problems of Implementing a Policy), The Yearbook of Education, 1957, op.cit., p.156
91. Holmes, B., Problems in Education, op.cit., p.159
92. Ibid., p.169
93. Ibid., p.226
94. Fisher, op.cit., p.157
95. Holmes, op.cit., p.164
96. Ibid., p.177
97. The Secretary of State for Education and Science, Education in Schools A Consultative Document (The Green Paper), London, HMSO, 1977, p.17
98. Holmes, op.cit., p.180
99. The Green Paper, op.cit., p.12
100. Holmes, B., 'American and English Education Compared,' in Trends in Education, London, HMSO, September 1976, p.6
101. Holmes, B., Problems in Education, op.cit., p.174
102. Kelly, A.V., The Curriculum Theory and Practice, London, Harper & Row, 1977, p.16
103. Walton, J. (Ed.), The Secondary School Timetable, London, World Lock Educational, 1972, pp.24-5
104. Board of Education, Report of the Consultative Committee on Secondary Education, with Special Reference to Grammar Schools and Technical High Schools, London, HMSO, 1938, p.xxii

105. Norwood Report, Curriculum and Examinations in Secondary Schools, Committee of the Secondary Schools Examinations Council, London, HMSO, 1943.
106. Dent, H.C., The Educational System of England and Wales, London, University of London Press, Ltd., 1971, p.107
107. Holmes, op.cit., pp.113-14
108. Ibid., p.114
109. Field, F., Unequal Britain, London, Arrow Books, 1974, p.17
110. General Household Survey, London, HMSO, 1973, p.233
111. Ibid.
112. Goldthorpe, H. et al., The Affluent Worker in the Class Structure, Great Britain, Cambridge University Press, 1969, pp.72-3
113. Roberts, K., 'The Organisation of Education and the Ambitions of School-Leavers: A Comparative Review,' in Comparative Education, Vol.4, No.2, March 1968, p.89
114. Jayasuriya, D.L., A Study of Adolescent Ambition, Ph.D. thesis, London, 1960, as quoted by Roberts, *ibid.*
115. Holmes, op.cit., p.234
116. Lawton, D., Social Change, Educational Theory and Curriculum Planning, London, U.L.P., 1973, p.82
117. Roberts, K., 'Economy and Education: Foundations of a General Theory,' in Comparative Education, Vol.7, No.1, August 1971, p.4
118. Ibid., p.8
119. Holmes, op.cit., p.221
120. Ibid., p.247
121. Ibid., p.222
122. Ibid., p.223
123. Ibid., p.240
124. The Newsom Report, as quoted by Lawton, op.cit., p.109
125. Circular 144 in 1947, as quoted by Dent, op.cit., p.111

126. Holmes, op.cit., p.246
127. Department of Education and Science, Circular 10/70, 30 June 1970.
128. Holly, D., Society, Schools and Humanity, London, MacGibbon & Kee, 1971, as referred to by Lawton, op.cit., p.41
129. Cole, op.cit., p.141
130. Holmes, op.cit., p.117
131. Parkinson, M., The Labour Party and the Organisation of Secondary Education 1918-1965, London, Routledge & Kegan Paul, 1970, as referred to by Lawton, D., Class, Culture and the Curriculum, London, Routledge & Kegan Paul, 1975, p.5
132. Benn, C. and Simon, B., Half Way There, McGraw-Hill, 1970, as referred to by Lawton, D., *ibid.*
133. Lawton, *ibid.*
134. Ford, J., Social Class and the Comprehensive School, London, Routledge & Kegan Paul, 1969, as referred to by Lawton, *ibid.*, p.4
135. Lawton, *ibid.*

CHAPTER 5  
CURRICULUM DEVELOPMENT IN SECONDARY  
SCHOOLS IN ENGLAND SINCE 1944

Contextual Variables

The last chapter was an analysis of the changes and the non-changes in Britain's social structure, and in the economic, political, and educational affairs. Despite the fact that the distinction between social classes has been reduced, social equality has not been achieved. Britain has ceased to be the centre of an empire, and has become instead a medium-sized European power, albeit one

"... with wide international connections and responsibilities. Thus, the education appropriate to ... imperial past cannot meet the requirements of modern Britain."

1

The country's economic system has been changed from a market economy to a mixed economy. Most foreign savings have moved from Britain to other industrial nations. So the country's economic wellbeing depends on its own efforts, and its standard of living is directly related to its ability to sell goods and services overseas. However, economic growth and productivity are lower than, for example, France, Germany, Japan and the USA. Blame has been laid at the door of defective industrial management.

"British firms have been relatively backward in employing qualified specialists; their project appraisal methods have often been primitive; modern management practices have been only slowly introduced; and research and development effort has frequently been misdirected."

2

Moreover, there is a wide gap between the world of education and the world of work. The Green Paper in 1977 stated that: "Boys and girls are not sufficiently aware of the importance of industry to our society, and they are not taught much about it."<sup>3</sup>

The position in Britain as a leading industrial nation has been endangered after the Second World War, "by failure to secure the fullest possible application of science to industry, and this failure is partly due

to deficiencies in education."<sup>4</sup> Those deficiencies have been partly due to too little attention being paid to the expansion of education on the grounds of manpower needs. It is, as Holmes points out, that "many of the basic issues in political and economic affairs have been complicated by an educational system which tended to maintain traditional social class values."<sup>5</sup> Post-war Britain required a system of schools which would help to solve economic and political problems by fostering new attitudes and new skills among its young people.

Since the war Britain has changed demographically as well. Internal migration has been a phenomenon, for example with the establishment of new towns and expanded towns. Immigration from abroad has meant that the country is now a multiracial and multicultural country.

Education policies have been changed substantially. Secondary education for all was introduced in 1945. Since then the school leaving age has been raised twice, in 1947 and in 1973. The school population is now at its peak; it will decline for a decade or more.<sup>6</sup> The reorganisation of the secondary schools in England and Wales to eliminate selection is largely accomplished. Opportunities to move on to further and higher education have greatly increased: the proportion of young people benefiting from post-school education has more than doubled since 1960.<sup>7</sup> The establishment of the Certificate of Secondary Education (CSE) system of examinations in the 1960s, in addition to the existing General Certificate of Education (GCE) system, brought nationally-recognised examinations within the reach of very many pupils who would have previously left school without any certificate of attainment, and it is estimated that in 1970 well over one half of the total number of 16 year olds in England and Wales sat at least one public examination.<sup>8</sup> Now four-fifths of all pupils are attempting such examinations.<sup>9</sup>

These are the environmental conditions which have emerged in British society since 1944. Bernstein anticipated in 1967 that, as society moves from the more closed to the more open position there will be modifications in what society accepts as valid knowledge, what is accepted as valid transmission of knowledge and what counts as a valid realisation of this knowledge on the part of the taught. Any changes in these areas are bound to have an effect on the curriculum and the organisation of curriculum in schools.<sup>10</sup>

In short, curriculum development in secondary school should be judged against the contextual variables which have been described, in detail, in Chapter 4, and against the curriculum theory, namely, essentialism. These are the concern of this chapter.

#### I. CURRICULUM AIMS

The socio-economic and technological changes must lead to, and may be accompanied by, changes in the norms, the values, the beliefs, and the customs of society. However, the people may change their values and attitudes slowly and reluctantly. Thus there is a time-lag between the technological changes and those that follow in the norms, values and social institutions. The attack of the socio-economic and political reformers has been directed to the public schools and grammar schools and the attitudes and values which are attached to them. Holmes points out that:

"... on the whole the theories of man, society, and knowledge which justified pre-war European system of education were Platonic. The institutions which had grown up over the years reflected these views. It was thought that a few persons of superior intellect should be given the kind of education which would prepare them for the traditional professions of law, the church, medicine, and certain levels of teaching."

The Hadow Report of 1926 defined the weaknesses of secondary school curriculum as: 1) the undue academic bias of the curriculum and its consequent lack of relevance to everyday life, 2) the inability of school leavers to use their knowledge gained in school in their work, and 3) a lack of initiative and resourcefulness particularly obvious in the girls who had just left school.<sup>12</sup> The report suggested five main principles for the proposed new secondary schools: 1) a stress on a practical bias, 2) use of occupation needs and standards as an incentive, including the use of an examination, 3) development of local interests, 4) necessity to plan as a significant and self-contained whole, and 5) development of permanent interests.

The Consultative Committee which had produced the Spens Report in 1938 felt that secondary school curriculum was too academic, the Committee pointed out that "the curriculum should be taught in terms of activity and experience rather than knowledge to be acquired and facts to be stored."<sup>13</sup> They felt that the curriculum was overcrowded and they deplored the exaggerated importance that had been given to individual subjects.

The Report stated that:

"The grammar school curriculum is still largely planned in the interests of pupils who intend to proceed to a university, although 85 per cent of the pupils do not remain at school beyond the age of 16."

14

The aim of this plan, as the Report stated, is:

"... to produce a generation of young men and women sensitive to beauty and to moral values and trained to concentrate their attention, to think consecutively and readily, to express ideas exactly and coherently and to exercise due caution in accepting evidence and drawing conclusions."

15

The report's principles gave first priority to the education of the

individual but then included his education as a democratic citizen and as a future worker. In reality, however, as a grammar school headmaster said, our methods of teaching are still far from realising those <sup>aims</sup> expressed in the Spens Report.<sup>16</sup>

The Norwood Report in 1943 justified the tripartite system of secondary schooling by a return to Platonic principles of the innate abilities of 'particular groups of pupils'. Those who are interested in learning for its own sake should go to the grammar schools; those who are interested in the applied sciences and art should go to technical schools; and finally, those who could deal more easily with materials than with ideas should attend modern schools.<sup>17</sup> The report ignored almost completely the socio-economic and political implications of the proposal.

So the aims of grammar school curriculum were still Platonic. Education was for its own sake, rather than education for personal problems, future occupations, leisure time and so on. However, curricula in all secondary schools are conforming to the essentialist school of thought in the sense that they are offering education which tends to the training of the mind, developing the abilities for remembering, reasoning and comprehending.

According to the 1944 Education Act, education was to be provided according to the age, aptitude and ability of each individual child of secondary school age, and as far as economically feasible, in accordance with the wishes of parents.<sup>18</sup> From the organisational point of view, this Act seemed a logical outcome of the development of previous years. But the Curriculum problems seemed no nearer to being solved. As far as the grammar school curriculum was concerned, the recommendations in the various Reports seemed to go unheeded.<sup>19</sup>

The Council for Curriculum Reform in 1945 had pointed out that it was desirable that there should be a further development of a form of society with a planned economy, which is consistent with the maintenance of democratic principles.<sup>20</sup> The content of the school curriculum and the teaching methods should be determined by their relevance to the fulfilment of human needs within such a society.

"... therefore, the criteria by which education should be judged are that it must promote both the fullest possible personal development and the most effective participation in a planned democratic society."

21

In 1959, the Crowther Committee asked itself what distinguished the sixth form curriculum, and arrived at the obvious answer that it was a very highly specialised curriculum, partly due to the demand for university places. The minimum entrance qualification to universities was two A-level subjects, but there was great pressure on sixth forms to do even better - to produce sixth forms with two or three A-level subjects at very high grades. Faced with this alarming degree of specialisation among the most academically able students, the Committee managed to rationalise the whole process:

"The argument is not whether specialisation is desirable or unavoidable; it is about when it should begin. In England it begins for many subjects earlier than any other country. From the age of 15, or 16 at least, the classical specialist in an English school will spend only a small part of his actual school time on anything but Latin, Greek and ancient history; the equivalent is true of the mathematician or scientist."

22

The Committee pointed out that:

"In this system of specialisation for young people while they are still at school English education is singular. Neither in Western Europe nor in North America is there anything of the sort.... On the Continent of Europe, there is no question of dropping altogether the study of languages or history or mathematics or science, while in some countries Latin as well is kept on the compulsory list for all pupils in the most highly selective schools."

23

Thus while the English grammar school differs from the American high school both in its methods and in its objectives, its difference from the Europeans is chiefly one of method.

However, the Committee argued in favour of specialisation. They suggested that concentration on a limited field of knowledge led naturally to 'study in depth'. But what was really happening to the majority of sixth form pupils in that time? The curriculum formula which prevailed could be summed up in this way:

"... first, force pupils to specialise at age 14 or before; secondly structure them into thinking of themselves as arts or science specialists ...; then in the sixth form patch up the damage by literacy or numeracy remedial education, in the form of a complementary study."

24

As a result of this very early specialisation "a youngster may discover too late that he made a wrong subject choice at 13 or 14 and finds that it is too late to change at 16 or 18."<sup>25</sup> The problem is still unsolved. So the Crowther Committee failed to get to the heart of the problem, they failed to make any real link between the social change and the curriculum, there was no discussion of a common curriculum.

In 1963 the Newsom Report took a further step; it described the curriculum and organisation of secondary education as reacting very slowly to the socio-economic and technological changes, and emphasised that extra-curricular activities should be provided and considered as an essential part of the curriculum content. Therefore, the Report recommended that the school day should be extended for the 14-16 year age group in the secondary modern schools, to accommodate such activities. The Committee argued that it was necessary to make schools more like work in terms of 'working hours'.<sup>26</sup>

The Committee emphasised the importance of science and mathematics. They thought that more pupils would be required to use these subjects when they left schools to enter employment.<sup>27</sup> They also emphasised that all boys and girls of all levels of ability should have the opportunity of learning a foreign language. The words 'realistic' and 'practical' were frequently used. Art, handicraft, needlework, physical education and music were dealt with at length. The idea that all children need to exercise their imagination more in drama, writing, and in other media was stressed. The idea that pupils should be prepared in the final years for their future work and leisure was stressed. They stated that,

"... the school programme in the final year ought to be deliberately out-going - an initiation into the adult world of work and leisure."

28

In order to achieve such aims, the Committee suggested that film and television should be included in the curriculum, and that teachers should be trained in their use.

In practice, however, what has happened in many schools since the Newsom Report has been some effort to set up a curriculum organisation for the fourth-year leavers, in preparation for the time when they will be fifth-year leavers. So many supposedly 'realistic' and 'practical' Newsom courses have been devised, which seem to bear little resemblance to genuine education. Extra-curricular activities have been enjoyed by only a few, and those most in need of such activities are the least likely to get them. Social education problems (sex education, marriage, etc.) was remedied on religious grounds. Real experience has degenerated into watered-down life-adjustment courses. Moreover, the Report lacked, as Lawton puts it, "the real theoretical understanding of curriculum problems and practical solutions."<sup>2</sup> Little progress has been made in schools on the common core curriculum, and

the common culture problem.

Most of the Reports such as Crowther and Newsom, and earlier Reports such as Hadow, frequently referred to the difficulties of young people growing up and learning how to live in complex, industrialised, urbanised society. They emphasised the responsibility of schools in helping youngsters to find their way about the modern world. They diagnosed the problem of the curriculum, sometimes in considerable detail, but they have failed to provide the right answer. The pupils' rejection of the content of their education is apparent. There are at least two kinds of reason for this. First is the psychological reason, for example, the absence of many kinds of interests and sources of motivation, the feeling that there is little relevance in what grammar schools are offering, especially for those who are going to leave school at age 16. The second reason is sociological rather than psychological, for example, some curriculum content can appear - and actually is - irrelevant to pupils not only because they do not see the point of it but because it has no point.<sup>30</sup>

In conclusion, an awareness of the social needs as well as individual needs has been strongly expressed. After the war, it was more necessary for England than ever before

"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."

31

These aims have been confirmed in the Green Paper of 1977, since it emphasises that education is

"to help children understand the world in which we live, and the interdependence of nations; ... to help children to appreciate how the nation earns and maintains its standard of living and properly to esteem the essential role of industry and commerce in this process; ... to provide a basis of mathematical, scientific and technical knowledge, enabling boys and girls to learn the essential skills needed in a fast-changing world of work."

32

The latter aim here implies that:

"It is not the task of schools to prepare pupils for specific jobs but experience has long shown that studies and activities that are practical and obviously relevant to working life can be valuable as a means of learning, including the learning of basic skills."

33

These thoughts have been reflected in much of the discussion on the curriculum. In reality, however, the principal points of concern appear to be:

"... the curriculum in many schools is not sufficiently matched to life in a modern industrial society."

34

"Nor are our young people [the Green Paper stated] sufficiently aware of the international interdependence of modern countries. Many of our most pressing problems can only be solved internationally, ... so our children need to be educated in international understanding as well."

35

So the changed values, attitudes and aims of education have not been accompanied with equal change in the secondary school curriculum. At the same time the Platonic view of change, added to the fact that schools in any case perform the task of passing on from one generation to the next the accumulated knowledge of the society in which they exist, meant that the academic secondary school in particular was slow to change. Moreover, since knowledge for its own sake, rather than knowledge for practical use, dominated the thinking of many public schools and grammar schools, an appeal could always be made to the sanctity of academic standards when changes threatened.<sup>36</sup>

To achieve the above mentioned aims, however, it is perhaps necessary to establish a common core curriculum which emphasises the individual needs, as well as the socio-economic and political needs of society.

Holmes points out:

"The curriculum may be one based on Herbert Spencer's views; that is, one which helps to prepare children to face the problems which arise in their personal life, those which are likely to arise in their future occupation, those which are concerned with the aesthetic aspects of life, and those which are concerned with their leisure-time activities."

37

### Specifications

Now some of the specific aims and objectives for each of the subjects offered at ordinary and advanced level for the purpose of analysis will be presented:

#### 1. The Academic Field

In English language (ordinary level), the syllabus is designed to enable the student: a) to write and speak with facility, clarity and accuracy; b) to understand what is read; c) to use a vocabulary appropriate to an Ordinary Level student's age, experience and needs; d) to construct and join sentences and paragraphs; and e) to avoid mistakes of punctuation, grammar, spelling and idiom.<sup>38</sup>

In English literature, the Joint Matriculation Board recognises that the aim of this course is: to present the subject as a discipline that is humane, historical, and communicative. The Board also recognises that: "a sixth-form course may develop the ability to write original works of literary merit."<sup>39</sup>

In Greek-with-classical studies or Latin-with-classical studies, the

syllabus in both of these courses is intended to meet the needs of candidates who wish to combine a study of the Greek or Latin language with an interest in the wider aspects of classical civilisation. The other foreign languages provided are French, German, Spanish, Italian, Russian and Welsh. It is generally agreed that "the ability to understand at least one foreign language, and to communicate in it at however modest a level, has an educational value."<sup>40</sup> Moreover, modern language learning should "provide much active enjoyment for the younger pupils, and intellectual enjoyment for the older ones."<sup>41</sup>

Britain's entry into the European Economic Community should give even greater importance to the cultural aims of teaching European languages and contribute something to their realisation. Finally, the knowledge of a modern language can greatly enhance the cultural value of foreign travel, opportunities for which are becoming more widespread every year.

In history (Ordinary Level), the aim of the syllabus is first to enable centres to provide Ordinary Level students who are not necessarily continuing their studies in this subject with a sound general basis of historical knowledge and understanding related to a specific period of history, and second, to enable centres to provide a suitable introduction to methods of further study.<sup>42</sup> In the Advanced Level, the aim of the syllabus is: a) to provide the candidates whose formal study of history will not necessarily go beyond Advanced Level with i) a sound knowledge and understanding of selected fields of history, ii) an introduction to problems of historical interpretation, iii) an introduction to particular approaches to the study of history according to the syllabus or alternative chosen; b) to provide an adequate preliminary course for those who hope to specialise in history at a higher level.<sup>43</sup>

The specific objectives of this course are: a) to provide a student with factual material, sufficient to enable him to make a profitable study in detail of certain topics in a chosen period; b) to enable him to understand the nature of historical evidence, and to draw conclusions from this evidence; c) to enable him to evaluate opinions and to recognise prejudice, and d) to enable him to select and organise relevant knowledge in order to analyse, and to build up a rational reconstruction of the past.<sup>44</sup>

The British economic and social history syllabus has recently been established. This syllabus has the specific purpose of enabling schools to devise courses which provide students with an understanding of the development of the British economy, and the main social consequences of this development in the period 1700-1951. Emphasis has been placed on the period 1850-1951, Britain's attainment of economic maturity and changing position in the world economy.<sup>45</sup>

In geography, Ordinary and Advanced Levels, emphasis has been put on knowledge, comprehension and application. As for knowledge, a detailed knowledge is expected of the major features of the distribution of land and water, of the relief and land forms, of climates and vegetation, of the major types of economy, and of population on a world scale. A more detailed knowledge is expected of these features in certain selected areas including especially the British Isles. As for comprehension and application, stress is laid on the ability to understand and interpret geographical information presented in writing in the form of statistics, maps, diagrams and photographs. The ability to synthesise geographical information and to use it to draw conclusions of geographical validity.<sup>46</sup>

Social studies in 1976 included: Government, Economics, and Commerce (Ordinary Level); Economics (Advanced and Special); British Government

and Politics (Advanced Level); Sociology (Advanced Level); Book-keeping and Accounting (Ordinary Level); and Principles of Accounts (Advanced Level).<sup>47</sup>

The aims of the syllabus of Government, Economics and Commerce (Ordinary Level) are:

"... to enable schools to provide courses which will help in the general education of candidates towards their future as citizens; to encourage them to study human behaviour within the scope, economics and commerce; to develop an understanding of a) the inter-relationships between government and the political system on the one hand and the individual citizen and the general public on the other, b) the basic economic problem of the allocation of scarce resources, c) the different branches of commerce; and thus to facilitate the ability to discuss current local and national problems."

48

This statement provides a general indication of the importance of knowledge. It asserts also the comprehension and application. It does, however, ignore the higher level of the mental process such as analysis and evaluation.

In the Economics for Advanced Level, the syllabus is intended to encourage courses which:

"a) Provide a basis of factual knowledge of economics, b) encourage the development in the pupil of i) a facility for self-expression, not only in writing but also in using additional aids such as statistics and diagrams where appropriate, ii) the habit of using works of reference as sources of data specific to economics, iii) the habit of reading critically to gain information about the changing economy in which we live, iv) an appreciation of the method of study used by the economist and the most effective ways in which economic data may be analysed, correlated, discussed and presented."

49

This statement is intended to provide a general indication of the abilities included in the whole mental process. It indicates the importance of knowledge and facts, the ability to understand and interpret these facts

and information, the ability to select and apply known laws and principles to problems, the ability to analyse and correlate elements so as to form a rational pattern or structure, the ability to evaluate the material and finally, the ability to appreciate the role of the main models in the analysis of economic problems.

In the syllabuses of British Government and politics, sociology, book-keeping and accounts, the Board offers similar statements which indicate the importance of knowledge, understanding, application, analysis, and evaluation.<sup>50</sup>

In mathematics, several courses are offered for the Ordinary, Advanced and Special Levels. The following statement is intended to provide a general indication of the knowledge and abilities which the examinations have been designed to test in conjunction with the subject matter included in the syllabuses. They are:

- "1) Knowledge of mathematical notation, terminology, conventions and units.
  - 2) The ability to understand information presented in verbal, graphical or tabular form, and to translate such information into mathematical form.
  - 3) The ability to recognise the mathematical methods which are suitable for the solution of the problem under consideration.
  - 4) The ability to apply mathematical methods and techniques.
  - 5) The ability to make logical deductions.
  - 6) The ability to select and apply appropriate techniques to problems in unfamiliar or novel situations.
  - 7) The ability to evaluate and interpret mathematical results."
- 51

In Physics 1976, syllabuses are offered for Ordinary Level (and Optional Practical) and for Advanced and Special Level. The objectives given for the advanced syllabus, for example, are intended to provide knowledge of scientific terminology and conventions, knowledge of general and specific methods, the techniques and equipment that have been used by

scientists in their investigations, knowledge of the main generalisations that have been made and of the theories that are widely held.

As for comprehension, the statement emphasises, for example,

"The ability to understand and interpret scientific information presented in verbal mathematical or graphical form and to translate such information from one form to another, the ability to explain familiar phenomena in terms of relevant models, laws and principles, the ability to make generalisations about scientific knowledge or about given data."

52

As for application, the statement asserts "the ability to select and apply known laws and principles to problems which are unfamiliar or are presented in a novel manner."<sup>53</sup>

As for analysis, analogy, and evaluation, the statement asserts

"the ability to check that hypotheses are consistent with given information, to recognise unstated assumptions and discriminate between hypotheses. The ability to assess observations of a phenomenon in order to make new hypotheses, suggest new questions and make predictions. The ability to formulate methods for testing hypotheses and to formulate problems in an appropriate form of scientific investigation. The ability to appreciate the role of the main concepts and models in scientific explanation."

54

In chemistry, two different syllabuses are offered; one for the Ordinary Level, and the other for the Advanced and Special Level. As for the first, the abilities required are: comprehension, application and evaluation, for example,

"the ability to explain familiar phenomena in terms of the relevant models, laws and principles. The ability to select and apply known laws and principles to given situations. The ability to think clearly about given data. The ability to recognise mistakes and misconceptions."

55

At Advanced Level, the syllabus is provided to meet the needs of students who wish to study chemistry in this wider context. The syllabus

is not intended as a vocational training course for students who intend to enter chemical industry direct from school nor is it intended to provide an introduction at the school level to specialist studies in tertiary education. However, the syllabus includes a section on the social and economic aspects of chemical technology and six case studies have been prepared to enable students to establish an appreciation that the applications of chemistry have wide economic and social implications and to understand the relation between chemical principles and industrial practice.<sup>56</sup>

The aims and objectives of this syllabus put an emphasis on knowledge, understanding, application, investigation, and evaluation. A practical work is incorporated in the syllabus to enable students "to use scientific equipment correctly, to make accurate observations,"<sup>57</sup> and to apply most of the abilities included in application element.

General Physical Sciences (1976) are courses established to provide a physical science syllabus for Ordinary Level, and another one for Advanced Level, Science (double subject) for Ordinary Level, general science for Ordinary Level, and technical science for Ordinary Level. As for the physical science for Ordinary Level, the syllabus may cut across the boundaries which might be considered to exist between physics and chemistry. The aim of the syllabus is to enable schools offering it to provide:

"a course in physical science in which distinctions are not drawn between physics and chemistry as separate fields, a course, which together with an Ordinary level course in biological science, will serve as a suitable basis for the development of sixth-form studies in physics, engineering science, chemistry, physical science or biology."  
58

At Advanced Level, the principal criteria have been to provide a syllabus which can be taught to students who have previously completed a

course equivalent at least to physical science at the Ordinary Level. In this syllabus one of the main considerations has been "to produce a single Advanced level subject which would be an acceptable background for existing University courses which at present require either Advanced level physics or chemistry or both."<sup>59</sup> The syllabus is therefore mainly a combination of topics in physics and chemistry. It offers many opportunities for students to relate their own practical work to the theoretical content of the course.

In Science (double subject) for Ordinary Level, the aim of the syllabus is to enable centres offering it to provide both

- "a) a terminal course in science at the GCE Ordinary level, and
  - b) a course which will serve as a suitable basis for the development of sixth-form studies in physics, engineering science, chemistry, physical science or biology."
- 60

In all these areas of science, the statement of aims is intended to provide a general indication of the abilities required which include:

- "a) knowledge
    - i) Knowledge of appropriate scientific terminology.
    - ii) Knowledge of the main facts that have been established about the subject matter of the syllabus.
    - iii) Knowledge of the generalisations that have been made and the principles that have been established.
  - b) comprehension, application and evaluation
    - i) The ability to understand and interpret information presented in verbal, numerical or graphical form and to translate such information from one to another.
    - ii) The ability to recognise and understand phenomena in terms of the relevant models, laws and principles.
    - iii) The ability to select and apply known laws and principles to given situations."
- 61

Biological courses have been offered for Ordinary, Optional, Advanced and Special Level. In the Advanced course, for example, the aim of the syllabus

"is to enable centres to provide courses ... which will develop in students an appreciation and understanding of fundamental biological principles based on a study of the interaction of organisms, the maintenance of the individual and species in flowering plant and mammal, and the biology of cells."

62

Geological courses have also been provided for Ordinary, Advanced and Special Level. The aims of the syllabus, for example, at Advanced Level are:

- "a) to develop in the pupil enjoyment of the subject as a leisure activity;
- b) provide a basis of factual knowledge of geology;
- c) develop an appreciation of the links which geology has with other scientific disciplines;
- d) the ability to think in terms of geological time;
- e) an understanding of the importance of geology to man with regard to the utilisation and conservation of natural resources;
- f) an understanding of the importance of geology to man in the interpretation of the history of the earth."

63

## 2. The Occupational or Practical Field

This field consists of technical subjects such as woodwork courses for Ordinary and Advanced Levels; metalwork courses for Ordinary and Advanced Levels; engineering workshop, theory and practice for Ordinary Level; geometrical and engineering drawing courses for Ordinary and Advanced Levels; surveying for Ordinary; navigation for Ordinary; seamanship, signals and rule of the road for Ordinary; and finally, textiles for Ordinary Level.

In the woodwork course at Ordinary Level, the aim of the syllabus is to develop in students a sound understanding of woodwork based on a study

of design and technique, and on practical experience of craft and design work. Knowledge, understanding, application and design have been emphasised. For example, knowledge and understanding of:

- "a) materials, tools, and equipment and an appreciation of their uses;
  - b) techniques and construction in general use;
  - c) the history of English furniture and an appreciation of furniture style;
  - d) the connections of drawing."
- 64

As for application and design at Advanced course, a statement of aims asserts the ability to:

- "a) organise and carry out a sequence of constructional operations;
  - b) make decisions about constructional techniques to suit particular purposes;
  - c) read and interpret technical drawings;
  - d) select and use woodworking tools;
  - e) provide solutions in relation to specific design problems which satisfy functional requirements."
- 65

In metal-work courses at Ordinary and Advanced Levels, the syllabuses are aimed to enable schools to provide courses which will develop in pupils a sound understanding of metal-work based on a study of design and techniques, and on practical experience of craft and design work. In the engineering workshop, the aims of the syllabuses are to develop courses which provide the pupil with craft knowledge and experience in the field of engineering workshop theory and practice. In geometrical and engineering drawing at both Ordinary and Advanced Levels, knowledge, comprehension, application, technique, analysis and synthesis have been emphasised.

In surveying the student is expected to know and understand:

- "the care and correct use of surveying instruments;
- the methods of measurement; the use of scales; the common causes of error in measurements and observations; the ability to measure distances, observe angles and determine height differences ...

the ability to translate information from one form to another; the application of the knowledge and techniques ... to prepare plans, maps, and sections to appropriate scales."

66

In navigation, the student is expected to know and understand the instruments, charts and coastal navigation, the sailings and natural astronomy. In textiles, a student is expected to know and understand simple knowledge of textile fibres, yarns and yarn production, fabrics and fabric production, finishing and finished products, and textile industry.

### 3. The Cultural Field and Students' Interests

Domestic science is the area of knowledge which usually includes food, clothing (at Ordinary Level), and the home, the family, society, needlework and dressmaking (at Advanced Level). It overlaps with natural science. So all students will be expected to show that they have knowledge of elementary science necessary for the proper understanding of the processes involved.

The aims of the syllabus of the home, the family and society, for example, are to enable schools offering it to provide sixth-form courses in the subject which will:

- "a) develop in pupils the abilities needed to manage a home and to feed a family efficiently at a period when society is becoming increasingly complex;
- b) increase in pupils appreciation of the aesthetic side of making a home within its environment;
- c) encourage in pupils a consideration of personal relationships within the family and of the relation of the family to contemporary society;
- d) encourage the application of accurate observation, individual powers of thought and scientific investigation."

67

Different courses of art have been provided for Ordinary, Advanced and Special Levels. Students should know and understand something about the history and appreciation of English architecture from Norman times to

the present day, or the history and appreciation of painting, or the arts of daily life. "They should show evidence of the ability to understand and use structural principles and the qualities of shape, line, tone, texture, colour and space."<sup>68</sup> They should show "an appreciation of art and design as affected by human needs and aspirations and by materials and techniques."<sup>69</sup>

Different courses in music have been offered at Ordinary and Advanced Levels. The syllabuses are designed "to enable schools to provide courses in which the understanding and enjoyment of music are developed through an appreciation of the historical development of musical forms and techniques."<sup>70</sup> Emphasis has been placed on theoretical and practical studies. However, greater weight is attached to the academic and theoretical side than the practical one. At the Advanced course a primary objective is to provide a syllabus which will enable teachers to plan stimulating and rewarding courses which will give scope for individual interests and aptitudes.

"But whatever the pupil's eventual destination and career it seems desirable that this course should be a balanced one and that it should be concerned with three main areas of musical activity, namely, written musical expression, performance, and listening and critical appreciation."

71

These are most of the statements of aims and objectives which have been developed in the 1970s. From the point of view of essentialist curriculum theory, it is important that education should be concerned with helping the student to deal with problems and situations that he is likely to meet, and to display behaviour which, without education, he would not exhibit. Thus school is a purposive institution, and curriculum is an intentional activity.

Essentially learning takes place through the learning experiences, and these refer to the interaction between the learner and the external

conditions in his environment. Therefore, not only should aims and objectives be relevant to present social needs (as a criterion), but also to what needs are likely to be in the future, taking into consideration the possibilities of continuous change. Despite the emphasis on the individual student, his rights, attitudes, and abilities, little has been placed on the social needs. Moreover, no indication has been made to suggest any kind of contact between a student and his environment. Nevertheless, the Green Paper of 1977 indicated that the best approach would seem to be for the school to provide the general knowledge and skills that are required to live and earn a living and the knowledge and skills that are fundamental to different vocational ends but not 'for specific jobs'.

Headmasters, however, work within a strongly traditional framework, the majority of their aims have been accepted on purely traditional grounds or as the result of external pressures, such as examination syllabuses and university requirements. Unfortunately, as Wiseman pointed out in 1970,

"the modifications that are made are sometimes based on but a partial knowledge of the needs of pupils and of society and too limited a concept of the role of the school in society locally and at large."  
72

If they are ever, seriously and critically, to evaluate their educational aims, it is necessary that they should be set out in a much more specific way than has been done. Aims must be broken down in terms of operational objectives.

"It is essential to spell out the beliefs, values, attitudes, qualities of mind, knowledge, skill and so on [Wiseman continues] that we want our children to acquire so that teachers may be helped to judge the results of their teaching."  
73

## II. CURRICULUM CONTENT

The conclusion that has been reached now is that educational aims stated so far may help the teachers as a guideline in planning their programmes, selecting their content topics, and in meeting the university requirements. Now before proceeding to the development of curriculum content, it would be wise to shed light on the idea or theory which lay behind the content of the curriculum with special reference to grammar schools. Is it the essentialistic view or the Platonic which has dominated educational practice? There is no easy answer to such a question.

For Plato, there was no doubt that there was a very clear hierarchy of knowledge with philosophy at its peak. The fundamental principle of that hierarchy was that the greater the level of abstraction the more status a particular kind of knowledge had. Plato also asserted that, in addition to the superiority of intellectual knowledge over the experience of the physical world, gradations must be recognised within the realms of intellectual knowledge according to degrees of abstraction. The history of education in pre-war Britain and in Western Europe as a whole, revealed the influence of that kind of thinking on the curriculum. It also revealed a concern to distinguish those areas of knowledge which seemed to have social and economic goals from those that have seemed to have some intrinsic right to inclusion in the curriculum.

This was the point of attraction expressed in the past for the idea of liberal education, and of the later concern with the education of the cultured gentleman. From here also came the conflict and the clear distinction between liberal and vocational forms of knowledge.<sup>74</sup> On the whole, such dispute as there has been over the inclusion of vocational subjects in the

curriculum has centred on the issue of whether this is an appropriate concern of schools at all or whether it should be their concern only in relation to the needs of those pupils who cannot cope with the intellectual demands of those subjects that have been felt to be intrinsically valuable.<sup>75</sup> In other words, "this is a view which leads to the generation of two or three levels of culture, two or three kinds of curriculum, and two or three classes of people within society."<sup>76</sup>

Essentialism stems from Aristotle. It would suggest that the content of a liberal general education consists of a few carefully selected subjects. Debates have been going on in England to decide which are the 'essential' subjects. John Locke who had a distinct Aristotelian influence, asserted that education should offer students opportunities to develop their understanding, reasoning, and rationality. For achieving this he stressed the study of mathematics and religion. He also maintained that intellectual and self-control should be fostered by experience and practice as much as possible in a variety of fields. During the nineteenth century the natural sciences were placed in opposition to classical languages. In the twentieth century the cultural area of knowledge is trying to gain a central place with the natural sciences. The vocational and technical area of knowledge and the link between secondary school curriculum and social needs have been lacking.

It could be concluded that, on the one hand, secondary school curriculum is Platonic in a sense that the more able students are directed to the study of pure academic subjects. On the other hand, it is essentialist in a sense that it maintains the academic achievement and the development of mind through few selected subjects to be studied in the last years of secondary education. The intention here, however, is to shed light on the subjects studied and

their development in accordance with essentialist views.

### 1. The Academic Field

In the academic secondary schools the classical languages, Latin and Greek, have been taught for a long time. The natural sciences have been accommodated in the secondary school curriculum gradually since the nineteenth century. In the 1940s, in addition to Latin, English literature, history, geography, and modern languages (usually French), had also been taught. But it should be remembered, that even when science is taught in grammar schools, "it is usually a branch of pure science which is of only limited vocational value."<sup>77</sup> Mathematics has been taught with its divisions into arithmetic, algebra, geometry and trigonometry. A not very far-reaching acquaintance with some of the arts and small amounts of handicraft and physical training completed the picture in 1945, see Table 1.

But what subjects were taught, and to which students in the grammar schools? In 1940s the students in grammar schools after their first year were graded very carefully into A, B and C, and at the end of each school year they were re-graded. In their first year, all pupils took the same subjects, including French and general science. In the second year, all pupils studied chemistry, physics and biology; the A and B boys studied Latin, and the C boys studied geography instead. It is worth noting that, at the time, the majority of the students gave up the study of geography,<sup>78</sup> because Latin was one of the most important requirements for entering university. In the third year all boys took three sciences, and non-Latin boys (by this time including some members of the B form) took geography and either commercial courses or handicraft. In the fourth and fifth years, A and B groups had to choose between physics and biology, and a set of

TABLE 1: ALLOCATION OF PERIODS IN 1945

For boys who take Latin

	English History & Scripture	Latin	French	Maths	Sciences	Music	Art	Games and P.T.	Handi- crafts	Geo- graphy	Homework per week
1st year	10	-	5	7	3	1	2	3	2	2	16 with 30 min each
2nd year	7	5	4	5	8	-	2	2	2	-	16 " 30 " "
3rd year	7	6	5	5	8	-	2	2	-	-	16 " 40 " "
4th year	8	6	5	6	6	-	2	2	-	-	16 " 40 " "
5th year	9	6	5	6	7	-	-	2	-	-	16 " 40 " "

For boys who don't take Latin

	English History & Scripture	Geo- graphy	French	Maths	Sciences	Music	Games & P.T.	Art	Handi- crafts	Commercial Subjects	Homework per week
1st year	10	2	5	7	3	1	3	2	2	-	16 with 30 min each
2nd year	7	2	4	5	8	-	2	2	2	2	16 " 40 " "
3rd year	7	2	5	5	8	-	2	2	4(-)	-(4)	16 " 40 " "
4th year	7	2	5	5	5	-	2	(3)*2	7(-)	-(6)	16 " 40 " "
5th year	(10)7	4	5	6	4	-	2	-(2)	7(-)	-(2)	16 " 40 " "

\* The figures in brackets denote alternatives.

Source: Davies, H., The Boys' Grammar School Today and Tomorrow, London, Methuen & Co.Ltd., 1945, p.11

alternatives made it possible for C group to select a range of subjects which they preferred. It should be remembered that a number of A group could pass directly from the third year to the School Certificate form. This was the possible time-table and the allocation of periods to each subject in a grammar school in the mid-1940s. It should also be borne in mind that differences between schools and localities have always been considered.

Streaming was more definite in the second year. The C group contained those pupils who were considered to be the least able of the year's group. Under the impetus of the war, considerable stress was placed on the teaching of mathematics and sciences. Latin was often introduced in the second year. In general, by the 1940s, the high status enjoyed by classics was shared by other subjects such as mathematics, science, history and English.<sup>79</sup> These subjects are considered as valid knowledge. But probably the most important weaknesses of the time-table were, and still are, the occupational and cultural areas. Physical training was given the minimum amount of time. The leisure time was seriously reduced by the amount of homework which pupils had to do. Music and art were regarded as of little importance, and thus "occupied a much lower position."<sup>80</sup>

The whole time-table was calculated to produce the best possible results in the School Certificate examination. A headmaster of a grammar school pointed out in 1945 that:

"Subjects of aesthetic and cultural value, which are permissible at the beginning of the school course, are gradually dropped as the fateful year approaches. Throughout is to be found the strictest subordination of the activities of the boys to an external examination, which thus becomes the end to which all must be sacrificed."

Hence, "No parent can complain that his son is compelled to waste his time in unprofitable studies of an aesthetic nature."<sup>82</sup>

On the whole the curriculum is concerned with academic rather than everyday knowledge, and with a liberal general education rather than a practical and vocational education. After the war, however, the traditional concentration on a small number of subjects in the pre-university years (at O and A Levels of the GCE) were questioned. Post-war debates have been concentrated to decide which are 'essential' subjects. Sociologists and some educationists argue that there is a lag between the types of skill and knowledge required by the socio-economic and technological changes and the subjects taught in the educational institutions.<sup>83</sup> They demand, therefore, on the same lines as H. Spencer, that the content of education should be selected in the light of problems young people are likely to face in their future life. However, as Holmes points out in 1974,

"... the traditional concentration on a small number of freely chosen subjects in the pre-university years of the secondary school has been questioned and proposals to increase the number of subjects studied by senior grammar school pupils have been made. Until very recently they fell on stony ground."

84

A further look at possible timetables for grammar schools in the late 1950s may indicate some changes which have taken place in these schools. Comparison will be made between the former timetable in 1945 and the coming one which held in 1958, see Table 2.

This timetable attempts more than ever before to meet the problems of pupils who do not intend to go on to higher education.

TABLE 2: ABSTRACTS FROM POSSIBLE GRAMMAR SCHOOL TIMETABLES  
IN 1958 (4 form entry mixed)

First Year

1A	(29)	E <sub>5</sub>	Fr <sub>5</sub>	G <sub>3</sub>	H <sub>3</sub>	G.Sc. <sub>3</sub>	Ma <sub>2</sub>	RI <sub>2</sub>	A <sub>2</sub>	PE.G	PE.G <sub>3</sub>		
1B	(28)	E <sub>5</sub>	Fr <sub>5</sub>	G <sub>3</sub>	H <sub>3</sub>	G.Sc. <sub>3</sub>	MU <sub>2</sub>	RI <sub>2</sub>	A <sub>2</sub>	Craft	Craft <sub>2</sub>		
1C	(28)	E <sub>5</sub>	Fr <sub>5</sub>	G <sub>3</sub>	H <sub>3</sub>	G.Sc. <sub>3</sub>	MU <sub>2</sub>	RI <sub>2</sub>	A <sub>2</sub>	PE.G.	PE.G <sub>3</sub>		M M M M <sub>5</sub>
1T	(27)	E <sub>5</sub>	Fr <sub>5</sub>	G <sub>3</sub>	H <sub>3</sub>	G.Sc. <sub>3</sub>	MU <sub>2</sub>	RI <sub>2</sub>	A <sub>2</sub>	Craft	Craft <sub>2</sub>		

Fourth Year

4 exp	(22)	E <sub>5</sub>	Fr <sub>5</sub>	G <sub>3</sub>	H <sub>3</sub>	RI <sub>1</sub>	PE.G <sub>2</sub>	Ph	Ch	Bi	G.Sc	L	J <sub>11</sub>	M <sub>5</sub>
4A	(29)	E <sub>5</sub>	Fr <sub>5</sub>	G	H <sub>3</sub>	RI <sub>1</sub>	A	MU <sub>2</sub>	PE.G.	PE.G.	PE.G <sub>2</sub>			
									M	M	M <sub>5</sub>			
4B	(29)	E <sub>5</sub>	Fr <sub>5</sub>	G	H <sub>3</sub>	RI <sub>1</sub>	A	MU <sub>2</sub>	Ph.	D.Sc	L	4		
4C	(29)	E <sub>5</sub>	Fr <sub>5</sub>	G	H <sub>3</sub>	RI <sub>1</sub>	A	MU <sub>2</sub>	Ch	MWK	G.Sc <sub>4</sub>			
									Bi	WK	H <sub>4</sub>			

subjects not taken by form teacher

Source: Walton, J. (ed.), The Secondary School Timetable, World Lock Educational, 1972, p.35

Therefore, the lowest ability, or those with the lowest educational aspirations, tend to have a much modified timetable as they go through school. The fourth year was given greater variety of (advised) choice and is beginning to show similarity to present-day fourth year.<sup>85</sup> In the first year, a smaller percentage of subjects taught by form teacher than

ever before. In the fourth year the only subject taught by the form teacher is religion. It is worth noting also, that from the appearance of the express stream, more able academic pupils are going to take GCE in four years rather than five.

In general, as Walton points out:

"Probably the most important point to emphasise here is that the matrix of the 1958 grammar school ... tended to be the pattern for years to come. A growing dissatisfaction with general streaming was leading to setting, probably first in mathematics, and then in other subjects, setting was seen to be a useful way of permitting a group of children to select alternatives at any one point of time. In some senses this was a response to an attempt to get more things into the timetable.... The major aim was to set subjects at the same time to permit the more able to be grouped together in the most appropriate way. The more able were the important customers to be served."

86

In 1961, 360 headmasters of schools with sixth formers signed an A.B.C. agreement to extend the content of the curriculum, and pledged themselves to allocate one-third of the time in the sixth form to non-specialist work (not including physical education and private study). In 1962, the General Study Association tended to do something similar.<sup>87</sup>

It seems fair to say that if there is a real desire to help young people to find their way in a modern society, it would seem clear that schools should help them to understand their society, the best thing to do is to teach them about it in a more direct fashion. There is a body of knowledge which is relevant to intellectual understanding of society as social science and especially sociology, economics and politics. Much of this area is not available in the content. So a part of the available body of knowledge is irrelevant and a part of the relevant body of knowledge is not available in the content. The curriculum content, therefore, is not valid, since it did not promote the outcomes that were thought desirable in

the previous reports, and it is not comprehensive, since not all the aims and goals expressed in the previous section have corresponding experiences. Nor is it suitable either for pupils especially those who are going to leave school at the age of 16, or of the changing needs of society.

However, the Schools Council and Nuffield Foundation have introduced some projects in an attempt to cope with problems of change. For example, a number of the Nuffield mathematics and science projects are explicitly concerned with improving the real understanding of mathematics and science by pupils in schools. To the same end the Schools Council has introduced the project of 'Mathematics for the Majority'.

"It is untrue to say that the main motive behind this would be vocational; probably the intention is not only to produce more skilled workers but also to enable more pupils to have an understanding of mathematics and science because they live in a mathematical, scientific world, and without these kinds of understandings they are incomplete persons."  
88

The common feature of these projects is the concentration on comprehension, application, concepts and principles, rather than the acquisition of skills and information. This means that:

"... not only will pupils have a greater understanding of mathematics and science (if these projects are successful) but also it so happens that this will fit in with the vocational requirements of industry and commerce."  
89

The 'Project Technology', which was introduced by Schools Council, is another example. It is designed not only to produce more technologists, but also to encourage schools to incorporate aspects of technology into various parts of the existing curriculum in such a way that boys and girls will begin to understand technology and also the social implications of technology.  
90

There are some other projects, introduced by the Schools Council and Nuffield, dealing indirectly with education for leisure. These projects are particularly concerned with the central issue of the common culture. The Nuffield and Schools Council Humanities Curriculum Project, for example, sets out to develop the idea that:

"The main issues are not so much what ground to cover in the sense of what subjects to teach, but what information, ideas, experiences to grapple with, through what media, by what means. The problem is to give every man some access to a complex cultural inheritance, some hold on his personal life and on his relationships with the various communities to which he belongs, some extension of his understanding of, and sensitivity towards, other human beings."

91

The Schools Council also introduced social education and social studies projects. But much more work is still needed in this greatly neglected area of the curriculum content.

Despite the importance of these projects and studies no attempt has been made systematically by the Schools Council to analyse the existing curriculum or to attempt to draft a revised curriculum from first principles. Piecemeal reform has been the only plan. Even at the level of piecemeal reform, the dissatisfaction is considerable. For example, the problem of over-specialised, elitist sixth form still exists. There is an

"increasing competition at 18+ for university places whilst neglecting the majority of pupils who do not go on to university, and completely ignoring the majority for whom there is no education at all after 16."

92

The School Council has partly failed to develop a theoretical perspective with which to approach the problem of curriculum planning in contrast to curriculum development. They did not provide any kind of basis for a common curriculum.

Taking into consideration that grammar schools have always been intended to prepare the more academically able students for the leading positions in society through the most classical and academic knowledge, this is the Platonic view. But, on the other hand, if we take into consideration that this is being done through few carefully selected subjects in the last few years of secondary education, this might be related to the essentialist view of the curriculum.

## 2. The Occupational Field

Certainly there is evidence that England has recently devoted fewer resources to the development of human capital than other major industrial countries - and that education in particular, has been less oriented towards business and technology. So it is principally human factors which account for England's relatively poor record. In 1968,<sup>93</sup> an interesting study of Britain's economic prospects was carried out by a team of American experts. They looked at some factors which might affect the rate of growth. Their conclusion was that the low rate of growth could partly be explained in terms of objectively quantifiable factors. In other words, given similar inputs of land, labour and capital, there is evidence that the British are likely to use them less effectively than their rivals. Why should this be so? There are several possibilities. Outstanding among them is that the educational system has failed to respond adequately to the changing economic needs.

The crucial point is that the influence of the economy upon education is mainly mediated, as Roberts points out, through other social and political institutions.<sup>94</sup> These mediating processes not only obstructed but also distorted the demands of the economy in Britain. On the one hand there is

conflict between the two major political parties on the education issue (grammar or comprehensive), and this has affected the curriculum. On the other hand, the secondary school curriculum, especially that of the grammar school, still retains many of the characteristics of an elite; it accords low prestige to 'the practical', 'the useful' and anything connected with low-status vocations.<sup>95</sup>

The classical arts, or alternatively the pure sciences and mathematics, have always possessed a prestige which a technological education has been unable to rival. Teachers "generally rejected the achievement of vocational success as a major objective of education."<sup>96</sup> Thus, the teaching of technological subjects has been relegated to the fringes of the educational content.

Despite the Newsom Report and its emphasis on the importance of practical subjects, and the Schools Council Project Technology, and its emphasis on the understanding of technology and its social implications, the fourth and fifth years of a grammar school were not really affected by these efforts.<sup>97</sup> What is really happening is this: woodwork and/or metalwork for boys, and housecraft for girls is provided. One or more of engineering, technical drawing, architecture, economic and commercial subjects (usually for girls) are provided for the older pupils. Few schools provide an agricultural or horticultural course.<sup>98</sup> It is worth noting that most teachers generally do not consider these subjects as an 'essential' part of curriculum content.

### 3. Students' Interests

However, courses such as book-keeping and accounting, art, craft (design

and practice), music, woodwork, metalwork, physical education, domestic science (home, family, and society), dressmaking, etc. are provided as electives at the Ordinary and/or Advanced Levels. In grammar schools, art, music, woodwork and/or metalwork for boys, and housecraft for girls are provided. Physical education is given in all schools, and is supplemented by organised outdoor games, athletic sports, and as a rule swimming. An important feature of secondary schools is a wide range of voluntary clubs and societies, mostly organised and run by pupils, pursuing their activities wholly or mainly outside school hours.<sup>99</sup> Most schools have musical and dramatic societies, many have literary, debating, and scientific societies. Apart from the intrinsic value of these activities, they provide training grounds for the learning of responsibility. Teachers of many of these courses and activities have been increased, nevertheless shortage among adequately trained teachers still exists.

### III. TEACHING METHOD AND ORGANISATION

#### 1. Teaching Methods

The curriculum of the grammar school rests on traditional concepts and needs. It is mainly organised to meet the needs of a small number of pupils many of whom intend to continue their education at a university. Towards this end, the traditional methods of instruction have been directed. Actual teaching methods have also been affected by the examinations. In the majority of grammar schools, traditional subjects are taught largely in traditional ways, and the pupils continue to be prepared for the same examinations.

English literature and history, as Davies pointed out, degenerate into

compiled books containing an overwhelming mass of facts, many of which are useless and uninteresting for pupils. Latin often becomes a matter of memorising selected passages from a translation of the set books, and mathematics a series of subjects unrelated either to each other or to the needs and interests of the pupils. Individual efforts to discover, co-operation work, experiments in teaching are pushed aside.<sup>100</sup> Acquisition of knowledge for the purpose of examination becomes the aim of both teacher and pupil. Knowledge itself is divided into separate subjects. The result is a failure to hold the interest of the pupils and to develop their individual potentialities. Despite the increasing number of pupils in the sixth forms, most pupils, when they leave school at the age of 16, have little desire to continue their education and have acquired few general interests which will furnish them with a rich background to their lives. They are not conscious of having received a training for their life as adults, based upon their individual needs and abilities.

Some school activities only have value if the pupil continues his studies at the university level. The needs of the small minority who will proceed to a university very often control the education given to the entire school, although the great majority of the pupils will certainly leave at 16. Certain facts from a given period of history, for example, are taught not because they are interesting or valuable to the pupils, but because a syllabus has been drawn up by someone in authority. In science and mathematics the emphasis is often on the abstract, the academic, and the general, and much time is spent in acquiring skills in mathematics, or in learning a vast quantity of information which is of use only to the specialists.

Little attempt is made to relate the subject-matter to the interests

and everyday life of the pupils. Far too little effort is made to relate the lessons of science and mathematics, for example, to the problems of society, to the industrial or agricultural needs. The grammar schools have increasingly been dominated by specialists each interested in the defence of his own subject. Stenhouse in 1975 stated that:

"The power of the British school to define reality and knowledge is increased by the fact that in Britain the teacher is taken to be wise in deciding what his pupils shall learn and not simply knowledgeable in teaching them what they have decided to learn or what society has decided they should learn. Traditionally comparatively little choice of curriculum has lain with the pupil - as compared with the United States for example. And teachers have been rather free of policy constraints on the curriculum ... as compared say with Sweden, where most people would regard it as improper that curriculum decisions should lie with teachers rather than in the democratic political process.... The British system is well equipped to resist policies of indoctrination being imposed upon it, and this also ensures that it is in a good position to resist the reality at its doors."

101

However, one of the major criticisms that can be levelled at the existing teaching method is that valuable qualities are aimed at but are all too rarely achieved. So the methods of teaching are still far from realising those aims expressed, for example, by the Spens Report in 1938:

"... to produce a generation of young people able to think consecutively and ready to express ideas exactly and coherently and to exercise due caution in accepting evidence and drawing conclusions."

102

Or those expressed by the Newsom Report in 1963 concerning the adult world of work and leisure, or those expressed by pupils and parents in the Schools Council Enquiry No.1 in 1968, that:

"Both 15 year old leavers and their parents very widely saw the provision of knowledge and skills which would enable young people to obtain the best jobs and careers of which they are capable as one of the main functions

that a school should undertake. Teachers, however, very generally rejected the achievement of vocational success as a major objective of education."

103

Or those expressed by the Secretary of State in the Green Paper in 1977, that schools should provide pupils with "the essential skills needed in a fast-changing world of work."<sup>104</sup> It is fair to say that many of the aims and objectives mentioned above may be considered as aspirations with inadequate attention being paid to the institutional means of achieving them.

So while pupils, parents, economists, sociologists, and the State have all considered that the achievement of skills needed in a 'changing world of work' as an essential function of the school, teachers generally rejected that as an essential objective of education. The crucial point here, in respect of the values of the school, is the gap between pupils and parents and teachers. Certainly schools

"go along with parents and pupils in valuing highly the achievement of such success. But teachers have traditionally known little of the early leavers' world. Probably only a minority of teachers can evaluate the pros and cons of various apprenticeships, or understand the rewards and the stresses of long-distance transport driving, horticultural work or motor car factory work... All this is easily understandable and many teachers are deeply concerned about the situation."

105

So to overcome the problem of neglecting vocational aims and goals, it is perhaps apparent that this cannot be dealt with by any curriculum project, but needs far greater awareness of its nature on the part of teachers' education, and in-service training. It is one of those problems which can only be solved by changes in teachers' attitudes.<sup>106</sup>

It is obvious that many teachers can and do obstruct attempts to introduce changes into the curriculum. Teachers are often accused of

conservatism, of too great an attachment to tradition. Such an attitude is understandable when one realises that their standing often depends on the maintenance of those subjects and experiences in which they have a recognised expertise. This emphasises the need to improve in-service opportunities to enable the teachers to become rather less dependent on the skills and experiences they acquired in their initial courses.

## 2. Organisation

### a) Streaming

In England and Wales, two characteristic features of schooling have generally been held to have widened the disparity in the relative treatment of pupils from different social backgrounds.<sup>107</sup> The first of these was the policy of selective secondary education. This policy was discussed in the previous chapter. The second feature is the policy of streaming. An awareness of the new developments in the field of intelligence testing in the 1930s,<sup>108</sup> the reorganised schools now had the material facilities to break their groups of pupils into what were regarded as more manageable homogeneous units (within a particular range of measured ability). Since that time streaming had begun. In practice, however, as Kelsall and others point out,

"... it is known that allocation to a stream is influenced by social factors as well; and it has been clearly shown that of two children of approximately the same measured ability who find themselves in different streams, the one allocated to the higher stream tends to show progress in subsequent development and the other to show deterioration."

109

In grammar and other schools, for example, students were divided according to their ability, in three divisions: A, B, and C. The purpose

of this was to allow students to progress at their own speed, and in particular it was designed to rush the abler student into the sixth form at the earliest possible moment. The disadvantages of such a method have become apparent, for example, if we look at it from the point of view of the 'C' stream. We would find, as Davies pointed out, that:

"Boys who go into 'C' form in their second year in the school soon realise the implications of their status. They are regarded, and often come to regard themselves, as stupid and lazy; good work is not expected from them, and soon they lose the capacity to do it ... As these boys pass up the school, from one 'C' form to another, many of them develop loutish characteristics and degenerate enemies of society."  
110

This difficulty was increased by the fact that the 'C' pupils were taught very much the same subjects, in very much the same way as the 'A' pupils. Latin was dropped, but the 'C' pupils were compelled to struggle with French, no matter how little linguistic ability they may possess. Handicraft, practical subjects, commercial subjects, music, art, as well as physical training would help to satisfy the needs of the non-academically able pupils. In other subjects like, for example, mathematics and science, the 'C' pupils were often taught almost exactly the same subject-matter as their abler colleagues. If the school must be organised on the basis of ability, with all the disadvantages to the less able pupils, it would imply that school should provide, at least, a wide range of activities which would interest all pupils. When this is neglected, the whole process looks very much like a deliberate sacrifice of the needs of the less intellectual pupils to the interests of potential university and scholarship candidates. Consequently, a significant proportion of this group fail to succeed sufficiently in their secondary education to fit themselves for higher education, and that those who fail in this way are heavily concentrated at the

lower level of the social scale.<sup>111</sup>

A growing dissatisfaction with streaming was leading to setting first in mathematics, and then in other subjects. "Setting was seen to be useful way of permitting a group of pupils to select alternatives at any one point of time."<sup>112</sup> This was perhaps considered as a response to an attempt to get more activities into the timetable.

"In this case probably blocking is a more accurate description of what was happening. Setting normally implies differentiation of groups of children by ability whereas blocking implies more pupil choice ... little blocking of this type was taking place ... The major aim was to set subjects at the same time to permit the more able to be grouped together in the most appropriate way."

113

Setting and blocking reflected the expansions in the range of curriculum subjects. It led first in grammar school and then in the teacher training colleges, to a narrow specialist teaching, and to the narrow specialisation in the fourth and fifth forms. In recent years some schools introduced mixed ability forms of grouping.<sup>114</sup> This kind of innovation involves considerable changes of methods and approaches, so that its success depends on the willingness of teachers to adapt their methods and approaches to the requirements of the changing needs. It is clear, then, if the role of the teacher is as central as this to successful curriculum development, no changes or innovations derived from outside will be successful unless there is a change in the teachers' attitudes.

#### b) Integration

Many pupils found the curriculum content a very disjointed and piecemeal affair, and lacked sequence mainly because of the traditional compartmentation of the subject-matter. Most teachers attempted to look

at the question of curriculum reform from the point of view of subjects, and ask which subjects ought to be added to or omitted from the curriculum content. From the early years of the grammar school right up to recent years, subjects had been treated separately, and separation between history, geography and social studies was quite strong. The division between the natural sciences into their existing watertight compartments, and even between English and literature was quite well established. The decrease of the form teacher and the increase of the specialised teachers have also maintained the boundaries between the subjects.

Nevertheless, this has been met with widespread opposition, and there were many advocates of a general science course containing a considerable proportion of biology (including the facts of sex). Similarly, the Spens Report questions the wisdom of separating mathematics into different branches "as distorting the characteristic architecture of mathematics."<sup>115</sup> The Newsom Report in 1963 advocated group courses and options between the subjects, and the balance between different areas of knowledge. This, probably, is the reason why the report did not give separate chapters to each subject but grouped them together in three broad fields of knowledge.

"It is probable on the basis of the knowledge we have gained from our survey that his [the head's] timetable analysis will show for fourth year pupils the equivalent each week of two days for the humanities, one day for maths and science and two for the 'practical subjects' in the extended sense we have given this term ... A school, however, which drastically curtails the time spent in one of these fields is not providing a suitable secondary education."

116

However, the fourth and fifth years of grammar schools were not going to look much different after this report. Practically all major reports, such as Hadow, Spens, Crowther and Newsom, have made their protests against

the organisation of the content, but these protests had little effect, especially on grammar schools. Of course different subjects received different weightings (reflected at least in the amount of time given to each of them), but the insulation between subjects was still very strong. Any attempt to weaken the subject boundaries

"... can be regarded as attempts to break or weaken existing monopolies. Knowledge ... is private property with its own power structure and market situation. This affects the whole ambience surrounding the development and marketing of new knowledge ... pupils are early socialised into this concept of knowledge as private property. They are encouraged to work as isolated individuals with their arms around their work ... It can be most clearly observed in examination halls."  
117

This phenomenon could be seen until recently in any grammar school. Thus the approach to the nature of knowledge and its organisation was associated with Bernstein's concept of a closed society.

However, there is a movement towards some form of integration as a possible solution to the psychological problems such as the rejection by many pupils of the content of their education, the absence of motivation, the feeling that there is little relevance in what schools are offering. For these reasons, many have recommended that the organisation of the content should be started from a consideration, not of the nature of knowledge, but of the needs and interests of the pupils. Others have looked to a complete change of methods, to the idea of promoting pupils' enquiry. It is possible to trace both interest-based and enquiry-based methods within existing subjects, not least those in which such schemes as the Nuffield Science projects are being operated.<sup>118</sup>

Another reason for some form of curriculum integration is sociological. A changing society has inevitably created new bases for the organisation of

knowledge and these required that the traditional forms of knowledge should and can be changed constantly and continuously to meet the changing needs. Thus the reorganisation of knowledge must represent changes that are meaningful for both social and individual needs. An interesting example of this kind of reorganisation and regrouping of subjects is that which is taking place in geography which focuses several kinds of knowledge on the issue of man and his environment. So the new course is not an arbitrary collection of subject matter but it has a central focus such that provided by the controversial issues of Humanities Curriculum Project and new geography course.

Another example is a new course taking place called 'Handicraft' through the linking of design studies with science and technology to form 'Design and Technology' a new and very different curriculum subject.<sup>119</sup> The Schools Council's Humanities Curriculum Project is endeavouring to encourage senior pupils in secondary schools to explore topics of special interest and concern to them as members of modern society, topics such as relations between the sexes, law and order, living in cities, war, and so on. The Schools Council argues that such topics could not be dealt with adequately within any traditional subjects but would necessarily involve some kind of interdisciplinary development. Such topics also focus on the issue of man and his environment.

Bernstein in 1971 distinguishes between two curriculum codes: the collection code and the integrated code. Within the collection code, his distinction is between specialised and non-specialised types. Within the English specialised type, he distinguishes two varieties:

"... a pure and an impure variety. The pure variety exists where 'A' level subjects are drawn from a common universe of knowledge, e.g. chemistry, physics,

mathematics. The impure variety exists where 'A' level subjects are drawn from different universes of knowledge, e.g. religion, physics, economics. The latter combination ... very rarely ... exists, for pupils are not encouraged to offer - neither does timetabling usually permit - such a combination."

120

Nevertheless, Bernstein observes that:

"One can detect the beginnings of a shift in England from the pure to the impure variety, which appears to be trying to work towards the non-specialised type of collection."

121

Bernstein considers in more detail the implications of the movement from a collection to an integrated code, and from a specialised to a less specialised type, and he suggests that such a move "will lead to a disturbance of existing authority structures, existing specific educational identities, and concepts of property."<sup>122</sup>

The social and political implications have created a demand for curriculum integration. Bernstein stated that:

"How a society selects, classifies, distributes, transmits and evaluates the educational knowledge it considers to be public, reflects both the distribution of power and the principles of social control."

123

If this is so, then a major change such as the move towards different forms of integration must itself reflect changes in the distribution of power and principles of social control in society. Then, what kinds of change are being reflected? There is a move from a curriculum in which the subject boundaries are relatively fixed and strong to the one in which the boundaries are relatively wide and interrelated. This trend is - not rapidly, but firmly - proceeding. There is a trend towards increased integration in one aspect of a more general trend in education towards 'open' rather than 'closed' schools, towards a mixing of categories, towards diversity rather

than purity, and that this is symptomatic of basic changes in the culture of English society, particularly changes in the principles of social control. In short, there is a corresponding move from a 'closed' to an 'open' society.

These trends result in changes in the social order of the school. As for teachers' relationships with each other, when the subject boundaries are strongly maintained, the organisation of the school remains firmly in the hands of the heads of the subject departments, thus individual staff for the most part only get involved professionally within their departments. Any attempt to change these strong boundaries

"may be felt as a threat to one's identity and may be experienced as a pollution endangering the sacred. Here we have one source of the resistance to change of educational code."

124

A move towards an integrated code will challenge this strong division and alter the relationship between teachers, since they must now learn to work together, to co-operate with each other across subject boundaries. So in each school a teacher should work not for an end peculiar to himself and his subject, but for the achievement of the common purpose of the educational process.

This in turn is likely to lead to changes in the hierarchy of the institution and a major shift in its power base; divisions will be reached by different procedures and individual teachers will be more closely involved in them. Indeed, it is likely also to lead to situations in which the need for the participation of the pupils in decision making will be recognised. A move towards an integrated code will represent a move towards recognising the changing needs of the economy, towards the individual pupils and their needs, and towards recognising the nature of knowledge not as entirely God-

given (so it should not be altered) but as man made, and towards including commonsense knowledge in the curriculum.<sup>125</sup>

#### IV. EVALUATION

##### 1. Aims of Examinations

Having analysed the curriculum aims, content, and the organisation of the content, it is time now for a central component of curriculum process, which is the evaluation. The major aim of the 11+ examinations is to select for and distribute children at the different types of secondary school.<sup>126</sup> The 11+, CSE and GCE examinations are intended to assess past achievement. But both the 11+ and GCE examinations are also meant to predict future academic attainment.<sup>127</sup>

If an examination has been successfully prepared and administered, it should be regarded, to the pupil, as a stimulus and a goal, to the teacher, it feeds back information about the effectiveness of his teaching and hence serve as feedback. To society at large, it furnishes a guarantee of competence in those examined to perform the task demanded of them by the jobs or professions they take up.<sup>128</sup> It should diagnose and predict a pupil's probable future performance in some course of study or area of knowledge. To accomplish such purposes, examinations or measuring devices should be valid and reliable, and the aims and objectives of a course should be clearly established, and syllabus or content area within which the expressed objectives are to be achieved, should be defined. The organisation of the content and teaching technique should make possible the consistent evaluation of the achievement or potential of each pupil. It is also "to enable parents to be informed about their children's educational progress,"

and finally, "to provide information about pupils at points of transition within the education system and when they leave school to start work or to go on to further and higher education."<sup>129</sup>

Of course many of these purposes are seldom, if ever, achieved, even in such widely used examinations as the CSE and GCE. In grammar schools, for example, external examinations, even at this stage of school work, are allowed to cramp the education of many pupils. Sixth form teaching in this school is intended almost exclusively to prepare pupils for the GCE and university scholarship examinations. So with a national system of examinations, it is perhaps inevitable that examinations do in fact dictate the curriculum to some extent, especially when past papers are so freely available to teachers and pupils alike. Given that examinations have such a pervasive influence in the secondary school, it is surprising that there has been little research into their functions and effectiveness. However, efforts to fill this gap and to meet the most necessary examination purposes are increasingly being made, as will be indicated by the analysis which follows.

## 2. Types of Examinations

Written, oral and practical examinations are all used. The essay form of written examination is the most popular. In recent years, variations on these traditional forms of examination have begun to be tried out. One of the most important of these is the continuous assessment. Objective tests have also been used but on a small scale especially in secondary education.<sup>130</sup>

The 11+ examination is conducted by the teachers and administered by the local education authorities. The procedures they use vary considerably in detail, but in general they are broadly similar. The following are the

techniques most generally used:

- "a) Standardised objective tests of intelligence ...
- b) Tests, usually objective and frequently standardised, of attainment in formal English and arithmetic. These two means are employed by the very large majority of authorities. They are usually checked by
- c) Reports from Primary School Head Teachers, and frequently by
- d) Scrutiny of records of children compiled over the period of primary education."

131

The tests are usually given to the children in their own schools, by their own teachers, who then mark the tests according to the instructions supplied to them. According to these instructions, the teachers convert the 'raw' scores into 'standard' scores. The marks are then sent to the local education office, where the marks are checked and all candidates from different areas are ranged in a single order of merit. A number of candidates on the top of this order of merit may be allocated to grammar schools. How far down from the top of the order, this will be largely determined by the proportionate number of grammar school places available in the area.<sup>132</sup>

It is, as Dent points out,

"there is no absolute standard by which children qualify for entry into the grammar school, and it has been a constant cause of complaint that there is great disparity between L.E.A. areas ... in the provision of grammar school places."

133

The 11+ has for many years been the cause of more anxiety, frustration and disappointment than any other aspect in the educational system, for both children and parents.<sup>134</sup> Therefore, from the late 1950s onward growing numbers of local authorities 'abolished' the 11+; that is to say, they abandoned some of the techniques, or spread the tests over a longer period, or otherwise rendered the selection procedure less harmful and less obvious. Moreover, the rapid increase of comprehensive schools during the 1960s and

and 1970s expedited this process of 'abolition' of the 11+.

Before the GCE, the work of the grammar school was based on a system of frequent mark-lists. At the end of each period, a mark must be provided for every pupil in each subject. The marks obtained were added together and the position in the form was found, and the promotion from one form to the next is considered. This system of marks made it easy, at a glance, to observe the progress of every pupil. Anxious parents could be confronted with a mass of marks, which were usually quite adequate to convince them of the efficiency of the school organisation.<sup>135</sup>

However, it cannot be claimed that numerical marks provide an accurate evaluation of a pupil's work. In the literary subjects, for example, numerical marks are not a precise guide to progress. Any teacher is capable of appreciating the progress or lack of progress of his pupils without consulting such numbers.

Recently, however, teachers adopted a variety of procedures for assessment, alone and in combination. There is, for example, the minute-to-minute questioning and scrutiny of pupils' work that is an ordinary part of the school day. There are the setting of oral and practical tests, and of periodic internal school examinations.<sup>136</sup> Here the professional competence and knowledge of the teachers are of prime importance.

The GCE began in 1951, and the CSE in 1965. Both are individual subject examinations, and the Certificates list the subject(s) in which a candidate has satisfied the examiner. Both are set by external examining boards each of which operates on a national scale. The GCE examinations are intended to be taken by pupils in the top 20 per cent of the ability range. The CSE examinations are designed to be taken by pupils in the 40th-80th percentile of the ability range.<sup>137</sup> In other words, the GCE O and A Levels have been

traditionally taken by the more able pupils while the CSE was designed for pupils of average ability. The argument under which this Certificate was introduced was that:

"Examination results do not offer a comprehensive picture of the abilities of any individual school leaver and many pupils will continue to leave without achieving graded examination results ... This raises the question of whether there should be leaving certificates for all pupils."

138

The CSE has six grades, its highest grade could be compared with the GCE O Level, so there is an overlapping between both examinations at this level. By being based on subject examinations, some schools are offering as little as one subject on the Certificate.<sup>139</sup>

All grammar schools prepare their pupils to take the GCE, and the majority of their pupils sit these examinations usually between the ages of 15 and 18. The examinations can be taken at two levels, ordinary and advanced. There are also scholarship papers, higher in standard than the advanced. Passes are based on individual subjects, not groups of subjects, as was the case with the former School Certificate. So, a GCE can be gained by passing in one subject only at the 'O' Level; and a candidate may go on adding other subjects indefinitely, at O or A Level, or both.

A GCE examination may not be taken by a candidate under the age of sixteen, unless

"... the head teacher certifies that it is desirable on educational grounds to enter him earlier, and that he has pursued a course of study with such competence that it is probable he will pass the examination in the subjects for which it is proposed to enter him."

140

The majority of grammar school pupils under the age of sixteen are entered for examinations at the 'O' Level. University requirements vary

from one college or department to another, but the absolute minimum is generally a pass in four or five subjects of which two at least must be passed at the 'A' level. The local education authority grants for university or comparable courses are given on the basis of the GCE results. It is worth noting that the GCE examinations are administered by examining boards, most of which are university boards.

The GCE 'O' Level tends to be more 'academic' than experimental. For academic subjects they usually consist of written papers and in some instances a practical or performance test. In general, the written papers are of an essay type and the candidate has to give answers to, or write an essay on, a number of topics chosen from a large choice offered. For example, these are questions in British and European history:

"What were the achievements of Alfred the Great?  
Describe the life and work of either Thomas Becket  
or Simon de Montfort."  
141

Recently, some objective tests have also been introduced by several boards. A few boards have also begun to try out continuous assessment of schoolwork on a small scale. The examinations of practical subjects are usually in two sections, written paper(s) and practical test. Most papers, generally, seem to have a time limit of about 2½ hours.

The papers and practical pieces are marked according to the marking schemes prepared by the Chief Examiners and the examiners' panel. All examiners have to send samples of the papers they have marked so that they can be checked. The marks are standardised by discussion and by reference to the standards of previous years.<sup>142</sup>

The CSE examinations tend to be more 'experimental' than the GCE examinations. These examinations are set in three modes.<sup>143</sup> In mode 1, the syllabuses and examination papers are usually set and marked by the

boards. Examinations often consist of a written paper, a practical test and course work. In this mode, objective tests are, to some extent, used in the written examinations, and most examining boards have introduced 'continuous assessment' of course work as part of both their academic and practical examinations. Thus, examinations in this mode are prepared and assessed in a similar manner to the GCE examinations. In general, therefore, the policies of CSE and GCE are fairly similar, but the roles of the teachers are more important in the CSE than in the GCE.

### 3. The Reliability and Validity of Examinations

In academic subjects, essays are still a widely used type of assessment in the GCE if not the CSE. There are two main forms of essay test, the subject-matter essay test and the composition test. The evidence from most of the research made so far suggests that:

"Subject-matter essay tests tend to be marked more reliably than composition essays, but both need to be marked carefully if they are to have satisfactory reliability. The composition tests in particular need to be marked twice if the marks are to have a reliability of 0.7 or more. The reliability of examinees is largely unexplored. The evidence on validity indicates that concurrent validity is often almost as high as marker reliability."

144

As for oral and practical tests, although they have been used for many years, there is so far little evidence about their reliability and validity at the secondary school level. Some of the little research made, however, suggests that:

"... carefully prepared tests may have reliabilities of up to 0.8 and concurrent validities of up to 0.5 to 0.6. These values tend to increase when two or more independent assessors are used."

145

Some interest is now being shown in objective tests, partly because they are easier to mark reliably and quicker than essay tests. The main types of objective tests which are commonly used are the short answer items and multiple-choice items. The evidence from studies carried out in America and in Britain indicate that "well-constructed objective tests can have high internal consistency and mark re-mark reliability (up to R of 1.00) and acceptable concurrent validity (R = 0.5 or better)."<sup>146</sup>

Concerning course work and internal school examinations, these two forms of assessment are considered together because, so far, there is little evidence of their effectiveness, and also because they are both involving internal assessment by teachers. These two types have been introduced into the CSE on a large scale in an attempt to overcome some of the difficulties arising from the use of completely external examinations, and they began to be tried out recently in GCE examinations for the same reasons. The evidence so far indicates that new methods of assessment need to be developed if full advantage is to be taken of the benefits of school-based examinations. It appears to be especially difficult to include reliable and valid oral and practical sections in such examinations at the moment.

So far the research has concentrated on the concurrent validity of examinations largely because the greatest information is available about these aspects of the GCE and CSE. "The investigation of content and predictive validity of academic examinations has scarcely begun."<sup>147</sup> The reliability and concurrent validity of the various forms of examinations identified here are indicated in Table 3.

The research suggests, as indicated in Table 3, that the objective test comes out best overall (in terms of reliability and validity), followed by the essay, course work, oral and practical examinations. The evidence

**TABLE 3: APPROXIMATE RELIABILITY AND CONCURRENT VALIDITY OF DIFFERENT FORMS OF ASSESSMENT**

Types of tests	Marker Reliability	Concurrent Validity
	Mean Correlation	Mean Correlation
Essay (composition)	0.7 to 0.8	0.4 to 0.7
Objective	0.9 to 0.99	0.5 to 0.7
Oral	0.6 to 0.8	0.5 to 0.6
Practical	0.6 to 0.7	0.5 to 0.6
Course work	0.6 to 0.7	0.6 to 0.7

Source: Connaughton, I.M., 'The Validity of Examinations at 16-Plus,' Educational Research, No.11, 1969, p.174

also indicates that the more specific and detailed the examining procedures to be followed, the more reliable and valid the examinations tend to be. Moreover, if aims, objectives and procedures are not clearly stated, it is difficult to review, and revise examinations effectively.<sup>148</sup>

### Conclusion

Since public examinations influence the curriculum of secondary school, there is a need, therefore, for the planning of both to be done jointly, and for teachers to be more closely involved in the planning and conducting of public examinations. In fact, an acceptance of this idea was part of the rationale for the introduction of the CSE examination as a result of the Beloe Report of 1960. The various modes of assessment made available to teachers by the CSE examination and the real involvement of teachers in the examining processes have done much to show how teachers can be given increased control over this particular source of influence on curriculum development.

The School Council, despite its tremendous efforts on curriculum development, has failed to achieve the minimal unifying effect which would have been gained by combining the GCE and CSE examinations at 16+. For this, a proposal made by the Schools Council may come into operation about 1980.<sup>149</sup> In some cases joint GCE and CSE syllabuses have already been approved and established, thus paving the way for the possible introduction of a single, public examination at 16+ in the near future.

NOTES

1. Education in Schools: A Consultative Document, (The Green Paper), London, HMSO, 1977, p.4
2. Donaldson, P., Guide to the British Economy, London, Penguin Books Ltd., 1976, p.189
3. The Green Paper, op.cit., p.2
4. Percy Report, Higher Technological Education, Report of Special Committee, April, 1944, July, 1945, London, HMSO, 1945, as quoted by Holmes, B., Problems in Education, A Comparative Approach, London, Routledge & Kegan Paul, 1965, p.232
5. Holmes, B., Problems in Education, A Comparative Approach, London, Routledge & Kegan Paul, 1965, p.234
6. The Green Paper, op.cit., p.3
7. Ibid.
8. Nuttall, D.L. and Willmott, A.S., British Examinations, Techniques of Analysis, London, N.F.E.R., 1972, p.11
9. The Green Paper, op.cit., p.3
10. Bernstein, B., Peters, R. and Elvin, P., 'Open Schools, Open Society?', New Society, September 14, 1967.
11. Holmes, op.cit., p.223
12. Hadow Report as referred to by Walton, J. (ed.), The Secondary School Timetable, London, World Lock Educational, 1972, p.22
13. Walton, ibid., p.26
14. Report of the Consultative Committee on Secondary Education with Special Reference to Grammar School and Technical High School, London, HMSO, 1938, p.xxii
15. Quoted by Davies, H., The Boys' Grammar School, London, Methuen & Co.Ltd., 1945, p.114
16. Ibid.
17. Norwood Report, Curriculum and Examinations in Secondary Schools, Committee of the Secondary Schools Examinations Council, London, HMSO, 1943, as referred to by Holmes, op.cit., p.240
18. Holmes, op.cit., p.227

19. See Walton, J. (ed.), *ibid.*, chap.1-2
20. The Council for Curriculum Reform, The Content of Education, London, University of London Press Ltd., 1945, chap.XII.
21. *Ibid.*, p.16
22. Lawton, D., Social Change, Educational Theory and Curriculum Planning, London, U.L.P., 1973, p.106
23. Crowther Report, A Report of the Central Advisory Council for Education, London, HMSO, 1959.
24. Lawton, *op.cit.*, pp.107-8
25. *Ibid.*, p.108
26. Newsom Report, Half Our Future: A Report of the Central Advisory Council for Education, London, HMSO, 1963
27. *Ibid.*, chap.18.
28. *Ibid.*, as quoted by Lawton, *op.cit.*, p.112
29. *Ibid.*, p.115
30. Kelly, A.V., The Curriculum Theory and Practice, London, Harper & Row, Publishers, 1977, pp.84-5
31. Holmes, *op.cit.*, p.253
32. The Green Paper, *op.cit.*, p.7
33. *Ibid.*, p.11
34. *Ibid.*
35. *Ibid.*, p.4
36. Holmes, *op.cit.*, p.225
37. *Ibid.*, p.254
38. Joint Matriculation Board (J.M.B.), General Certificate of Education, Regulations and Syllabuses 1976, Manchester, 1976, p.22
39. *Ibid.*, p.24
40. Schools Council, Working Paper No.19, Development of Modern Language Teaching in Secondary Schools, London, Schools Council, HMSO, 1969, p.3
41. *Ibid.*, p.4

42. J.M.B., *op.cit.*, p.27
43. *Ibid.*, p.34
44. *Ibid.*
45. *Ibid.*, p.36
46. *Ibid.*, p.46
47. *Ibid.*, p.51
48. *Ibid.*
49. *Ibid.*, p.55
50. See *ibid.*, pp.51-65
51. *Ibid.*, p.154
52. *Ibid.*, p.182
53. *Ibid.*
54. *Ibid.*
55. *Ibid.*, p.199
56. *Ibid.*, p.205
57. *Ibid.*, p.206
58. *Ibid.*, p.245
59. *Ibid.*, p.249
60. *Ibid.*, p.269
61. *Ibid.*
62. *Ibid.*, p.289
63. *Ibid.*, p.309
64. *Ibid.*, p.320
65. *Ibid.*, p.323
66. *Ibid.*, pp.337-8
67. *Ibid.*, p.347
68. *Ibid.*, p.77

69. Ibid., p.79
70. Ibid., p.90
71. Ibid., p.97
72. Wiseman, S. and Pidgeon, D., Curriculum Evaluation, Slough (England), NFER Publishing Co.Ltd., 1970, p.21
73. Ibid., p.22
74. See Hirst, P.H., Knowledge and the Curriculum, London, Routledge & Kegan Paul, 1974.
75. See Bantock, G.H., 'Towards a Theory of Popular Education,' in Hooper, R. (ed.), The Curriculum Context, Design & Development, Edinburgh, Oliver & Boyd, 1971.
76. Kelly, op.cit., p.71
77. Roberts, K., 'Economy and Education: Foundations of a General Theory,' in Comparative Education, Vol.7, No.1, 1971, p.10
78. Davies, H., The Boys' Grammar School Today and Tomorrow, London, Methuen & Co.Ltd., 1945, p.10
79. Walton, op.cit., p.30
80. Ibid.
81. Davies, op.cit., p.12
82. Ibid., p.10
83. Roberts, op.cit., p.8
84. Holmes, B., Curriculum Innovation at the Second Level of Education, Educational Documentation and Information, Paris, UNESCO, IBE, Bulletin No.190, 1974, p.24
85. Walton, op.cit., p.36
86. Ibid.
87. Lawton, op.cit., p.108
88. Ibid., p.137
89. Ibid.
90. Ibid.

91. Schools Council, Working Paper No.2, Raising the School Leaving Age: A Co-operative Programme of Research and Development, HMSO, 1965, as quoted by Lawton, *ibid.*, p.137
92. Lawton, *op.cit.*, p.120
93. Caves, R., et al. (ed.), Britain's Economic Prospects (Brooking Report), USA, Brookings Institution, 1968.
94. Roberts, *op.cit.*, p.8
95. Lawton, *op.cit.*, p.92
96. Schools Council, The 1968 Enquiry I. Young School Leavers. Report of a survey among young people, parents and teachers, Government Social Survey, London, HMSO, 1968, p.45
97. Walton, *op.cit.*, p.41
98. Dent, H.C., Educational System of England and Wales, London, London University Press, 1971, p.114
99. *Ibid.*
100. Davies, *op.cit.*, p.25
101. Stenhouse, L., An Introduction to Curriculum Research and Development, London, Heinemann, 1975, p.42
102. As quoted by Davies, *op.cit.*, p.114
103. Schools Council Enquiry No.1, *op.cit.*, p.45
104. The Green Paper, *op.cit.*, p.7
105. Stenhouse, *op.cit.*, p.42
106. Lawton, *op.cit.*, p.138
107. Kelsall, R.K. and Kelsall, H.M., Stratification, An Essay on Class and Inequality, London, Longman, 1974, p.74
108. Walton, *op.cit.*, p.25
109. Kelsall, et al., *op.cit.*, p.74
110. Davies, *op.cit.*, p.26
111. Kelsall, et al., *op.cit.*, pp.76-7
112. Walton, *op.cit.*, p.36

113. Ibid.
114. Kelly, op.cit., pp.18-19
115. The Spens Report, quoted by Davies, op.cit., p.115
116. The Newsom Report, quoted by Walton, op.cit., pp.40-1
117. See Bernstein, et al., op.cit.
118. Kelly, op.cit., p.84
119. Hicks, G., Design Studies in Education, Unpublished M.Phil. thesis, University of London, 1976.
120. Bernstein, B., 'On the classification and framing of educational knowledge,' in Young, M.F.D. (ed.), Knowledge and Control, London, Cassell & Collier Macmillan Publishers Ltd., 1971, pp.51-2
121. Ibid., p.52
122. Ibid., p.59
123. Ibid., p.47
124. Ibid., p.56
125. See, Bernstein, 'Open School, Open Society?', op.cit.
126. Ministry of Education, Secondary School Examinations other than the GCE (Beloe Report in 1958), London, HMSO, 1960.
127. Ibid.
128. Pilliner, A.E.G., 'Examinations,' in Butcher, H.J. (ed.), Educational Research in Britain, London, University of London Press, 1968, p.167
129. The Green Paper, op.cit., p.18
130. Nuttall, D.L. and Willmott, A.S., British Examinations: techniques of analysis, England (Slough), NFER, 1972, pp.13-14
131. Dent, op.cit., p.108
132. Ibid., p.109
133. Ibid.
134. For more details, see Vernon, P.E. (ed.), Secondary School Selection, A British Psychological Society Inquiry, London, Methuen, 1957.

135. Davies, op.cit., pp.12-14
136. The Green Paper, p.18
137. Ministry of Education 1960, op.cit.
138. The Green Paper, op.cit., pp.18-19
139. Richmond, W.K., The School Curriculum, London, Methuen & Co.Ltd., 1971, p.78
140. The School Regulations, 1959 (S.I.1959, No.364). Regulation 15.
141. University of Cambridge, Local Examinations Syndicates, General Certificate of Education, 'O' Level, British and European History, to 1688, Monday 2 June 1975, p.2
142. Connaughton, I.M., 'The Validity of Examinations at 16 Plus,' in Educational Research, No.11, 1969, p.166
143. Schools Council, The First Three Years: 1964/7, London, HMSO, 1968.
144. Connaughton, op.cit., p.168
145. Hitchman, P.J., 'The Validity and Reliability of Tests of Spoken English,' British Journal of Educational Psychology, 36, 15-23, 1966, as referred to by *ibid.*, p.169
146. Connaughton, op.cit., p.169
147. *Ibid.*, p.172
148. See Lewis, D.G., 'Objectives in the teaching of science,' Educational Research, No.7, 1965, pp.186-99. See also, Whitefield, R.C., 'Improving Examining at Sixteen Plus,' Educational Research, No.10, 1968, pp.109-13
149. See, Schools Council, A Common System of Examining at 16+, Examination Bulletin 23, London, Evans, Methuen Educational, 1971.

PART FOUR

This part consists of two chapters, 6 and 7. These two chapters deal with details of the contextual variables in Egyptian society and the general secondary school curriculum since 1952. Chapter 6 is concerned with the socio-economic, political, and educational changes and non-changes which have and have not taken place since the 1952 Revolution up to 1974. From 1974 right up to the present day the revolutionary policy has been undergoing considerable changes, for better or worse; this period, therefore, will need a separate study and so it will be dealt with here - but not in considerable detail.

Chapter 7 will be devoted to the curriculum development in the general secondary school in Egypt since 1952. Consideration will be given to the extent to which the curriculum of this school has or has not responded to the changes which have taken place and the extent to which the encyclopaedic curriculum theory has informed the curriculum practices in Egypt.

CHAPTER 6  
THE CONTEXTUAL VARIABLES  
IN EGYPT SINCE 1952

## I. SOCIAL CHANGE

### 1. Social Classes

Egyptian society pre-1952 Revolution was characterised by an unusual combination of very marked economic inequality with distinctive social classes and cultural homogeneity.<sup>1</sup> Egyptian social classes and economy were divided as follows: higher class or large landlords; upper-middle class or bourgeoisie; lower-middle class or urban petty bourgeoisie, upper-lower class or town workmen; and finally, lower class or peasantry (or fellaheen).<sup>2</sup>

The higher class consisted mainly of landlords. A small group of people who did not exceed half a per cent of Egyptian population owned about 34 per cent of Egyptian land. Those people had justified their existence so little as the Egyptian landlords, who had all the defects of a privileged class unredeemed by any of the virtues of a ruling class. Politically, landlord class was all-powerful. They wielded considerable political influence in their districts but their pressure made itself felt mainly at election times. Otherwise they left their peasants alone. Although their intellectual dispositions and influence were distinct from those of the higher professional class, especially the lawyers used to merge socially and politically with the landlord class.

The upper-middle class was small in number and had little political influence. It consisted mainly of directors of joint-stock companies, landowners, lawyers, ex-official, generally connected with politics, and elected by the predominantly foreign boards of directors with a view to giving their firm an Egyptian tinge.<sup>3</sup> As for most of the members of this class, their higher degree of culture and social consciousness on the one

hand, and their realisation of the fact that the poverty of the majority of the rural population severely limited the expansion of industry on the other, had given them a much keener awareness of Egypt's problems than the large landlords.

The lower-middle class consisted of government officials, employees, tradesmen, the less successful members of the professions and the upper layer of artisans, and was passing through a severe crisis. The expansion of education and the reduced expansion of civil service had created a large proportion of unemployment among the members of this class. The Egyptian traders, lawyers and doctors had to face the rivalry of foreigners. The young Egyptian employees felt themselves surrounded by a hostile ring of Levantine clerks, while their more distant prospects were blocked by the foreign hands of the business.<sup>4</sup> The inability of successive governments to solve social and economic problems had disgusted the youth of the towns with the political order in that time and aroused a keen desire for change.

The lower class consisted of two groups - town workers and peasants or 'fellaheen'. Concerning the first group, the most useful and comprehensive study is the survey of poverty carried out in 1938 by the Egyptian Association for Social Studies. No fewer than 3,333 family budgets covering 16,900 individuals mainly living in cities, were examined. The result is summarised as follows in the Association's Report for 1941:

"From a close study of these cases, the following composite picture emerges: a family of 5 persons living in 1.6 rooms, working 37.2 weeks per year, having a total annual income of £21,075, and spending monthly 195 piastres for all purposes of which 121 goes for food, 25.3 for rent, 23.4 for clothing, 3.9 for miscellaneous, a large part of which is for tobacco. The average debt is 24 piastres but 90 per cent of the families report no debt at all. It is not known how this deficit is made up, and surmise only can suggest the answer, i.e. failure to pay bills, loans, ... or charity."

"By way of deviation from this 'model' poor family, let us look at the condition of the poorest quarter, 833 families. In number the general average is 5.6 persons to a family. They live in one room, have 7½ weeks of work per year, a total annual income of 909 piastres, and a monthly expenditure of 83. Of this 52 is spent on food, 10 for rent, 8 for clothing, 4 for amusements, 4 for medicines also and 5 for tobacco, ... etc. This group reports no debt, but their total annual expenditure exceeds their income by 87 piastres."

6

The picture requires little comment, but two aspects need stressing. First, the terrible overcrowding in which the bulk of the Egyptian population lived made European slums seem almost palatial by comparison. Second, malnutrition and ill-health were prevalent. And the result was the prevalence of pellagra, lung disease, rickets and dental caries.<sup>7</sup>

Such an atmosphere was not designed to breed the kind of serious-minded workman taking an intense pride in his work and interest in working-class affairs, such as one meets in Europe; though there were many such, especially among graduates of industrial schools. Foreign industrialists often complained of the negligence and low productivity of Egyptian workmen. There was no doubt that the Egyptian worker had not yet been - in the factory - sufficiently long to develop an industrial ethos.

Nothing had been done for the town workers. Educational facilities were inadequate, which can be seen from the fact that only 42 per cent of the population (above 5 years) of Cairo and Alexandria were literate.<sup>8</sup> Technical schools were especially lacking, but the poverty of the trade unions had prevented them from meeting that deficiency, while the long hours of work left little energy or time to the worker.

A striking feature of the peasant was his poverty. Table 1 shows a typical family budget.

TABLE 1: ANNUAL COST OF LIVING OF A FAMILY OF FIVE PERSONS  
IN LOWER EGYPT

---

	£E
Food	17,900
Soap, petroleum, utensils	1,960
Tobacco	3,600
Clothing	2,870
Total	26,330

---

Source: Issawi, C., Egypt: An Economic and Social Analysis, London, Oxford University Press, 1949, p.153

The discussion of this budget in terms of many values does not mean, of course, that the transactions were in money. Cleland, in 1936, pointed out:

"Most of the fellah's trade is done by way of barter. The goods he both produces and consumes, naturally have a cash value, and that has been considered in making the budgets. He exchanges products direct whenever possible, for example, he would probably barter his eggs in the village shop for soap, tea, sugar or tobacco. The barber is paid occasionally by a few measures of maize. For new clothes, petroleum, etc., he most probably pays cash, which he gets by disposing of a sheep or goat, or cheese, or butter, etc."  
9

It should not be thought that the Egyptian peasant, like the French, spent little in order to save. His house was a two-roomed mud-brick hovel, in which he spent the night in company with his beasts, the daytime being passed mainly in the open. His furniture consists of a wooden chest, a stove, a few pots and pans, blankets and mattresses. His working clothes were rags. Any savings he succeeded in putting aside were used to purchase a small patch of land, unless they were spent on festivities.

For the peasant was in very close contact with the soil he tilled. His house was of mud. He spent his day knee-deep in mud. He drank the muddy water of the Nile. The earth and above all the Nile, form the subject of many fertility rites, some going back to the time of the Pharaohs. The peasant's maize and vegetable diet - meat was eaten, at most, once a month - explains the high incidence of pellagra and possibly the prevalence of tuberculosis. All these diseases had sapped the peasant's vitality.<sup>10</sup>

Girls must bring to their husbands a virgin body. Marriage was almost universal and was usually contracted at an early stage. Family life was patriarchal, especially in the rural areas. Wives were treated with affection, especially if they bore children, and in view of their numerous and varied economic functions, enjoyed a freedom far greater than that of townswomen.

The peasant was very gregarious - he could not be otherwise, seeing that in the Nile Valley it is literally impossible to be out of human sight. There was absolutely no sort of civic life, but the absence of civic life did not entail absence of mutual aid. All observers point to the remarkable helpfulness shown by the peasants to each other both in the field and in the home. Integrated in his village, the peasant was cut off from the civilising influence of the towns. The larger landlords were absentees. Government officials, irrigation inspectors, rural doctors, judicial officers, etc., naturally fled the village and lived in the capitals, especially in Cairo or Alexandria.

No wonder then that the peasant was profoundly ignorant. Some have mistaken his ignorance for innate stupidity; this is easily refuted by pointing to enormous numbers of sons of peasants who have had distinguished careers in European universities. Moreover, the recent developments are

helping to dispel that ignorance. There was no doubt that the peasants' social and national consciousness was increasing rapidly during the period in question, and this had resulted in the fact that during the Second World War the landowners remained in Cairo or Alexandria, confessing freely that they would rather face German bombs than their peasants.<sup>11</sup>

It is a fact that about a tenth of the land and a great part of the country's industrial and commercial capital was foreign-owned. Another equally significant fact was that the most important activities in the country were dominated by the foreigners as shown in Table 2.

TABLE 2: DISTRIBUTION BETWEEN MAIN OCCUPATIONS - EGYPTIANS AND FOREIGNERS 1937 (PERCENTAGE OF TOTAL EMPLOYED POPULATION)

	Egyptians	Foreigners
Agriculture	59%	1%
Industry and transport	10%	24%
Commerce and finance	6%	22%
Services	5%	20%
Others	20%	33%

Source: Cleland, W., The Population Problem in Egypt: A Study of population trends and conditions in modern Egypt, Pennsylvania, Science Press Printing Co., 1936.

Table 3 presents the numbers of foreign communities according to the Census of 1947.

TABLE 3:

---

Greeks	69,000
Jewish	63,000
Italian	48,000
Armenians	20,000
British	14,000
French	10,000
Total population	18,967,000

---

Source: The 1947 Census, Annex 1, p.67 (in Arabic).

The foreign communities consisted of the Jews, Armenians, Greeks, Italians, French and the British. As for the Jews, the census gave the number of Jews as 63,000. Of this the majority were of Egyptian nationality, but there were also many Italian, Spanish and French Jews. In Egypt, as elsewhere, the Jews tended to concentrate on, and exert a large control over, finance, and commerce and, lately, industry. They were also well represented in the professions and journalism and formed a large percentage of the staff of the large business houses.<sup>12</sup>

Until relatively recently there was no very marked specifically anti-Jewish, as distinct from the general anti-foreign, feeling. This arose perhaps from the fact that Jews did not compete with Egyptians in government jobs and that Jewish usurers confined their activities to the upper classes and did not operate in the villages. The spread of anti-Semitism in Europe has, however, had marked repercussions in Egypt, and the Palestine question has powerfully reinforced anti-Jewish sentiment. Culturally, the younger generation of Jews have no ties with Egypt, the bulk have been educated in French schools and have looked to France as their spiritual home.

The political power enjoyed during the last century by the Armenians has gone without prospect of return. In 1947 the 20,000<sup>13</sup> Armenian residents played a humble but useful part in industry, the crafts and petty trade.

The Greeks, who numbered 69,000<sup>14</sup> formed the largest, oldest and most diverse of the European communities. Generalisation is particularly difficult in their case since Greeks were found in large numbers in the professions, in the villages and in the ranks of the industrial workers, but their commercial character was especially marked.

The Italians, of whom there were some 48,000<sup>15</sup> in 1947, had provided the country with some of her artists and some of her skilled artisans. The fascist organisations in Egypt equipped the Italian community with many fine schools, clubs and swimming-pools, but produced a collective arrogance which greatly increased the Italians' unpopularity.

Although the French community numbered only 10,000 in 1947,<sup>16</sup> its cultural influence was the greatest. French schools had done more than any single factor to introduce European ideas in Egypt. The circulation of French newspapers probably equalled that of all the other foreign papers put together. The leading scientific, technical and literary reviews were written in French. French was the language of polite society and the one most naturally used in addressing a stranger. Nevertheless, French was rapidly losing ground in favour of English and parents were tending to send their children to British rather than French schools. And it must not be forgotten that English was the main language taught in government schools.

The British community (14,000<sup>17</sup> apart from the military and other British subjects) consisted of technicians and teachers, employed by the Egyptian government, and business men. The cultural influence of the

British, though growing, was inferior to that of the French. For many years the only important English school in Egypt was Victoria College, in Alexandria. But during the last twenty years before the Revolution, many schools had opened or enlarged, and the British Council had founded institutes in the main towns.

## II. SOCIAL MOBILITY

Britain dominated the Egyptian political life, while France was the strongest influence on cultural and intellectual life, and the Greeks and Italians controlled commerce. Even some Egyptians found it hard to shake off the belief that this was a natural phenomenon. But the majority of Egyptian people did not accept their miserable lot as inevitable because the revolutions against small and selfish ruling classes had succeeded elsewhere. Eventually they found leaders among young army officers who were middle or lower-middle class, but were unmistakably Egyptian and Egyptian educated.

The Egyptian Revolution on July 23, 1952 which deposed the hundred and fifty year old dynasty and destroyed the well-entrenched power of an immensely wealthy and self-confident ruling class, can claim to be the least violent and least bloody in recorded history.<sup>18</sup>

The Free Officers, as they called themselves, had been planning this revolt for years in secret against heavy odds. They had a clear idea of what they wanted to destroy in Egypt - the monarchy, the power of the landowners, foreign influence and the corruption of political life - and they had a vision of the kind of society they wished Egypt to become. But they had had very little time to study the political techniques needed to make the vision a reality.

When the Free Officers had succeeded with their revolution, they had two alternatives before them: one was to return to their barracks in the hope that, with King Farouk out of the way, Egypt's political system would purge itself of the remaining rottenness. The other was to stay and govern themselves. It very soon became clear that the first course would lead to chaos; as long as Egypt's social and economic system remained unchanged, the political groups such as Muslem Brothers and Communists would just wait for the Wafid Party to crumble before trying to seize power themselves. In addition, the Free Officers had believed, quite correctly, that the failure of the 1919 revolution was because its leaders "could not see clearly that a revolution cannot achieve its aims for the people unless it goes beyond the mere political goal of independence and tackles the roots of economic and social problems."<sup>19</sup> These left the Free Officers with the second option, and here the trouble was that they had no political experience or ideology. They were forced to be completely pragmatic in their approach to government.<sup>20</sup>

Thus, the fall of the old regime, and the ending of the foreign influence were not the only objectives of the Revolution, but rather, the building up of a new social order characterised by sufficiency and justice. The basis of work was six principles declared from the start epitomised in the National Charter as follows:

- "1) Destruction of imperialism and its stooges among Egyptian traitors.
- 2) Ending the feudalism.
- 3) Ending monopoly and the domination of capital over the government.
- 4) Establishment of social justice.
- 5) Building of a powerful national army.
- 6) Establishment of a sound democratic system."

These principles, of course, were not a complete theory of a revolutionary task, but they were a guide to work from the start. In the meantime they were activated and developed through interaction with actual experience during the first ten years after revolution, into a defined framework which has been embodied in the National Charter declared on May 22, 1962 and which depicted the fundamental features of the new society which Egypt is to build.

The new regime believed that political freedom was meaningless unless combined with social and economic freedom. Therefore, the social and economic policies of the Revolution were often motivated by distributional objectives. At a more general level improvements in the standard of living of the poor, a reduction in the degree of income inequality accompanied by increases in the income of the less-favoured groups, a better distribution of public goods such as education, health and social services, and more equal opportunities for the underprivileged are all relevant criteria to an assessment of economic development.

The land reform and land reclamation are the main factors of change. The immediate effect of the successive laws was to remove the top bracket in the existing distribution of land ownership, thus improving the relative distribution of income and wealth. The land reform involved a simple transfer of income from landowners to the smallholdings and landless. Although rents charged after the agrarian reform in 1952 were lower than before.

The estimated number of landless families (defined as neither owning nor renting land) in 1950 at 1,270 and in 1965 at 960,000.<sup>22</sup> By the late 1960s about 400,000 families including some three million individuals benefited by land redistribution from both land reclamation and land reform.

Average wage for adult males was £0.10 in 1950 and £0.22 in 1965. The average annual income of a landless family was estimated at £26 in 1950 and £59 in 1965. The cost of living rose during this period very slightly. The interesting feature of this change is the fall in the number of landless families as well as the rise in real incomes.

The smallholdings held (either as tenants or owners) parcels of less than five feddans was estimated at 787,000 families in 1950 and 1,600,000 in 1965. The average annual income was calculated at £78 in 1950, and £125 in 1965. The share of this group in total agricultural income was 17.5 per cent in 1950, and 34 per cent in 1965. As changes in average incomes for landed peasants are strongly influenced by changes in the composition of the ownership.

Tenants enjoyed probably a higher rate of real income growth between 1952 and 1965 as rents did not rise in the same way as gross value added. The increase in the income of these new entrants is much more substantial than that of old owners and tenants in this group.

An important change in the distribution of agricultural income between 1952 and 1965 is the disappearance of the 'more than 100 feddan'. There were some 600 big landowners with 500 feddans each, they would have received from renting their land, at about £30 per feddan, an annual gross income of £15,000 and probably this amount would double if they cultivated the land directly. The '100 feddan and plus' group appropriated in 1950 an estimated 25 per cent of gross agricultural income. The average income from land amounted to £14,000 annually, some 540 times as much as the income of a landless family. In 1965, however, 421,000 feddans were held in parcels of 100 feddans, accounting perhaps for a share of 4 per cent of total agricultural income.

Nationalisations automatically improved the distribution of income and wealth by transferring the ownership of means of production in large areas of the modern sector to the State. These measures were accompanied, however, by a large number of new projects, and by the Socialist laws which granted substantial benefits to workers. Industrialisation, increasing industrial wages, and distribution of profits, combined with various measures to hold down the cost of living, have substantially increased the incomes of the urban working class. Therefore, increases in real income were accompanied by a reduction in the input of effort and this implies a welfare gain. The health services and social insurances represent a value added to the real income.

Government civilian employment increased from an estimated 325,000 in 1952 to 1,035,000 in 1966/7.<sup>23</sup> The share of this group in the country's labour force rose from 9.6% to 15.4%, its share of the national income rose from 8.6% to 13% in the same period. Average annual income (at current prices) increased from £240 to £323 between the two years.<sup>24</sup> The university graduate usually enters at grade 7 (it was 6 grades until recently), and he may legitimately expect to reach the top of the ladder during his life of work.

Current public expenditure on health increased at almost 11% on average per year between 1952/3 and 1969/70.<sup>25</sup> The per capita expenditure on health services increased from £0.47 (index = 100) in 1952 to £1.206 (index = 252) in 1965.<sup>26</sup> In 1952 there were 5,200 doctors, or one for every 4,000 inhabitants. In 1964 there were 13,000 or one for every 2,000 inhabitants. Egypt, like many other large developing countries, is losing large numbers of doctors through the brain drain. The number of hospital beds more than doubled from about 35,000 in 1952, to 74,596 in 1972.<sup>27</sup>

There is no doubt that considerable progress has been achieved and that the average Egyptian today is healthier than his elders twenty years ago. Per capita consumption of medicines increased, and it is interesting to note in this context that the number of chemist shops has increased from 680 in 1952 to 1,977 in 1972.<sup>28</sup> Much remains to be done, however, to free Egypt from diseases and to lower the relatively high level of infant mortality.

The expansion of education, social services, housing and public utilities is great since 1952.<sup>29</sup> The increase in consumption is enormous to the extent that many economic difficulties arose due to it. The idea that the mass of the Egyptian people deserve to be compensated for their past sufferings colours all government thinking. It is the reason for the continuation of subsidies for basic necessities despite Egypt's economic difficulties, which are partly due to a massive rise in consumption. Until 1974, the government could passionately discard any scheme that allowed prices to rise as a means of reducing consumption.

There is little doubt, however, that rural areas have benefited under the Revolution from a rise in the share of public expenditure on social services. Achievements after 1952 have been significant. An interesting study by the Ministry of Planning reveals, however, the degree of disparity in the social services between rural and urban areas in 1966/7, see Table 4.

TABLE 4: SOME INDICATORS OF RURAL-URBAN DISTRIBUTION OF SOCIAL FACILITIES 1966/7 (PERCENTAGE)

	Urban Govrs.	Provinces
Population	21.8	78.2
Students in primary education	27.6	72.4
Students in preparatory education	35.7	64.3
Students in secondary education	42.4	57.6
Hospital beds	41.4	58.6
Social centres	13.2	86.8
Local administration revenues	29.7	70.3
Local administration expenditures	13.3	68.7

Source: Ministry of Planning, Indicators of Regional Development 1964/5 - 1966/7, unpublished memorandum, Cairo, 1968, pp.148-57

This is significant for hospital beds and for the spread of education above the primary level. And the discrepancy between public administration expenditures and revenues implies a hidden subsidy from provinces to the urban governorates. That the proportion of students in primary schools in the provinces is close to the proportion of their population in total is, however, a measure of the progress accomplished in certain fields.

In removing Egypt's former cultural aristocracy from power the government is also trying to push through a technical and economic revolution. Egypt's new higher class is composed of remaining landlords, scientists, doctors, engineers, architects, army officers, and factory managers.<sup>30</sup> In the universities the brightest students generally take medical or engineering degrees, while the less promising study the social sciences. Professors in the arts faculties unanimously complain of a drop in standards which is due, at least in part, to a change in the cultural climate of the country. Anyone

who mixed with the witty, cosmopolitan, self-confident members of the pre-revolutionary Egyptian cultural elite is likely to find their successors philistine, serious, and dull. But they have a much better understanding of their country's needs.

The Islamic ideal of human equality leaves the way open for upward movement from the bottom to the top of Egyptian society. With the removal of the hereditary royal family and the big landowners, and the present government's reiteration of its concern for the 'common man', this ideal has taken on somewhat more visible substance than it had prior to 1952.

At present while ownership of land is still an accepted means of confirming one's status, other factors are assuming greater importance. Success in industry and commerce is now a factor in social status and prestige, and government service is increasingly popular among young people.<sup>31</sup> In keeping with this trend, education is also assuming greater importance as a means of rising on the social scale. Where once literature, the fine arts and religious studies provided prestige for the individual, now training for industry, commerce or government work has also opened the way to wealth and position. Today, therefore, a new factor has been introduced: the recent Egyptian aspirations to power are of a degree and kind that will require the transformation of the traditionally passive Egyptian masses into a source of active political, economic, and military strength.

The present conflict between the old and the new takes a number of forms. The challenge of the new faces primarily from actions taken by educated people and the government. More jobs of more different kinds are available, travel is easier for the villagers and is more frequently undertaken, and the blaring radio with its movie music is favoured over local poetry and singing. While a village has a largely illiterate adult

population, nearly all of its children are literate, and they know more about more subjects than do the adults. The old values of society are challenged, while the new ones are said to be contained within a kind of Socialism which replaces the society of families with a society where the workers and fellaheen take its place.

The status of women in Egyptian society has substantially changed: they were given the franchise rights since the 1956 Constitution as well as equality with men in most areas of work. The National Charter in 1962 stated the principle:

"Woman must be regarded as equal to man and she must, therefore, shed the remaining shackles that impede her free movement so that she may play a constructive and profoundly important part in shaping life."

32

During the first half of the present century, there was the traditional belief that the education of girls was wasteful, if not useless. This attitude has changed, and now the strongest single factor behind the gradual emancipation of women in Egypt has been the growing acceptance of their right to equal educational opportunities with men. The proportion of girls in all stages of education which did not exceed 6 per cent in 1937 amounted to 38 per cent and 36 per cent and 34 per cent in primary, preparatory and general secondary education respectively,<sup>33</sup> and in 1962 26 per cent of university students were girls.

Thus, social change and social mobility could be attributable to four major changes: modernisation or technological change; demographic change; political change; and educational change.

## 1. Modernisation in Agriculture

### a) The Agrarian Reform

Before the introduction of the 1952 agrarian reform, over 94% of all landowners shared only 35% of the cultivated land, while the remaining 6% of the owners held 65%. While 188 landowners held over 1,000 feddans each, some two million farmers owned one feddan or less.<sup>34</sup> About 67% of the land was leased by landless peasants. By the time of the Revolution, rents sometimes exceeded the entire value of the crop that could be produced on the land.

Land reform was not an idea unique to the Revolution government, but all previous attempts in that direction had failed, by a parliament dominated by big landowners and rich merchants and industrialists, most of whom had invested heavily in land.

In less than two months after the Revolution, the Agrarian Reform Law was announced on September 9, 1952. An explanatory note to the law explained its social objectives:

"There are social justifications which must not be overlooked because the distribution of wealth in Egyptian rural districts is at variance with any concept of justice ... The unequal distribution of agricultural wealth gives rise to social evils. One of the biggest effects of these evils is the enslavement by a minority of the big landowners of the peasant and the direction of the country's general policy according to their personal interests, which in no way conform with the principles of democracy ..."

35

An individual could retain a maximum of 200 feddans, while transferring an excess of up to 100 feddans to his children. Surplus lands would be purchased by the state for seven times the basic land tax, equal to ten times the rental value. In a sense it was a moderate measure since even 200 feddans of irrigated land in the lower Nile Valley or Delta was still worth between

£E100,000 and £E140,000.<sup>36</sup> The reduction in rents was more radical since it affected small and medium landowners also and benefited the poorer sections of the farming community. The significance of the 1952 agrarian reform was that it sharply reduced, though it did not destroy, the political influence of the big landowners.

Again in 1961, other laws and decrees amended the terms of the original bill. Law No.127 of July 1961 limited to 100 feddans the holding of any individual or organisation, this was amended to 50 in 1969. But even this was certainly not Socialism - it might be compared with anti-monopoly legislation and redistributive taxation in capitalist countries.

By 1966, about one million feddans had been expropriated and 700,000 feddans had been redistributed to some 290,000 families,<sup>37</sup> comprising 1.5 million individuals. Distribution of land has increased the average size of the smallest farms by 50%. Since the reform law calls for distribution of no less than 2 and no more than 5 feddans to a recipient, it appears likely that 2 feddans is considered to be the minimum holding necessary to provide a family with a bare living. The reform has transferred control of the majority of the available land from the absentee aristocracy to the resident smallholder and has left a large share of farm income in the hands of the producers, see Table 5.

#### b) Land Reclamation

Due attention has been paid by the government to the land reclamation as the only way for expansion of the cultivated area. The National Charter aptly sums up the vast goals of the land reclamation programme:

"The horizontal expansion of agriculture into arid lands, and the operations for the reclamation of new lands must not halt for a single second. Green areas must expand daily on the banks of the Nile. A day shall come when every drop of the Nile shall be able to flow over its banks and generate an ever dynamic life."

TABLE 5: LAND OWNERSHIP IN EGYPT

Farm size (feddans)	Before 1952 Land Reform		- 1965 -	
	Thousands of owners	% of total land	Thousands of owners	% of total land
Under 5	2,642	35.4	3,033	57.1
5 - 9.99	79	8.8	78	9.5
10 - 19.99	47	10.7	61	8.2
20 - 49.99	22	10.9	29	12.6
50 - 99.99	6	7.2	6	6.1
100 - 199.99	3	7.3	4 *	6.5
200 and over	2	19.7	-	-
Total	2,801	100.0	3,211	100.0

\* 4,210 owners of 100 feddans each

Source: C.A.P.M.S., Statistical Handbook, Arab Republic of Egypt, Cairo 1972, p.54; Wilber, D.N., U.A.R. Egypt, its people, its society, its culture, New Haven, Hraf Press, 1969, p.316; Mabro, R., The Egyptian Economy, 1952-1972, London, Clarendon Press, Ox., 1974, p.73

The pioneers among the reclamation projects were the Tahrir Province, the New Valley and the Natrun Valley. In 1972, almost one million feddans were reclaimed, that is 16% of the whole cultivated land at mid-century.<sup>39</sup>

Within the reclaimed areas, each farmer receives a plot of two to five feddans, a house, cattle, and implements, and a loan from the local Co-operative. For each area of 4,500 feddans, a school, a medical unit, a veterinary unit, and premises for each Co-operative are provided. For each area of 13,500 feddans the Ministry constructs a market, a mosque, a club, and premises for town council and for a branch of the Agricultural and Co-operative Credit Bank.

Over 400,000 families including some three million individuals benefited

by land redistribution of both reclamation and agrarian reform. Co-operative Societies were established all over the countryside to offer various forms of aid to farmers. In 1971 the number of such societies reached 5,013 covering all Egyptian villages.<sup>40</sup>

c) Peasants and Land

Egypt is the scene of a struggle between modern techniques and traditional methods. On the whole, the country has benefited from the impact of the new ways; land reclamation, the scientific development of irrigation and the introduction of new farming techniques have brought bigger crops. However, the rate of population growth has absorbed much of the growth in national output.

Total agricultural production has increased 20% since the mid-1950s, and food production has increased 23%;<sup>41</sup> population has grown so rapidly, however, that per capita output has barely been maintained. In the struggle to support a large population on the limited land available, Egyptian agriculture has become so organised and controlled, relatively well administered, and highly productive. Because of the intensive farming and multiple cropping, yields per feddan are very high for almost all crops. Each cultivated feddan produces an average of 1.7 crops per year, and over 99.5%<sup>42</sup> of the cultivated land is under irrigation.

A number of factors, in addition to methods of cultivation, contribute to this unusually high productivity: 1) an agricultural labour force with centuries of experience in settled farming, 2) ease of communication between government and farmers, growing out of geographical cohesiveness and a tradition of government control, 3) a good 'growing climate', with abundant sunshine, and 4) fertile soil which until recently had been constantly replenished by deposits of silt from the Nile.

Throughout most of Egypt's history, the fellah has been treated by his rulers as an expendable economic resource. Successive Egyptian governments - most of them alien - used the food supply and tax revenue they extracted from the peasant to perpetuate themselves. The victim of countless oppressions and indignities and living in unrelieved monotony and poverty, the fellah had been brought too low to be able to help himself without a great deal of compulsory assistance from the government.

Since 1952, however, comprehensive and determined efforts have been made to improve the lot of the fellaheen - described as the backbone of the Revolution - through agrarian land reform, land reclamation, agricultural co-operatives in every single village, increased supplies of fertilisers, loans in cash in the harvest seasons, and improvement of health services and sanitation measures (see Tables 6 and 7).

TABLE 6: LOANS OFFERED FOR AGRICULTURAL CREDIT AND CO-OPERATION  
£E.000

Year	1952	1960	65/66	66/67	67/68	68/69	69/70
Amount of Loans	15960	36548	79345	86273	78478	68843	80868

Source: C.A.P.M.S., Statistical Handbook, 1952-1972, Cairo, 1972, p.49

Farming practice in Egypt is slow and unevenly changing under the impact of modern knowledge, where government experts are given a free rein, mechanisation and scientific soil treatment almost completely exclude the older ways. The high yields obtained by the government experimental stations show that the old methods and practices of cultivation are

TABLE 7: NUMBER OF AGRICULTURAL CO-OPERATIVES, MEMBERS AND THE CAPITAL 1952-1971

Year	Number of co-operatives	Members	Capital
1952	1727	498,652	661
1965	4839	2,368,984	2653
1966	4879	2,532,579	2682
1967	4921	2,750,876	2801
1968	4955	3,046,099	2996
1969	4998	2,921,369	3993
1971	5013	3,119,481	7404

Source: C.A.P.M.S., Annual Yearbook of U.A.E., Cairo, 1973, p.17

laborious, wasteful of seeds and natural fertilisers, and are comparatively less profitable. However, in spite of the government's ambitious land redistribution programme and its avid encouragement of the use of mechanised and scientific methods, the fellah is not easily turned from the traditional procedures he has learned for so long from his elders. Thus, the agricultural sector is indeed in need of a more educated and trained labour force.

#### d) Agriculture and Economy

Egypt has realised considerable economic progress during the last two decades especially in the field of industrialisation. Agriculture, however, is still the backbone of the Egyptian economy as it constitutes 33 per cent of the gross national products. The total value of agricultural production in 1970 reached about £E1075.1 million,<sup>43</sup> that is one third of the total national income. In 1965 agricultural exports constituted 72 per cent of

Egypt's total exports. The proportion of capital invested in this sector is 20 per cent of the total capital.

Moreover, agriculture will continue to occupy this important position until the industrialisation programmes are promoted and until a balance between the different economic activities is effected like other countries of the world which passed through the same stage. In the USA income from the agricultural sector constituted 40 per cent of the national income in 1800, and now it does not exceed 7 per cent.

For a long time Egypt's economic structure in general assumed an agricultural character. In 1907 the proportion of persons occupied in the agricultural field reached 70 per cent of the total manpower against 11.5 per cent in the field of industry. After World War II and with the expansion of industry, the workers in the agricultural field decreased to 58 per cent in 1960 and 51.3 per cent in 1970, while the proportion occupied in industry increased to 12.6 in 1960 and to 18.6 in 1970, see Table 8. Agriculture, however, is the way of life for about 60 per cent of the total population. It contributes one third of the gross national product and the tangible progress in this field has a direct bearing on the general economic development of Egypt.

In assessing the possibilities of agricultural development, the available resources and the implemented and scheduled agricultural programmes, especially after the completion of the High Dam, indicate that the increase of agricultural production at a rate higher than the population increase is not possible. It is not expected that this development could be impeded by insufficient manpower on condition that immigration from the countryside to the towns should be decisively stopped. Still the rapid development in the field of agriculture is not an easy task especially under the present

TABLE 8: PERCENTAGE DISTRIBUTION OF LABOUR FORCE BY ECONOMIC ACTIVITY IN EGYPT (1907-1970)

Years	1907	1917	1927	1937	1947	1960	1968	1969	1970
Agri-culture	70.0	68.5	67.0	69.0	62.4	58.0	54.7	52.5	51.3
Industry	11.5	11.5	10.5	10.6	12.3	12.6	17.0	17.4	18.6
Trans. & trad.	7.6	10.0	12.5	10.4	12.1	11.7	12.8	13.3	13.5
Services	10.9	10.0	9.9	10.0	13.2	17.7	15.5	16.8	16.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: C.A.P.M.S. Population and Development, Cairo, 1973, p.174. See also, Mabro, R., The Egyptian Economy 1952-1972, Oxford, Clarendon Press, 1974, p.207

conditions where capital investment in this field is not sufficient, the tools are still, in general, primitive, and the high rate of illiteracy among agricultural workers and the narrowness of land holdings and the need for more organised systems and more educated and trained people who are able to use mechanised and scientific methods of cultivation, irrigation and harvest.

## 2. Modernisation in Industry

### a) New Policy

Most of the industries which existed before 1952 were consumer industries taking their raw materials from agricultural products such as the food industries, textile industries and furniture manufacturing industries. Industry could not realise any progress except after 1930 with the introduction of custom-protection measures in the country. After World War II it became comparatively important with the establishment of some modern

industries such as rayon, paper, jute and fertilizer industries.

As a matter of fact, there was no well-defined industrial plan except after the 1952 Revolution which can be considered a real turning point in the history of industry in Egypt. Since then, evident care has been given to the existing industries as well as to the newly established ones. Since 1952, 800 new industrial projects have been established costing £E1,000 million.<sup>44</sup> Industrial projects before the Revolution were dominated by individuals, and aimed at realising quick profits without taking into consideration the national interests. For this reason production industries had no real existence mainly because they needed big capital and trained and skilful workers.

The new pattern of economy is not to be achieved by a communist-type of uniformity of economic structure but by diversity within unity. Thus the national economy was divided into three sectors: public sector, which would lead progress in all domains; private sector, characterised by its individual creative initiatives, would participate within the framework of the overall national plans; and the co-operative sector, which would keep alive the traditional crafts and brings modern methods and machinery within reach of the fellaheen.

The dominantly free enterprise policy was replaced, therefore, by a Socialist one depending on economic planning and state control. The Constitution stated that:

"The national economy should be organised in accordance with comprehensive development plan which ensures raising the national income and improving the living standards."

45

The planned economic policy necessitated the establishment of a number of institutions, the most remarkable of which are: the Permanent Council

for the Development of National Production (P.C.D.N.P.) in 1953; the National Planning Committee for Drafting the National Comprehensive Plans for Social and Economic Development in 1955; a new Ministry for Industry was established in 1956; and a new Ministry for Scientific Research was established in 1964.

Ownership, which was dominantly individual before the Revolution, has been changed, through a series of nationalisation schemes, to two styles of ownership: public and private. The National Charter pointed out:

"Nationalisation is the transfer of one of the means of production from the sphere of private ownership to that of public ownership."

46

The State was keen to lay down a well-defined plan for the co-ordination of resources, potentialities and requirements and effecting a balance in the fields of economic activity, instead of depending on agriculture alone, or on agricultural raw materials in industry.

#### b) National Planning

In January 1957, a National Planning Committee was set up whose aim was to prepare a long-term plan for social economic development. This Committee formulated a plan for industrialisation that was put into operation in 1958. But the planners realised, and the government soon learned, that industry could not be planned in a vacuum; therefore, in July 1960 a Comprehensive Five-Year Plan for 1960-5 was launched. This was to be followed by a Second Five-Year Plan for 1965-70 with the target of doubling the national income by 1970. The 1958 plan for industry, which had already had considerable success in speeding up industrialisation, was absorbed into the new Five-Year Plan which covered the agricultural sector as well.

This time 80% of the £1,636.4 million to be invested would be undertaken by the public sector. About 40% would be allocated to industry and

20% to increase the agricultural potential. The estimated distribution of investment between the various sectors in the first Five-Year Plan is as follows in Table 9.

**TABLE 9: DISTRIBUTION OF INVESTMENT BETWEEN THE VARIOUS SECTORS  
IN THE FIRST FIVE-YEAR PLAN (1960-1965)**

Sectors	Investment (Million £E)	%
Agricultural, irrigation and drainage	335.9	20.5
High Dam and Suez Canal	82.3	5.0
Industry and Electricity	574.7	35.2
Transport, Communications and Storage	234.2	14.3
Housing and Public Establishments	187.6	11.5
Services	101.7	6.2
Changes in Stocks	120.0	7.3
Total	1,636.4	100.0

Source: Abdallah, H., U.A.R. Agriculture, Cairo, Ministry of Agriculture, Foreign Relations Department, 1965; Wilber, D.N., United Arab Republic, New Haven, 1969, p.209; Mansfield, P., Nasser's Egypt, Great Britain, 1965, p.134

As this table shows, the heaviest concentration of investment is in industry and electricity. The industrial sector is expected to generate an increasing share of the national income, and the agricultural sector's share to decline.

The basic aims of the first Five-Year Plan were to increase national income by 40 per cent, and to double it by the end of the ten-year period.

"In terms of overall goals, Egypt did better than most similarly situated countries during the first plan period, and particularly during the first four of the five years."

TABLE 10: GROSS DOMESTIC PRODUCT BY SECTORS (AT CONSTANT FY 1960 PRICES - IN MILLION EE)

Sectors	Base Year					1964-65 (goal)	1964-65 actual as % of goal	1959-60 1964-65 (% increase)
	1959-60	1960-61	1961-62	1962-63	1963-64			
Agriculture	405.0	402.7 <sup>a</sup>	373.0 <sup>a</sup>	426.4	452.9	512.0	93.5	17.8
Industry	256.3	285.6	309.9	329.2	369.6	516.4	74.6	50.2
Electricity	9.8	12.2	16.3	18.4	18.6	23.6	94.9	128.6
Construction	47.1	44.2	73.6	83.5	96.0	52.0	178.1	96.6
Transport and Storage	92.9	102.2	116.9	127.1	144.0	117.0	134.7	25.9
Housing	73.0	73.8	76.2	77.6	78.7	84.0	95.2	15.1
Public Utilities	6.4	6.8	7.0	7.4	7.6	9.0	77.8	40.6
Finance and Commerce	129.2	145.1	151.6	154.0	148.3	162.1	93.7	25.5
Other services	265.5	290.9	286.6	308.3	332.1	329.0	119.0	23.9
Total	1285.2	1363.5	1411.1	1531.9	1647.8	1795.0	98.2	37.1
Annual Increase	6.1	3.5	8.6	7.6	6.9			

(Compound rate of increase: 6.5%)

(a) depressed by 1961 crop failure

Source: Wilber, D.N., U.A.R. Egypt, its people, its society, its culture,  
New Haven, Hraf Press, 1969, p.399

**TABLE 11: NUMBER IN EMPLOYMENT IN AGRICULTURE AND INDUSTRY AND THEIR RELATIVE CHANGES DURING THE FIRST FIVE-YEAR PLAN (1960-65)**

Sectors	Base Year		1st Year		2nd Year		3rd Year		4th Year		5th Year	
	1959/60		1960/61		1961/62		1962/63		1963/64		1964/5	
	No. of	%	No. of	%	No. of	%	No. of	%	No. of	%	No. of	%
	Workers		Workers		Workers		Workers		Workers		Workers	
Agri- culture	4325	54	3600	55	3600	54.1	3632	52.9	3673	51.9	3785.0	51.5
Industry	601.8	10	625.6	9.6	679.0	10.2	725.9	10.5	789.7	11.1	825.0	11.2
Total No. of Workers in the Plan	6006.0	100	6511.9	100	6659.9	100	6868.2	100	7085.0	100	7333.4	100

Source: General Frame of the Five-Year Plan for Economic and Social Development, July 1960 - June 1965, together with information from the Ministry of Planning.

The results' growth were immediate, especially in the industrial sector. Industry's contribution to GDP had been growing by about 10 per cent annually. GDP, in turn, increased by only 6.9 per cent.<sup>49</sup> After the 1967 war with Israel, various problems persisted, despite the government's desire to ignore them, but the next change involved temporary abandonment of the Second Plan. Instead, Egypt adopted a three-year plan 'Accomplishment Plan' for the period 68-70 to fulfill all the original goals of the Second Five-Year Plan, with some additions and adjustments for petroleum discoveries. In that time a revised budget was published for the fiscal year ending June 30, 1968, that cut all expenditures except defence to the bone and allocated £E232 million of public funds to investment. So, the Arab-Israeli War in 1967 must have inhibited for a while any new attempt.<sup>50</sup>

In 1972, a ten-year plan was announced, but it is very difficult to find any data about it or to trace it.

Since 1974 a new economic policy, called the 'open door' policy has been adopted.

"The open door economic policy would supply the most modern technological means towards the rapid and intensive industrialisation needed to promote exports by raising their standards."

51

It would encourage foreign investors to invest their money in long-term projects in the country. Suspicion has been expressed concerning the success of this new policy. So far some foreign investors have been reluctantly accepted to invest in the country, even though many of those who came invested their capital in short-term projects. A research carried out by two Egyptian economists about foreign banks in Egypt at present concluded that, despite many facilities offered to these banks, a significant proportion of their money - as much as 43%, including the savings of Egyptians - has been transferred abroad instead of investing it in Egypt.<sup>52</sup>

It could be suggested that an analysis of this new policy should take into consideration three main criteria: political grounds or political stability; economic grounds; and communication and facilities.

#### c) Industrial Output

According to statistical data, 1,440 industrial projects were scheduled to be completed during the First Plan. Six months before the end of the plan period, 786 had been completed and 41 had reached the 'running-in' stage. Another 121 were under construction, and 126 had been postponed or cancelled.<sup>53</sup>

By 1965, the industrial sector (broadly defined to include manufacturing,

TABLE 12: VALUE OF INDUSTRIAL OUTPUT 1952, 1960, 1964, 1965 (IN MILLION CURRENT ££)

	Fiscal 1952		Fiscal 1960		Fiscal 1964		Fiscal 1965		Increase 1952-65 (%)
	Value (million ££)	Share of total (%)							
Spinning & weaving	84.6	27.0	230.5	34.9	332.7	29.9	361.7	30.8	325.9
Foodstuffs	122.3	39.0	177.1	26.8	282.6	25.4	284.1	24.2	132.8
Engineering & electric. equipment	30.1	9.8	80.9	12.2	163.9	14.7	174.5	14.9	483.3
Chemicals & pharmaceuticals	20.5	6.5	49.1	7.4	121.1	10.9	133.6	11.4	570.0
Petroleum	34.2	10.9	66.4	10.0	118.3	10.6	122.6	10.4	258.8
Electric power	10.1	3.2	29.4	4.4	54.4	4.9	54.7	4.7	450.0
Building materials & ceramics	8.4	2.7	20.0	3.0	29.0	2.6	31.0	2.6	244.0
Mining	3.6	1.1	7.5	1.1	11.3	1.0	11.2	1.0	175.0
Total (a)	313.8	100.0	660.9	100.0	1,113.3	100.0	1,173.4	100.0	273.9

(a) Excludes government workshops, military production, cotton ginning and packing, bakeries, tea packing, printing, and publishing.

Source: Wilber, D.N., United Arab Republic Egypt: its people, its society, its culture, New Haven, Harp Press, 1969, p.407; C.A.P.M.S., Population and Development, op.cit., p.170

mining, petroleum, and electric energy) employed some 843,000 workers and produced goods valued at £E1,173.4 million, see Table 12.

The total value of industrial production rose by 285 per cent during the period 1951/52 - 1967/68. While industry contributed in 1950 about 8.4 per cent of the total national income, this rose to about 22 per cent in 1966, see Table 13. In 1970, the industrial production was estimated at £E2252.4 million, while the GDP was estimated at £E5306.6.<sup>54</sup> Manufacturing industries include the industrialisation of products from cotton, rice, wheat, sugar-cane, milk products, vegetables, fruit and mineral products. Many important industries have been promoted, such as fertilisers and chemical industries, including sulphuric acid, super phosphate, alcohol, soap, medicine, and plastic. The spinning and weaving industry contributes the largest rates towards the national economy. The government has paid due attention to the iron and steel products as well as the products of cars, lorries, television sets, refrigerators, tractors, and railway wagons, etc.

TABLE 13: PERCENTAGE SHARE OF AGRICULTURE AND MANUFACTURING INDUSTRY  
IN NATIONAL INCOME (1950-1966)

Year	Agriculture	Industry
1950	44.7	8.4
1955	35.8	10.8
1960	29.9	19.8
1966	29.0	21.7

Source: Anis, M., Study of National Income of Egypt, 1958;  
C.A.P.M.S., Statistical Handbook, 1972.

Concurrent with this development geological surveys have been made in remote areas and prospecting has taken place for natural resources which have lain untapped in unproductive areas. Large deposits of good quality iron ore have been found, mainly in the region around Aswan, and plans have been carried out to exploit them.

Similar development has taken place in the oil industry, although Egypt is still far from becoming a major oil exporting country, but the exportation of oil has increasingly continued. New commercially usable strikes have been made in the Red Sea areas. Foreign oil companies have been granted exploitation rights and some have been given exploration concessions in the Eastern and Western deserts. A system of pipelines has been carried out to transport refined products to industrial regions.<sup>55</sup>

d) The Industrial Structure and the State

Since 1952, the government has acquired ownership of as much as 90 per cent of the basic means of industrial production. The 1961 industrial census pointed out that most industry was nationalised, it recorded 884 establishments with over 50 employees and 3,171 smaller firms; both totals undoubtedly have risen substantially since that time.

The State continues to stress the fact that it is proper to introduce incentives into the socialised industries, and that this step has been taken; it is stated that since a fourth of the profits of the companies in the public sector is distributed among the workers, it is in their own interest to increase production. In addition, since the workers sit on the boards of directors of these companies, they feel a sense of participation and responsibility.

Despite obvious progress, industry suffers acutely from mismanagement, bureaucratic chaos, shortage of skilled workers, excessive employment at

government urging, and the lack of raw materials and equipment.

e) Industrialisation and Urbanisation

The general trend of the industrial planning is to increase the share of the rural areas as to services, so that the assurance of these services may help the farmer to increase his income. However, most of the major industries are concentrated in Cairo, Alexandria and Aswan. In Cairo alone there are about 22% of the major establishments of Egypt, followed by Alexandria, Gharbia and Dakahlia, respectively. These four governorates account for about half of the industrial establishments.

The industrial policy now gives considerable care to establishing small factories in rural areas and small towns in both upper and lower Egypt. As a matter of fact, the Egyptian countryside is still far from the required industrial level. There is no doubt that partial and disguised unemployment which is directly connected with the problem of overpopulation cannot be solved except by laying down extensive programmes for the industrialisation of the countryside, training the agricultural workers in rural manufactures such as canning, carpets and spinning and weaving industries as a preparatory step for their promotion in the industrial field. This may help to provide higher incomes for the rural inhabitants thus keeping them from migrating to urban areas where they may find no chance of remunerative work.

f) Labour Force

After 1952, great care was paid to workers: in industry Western methods are replacing the work of small artisans and craftsmen except in some of the highly skilled working trades. These workers, together with a fair number of the landless fellaheen, are gradually being absorbed by the expanding factories, and establishing new ones. The National Charter

asserted the right of every citizen for work, and stated that:

"We should remember that the right for work in itself is the right for life, in so far as it is the actual confirmation of the existence and the value of the human being."

56

In 1959, the Ministry of Social Affairs and Labour was created, to be followed, in 1961, by a separate Ministry of Labour. Presidential Decree No.1201, 1964 reorganised the Ministry of Labour and defined its duties. It was to study and devise the labour policy in accordance with Socialist principles, and especially to provide the people with opportunities for stable and remunerative labour and to ensure such labour relationships as would help to increase production and raise the standard of living.

Major changes in labour legislation and policies were introduced in 1961 and 1962. A profit sharing scheme compelled firms to distribute 25 per cent of their net profits to the benefit of their workers and employees. Cash payments to personnel amounted to £E3.75 million in 1962 and £E5 million in 1964/5.<sup>57</sup>

Membership of company boards was reorganised; the number of members limited to seven including two elected representatives of the personnel, one weekly paid worker and one salaried employee. Hours of work were reduced from 48 hours to 42 hours a week at the old wage. This decree also provides that workers could do 12 hours overtime in a week, at a premium above normal wages.<sup>58</sup> Workers and employees were, however, forbidden to cumulate two jobs, inter-firm mobility became difficult, especially in the public sector where the former employer's permission had to be sought before the transfer. Children under 12 may not be employed, and until age 15 they may not work more than six hours a day. Women are guaranteed non-discrimination when they hold the same job as male workers. They are entitled to 50 days of

maternity leave, at 70 per cent of their pay.

The minimum wage of £E0.250 (later to rise to £E0.300 then to £E0.400) was enforced in the public sector. This regulation was recently extended to the private sector. Average wages of manual workers in modern industry rose sharply between 1962 and 1964. Thus, the average money wage index (1953/4 = 100) for manual workers in industry rose from 128 in January 1962 to 169 in January 1969. The wages in this sector rose from £E82 million in 1960/61 to £E182 million in 1969/70, an increase of 122 per cent amounting to £E100 million.<sup>59</sup>

Dismissals became almost impossible both in law and in practice especially when the Arab Socialist Union was at its most active defending workers against their employers in the private as well as the public sector. Social insurance became compulsory and the employer's contribution was raised from 7 to 17 per cent of salary. Workers were guaranteed fourteen days paid holiday plus five national holidays a year. Sickness leave was increased to 180 days a year during which the worker is entitled to 70-80% of his basic salary.<sup>60</sup>

Whether consciously or unconsciously, Egyptian industrial workers are aware that so far they have benefited most from the country's economic development since the Revolution. In many respects they constitute a privileged class. All this has been done for the workers according to Nasser's doctrine that the mass of the people (workers and fellaheen) have been deprived for so long that they deserve to be compensated. The strongest criticism that can be made is that the government has conferred benefits to the workers much more than to the fellaheen; and this has encouraged emigration from rural to urban areas.

Egypt now has for the first time in its history an industrial working

class - together with the problems characteristic of the growth of that group. The productivity of workers in industry has risen, but it is still very low as compared with advanced nations. It is low for a number of reasons: government employment practices, lack of technical skills and health problems of the workers.

The main developments for 1937-60 are shown in Table 14. The total labour force increased by more than 1.19 million between 1937 and 1960. An interesting feature is that between 1947 and 1960 the labour force increased at a much slower rate than total population (less than 1% against 2.5% per annum). Agriculture employed less than 400,000 of an increment of 1,917,000 over the whole period. More than 1.5 million had to find jobs in other sectors.

TABLE 14: LABOUR FORCE AND EMPLOYMENT BY SECTORS 1937-1960 (IN THOUSANDS)

Sectors	1937	1947	1960
Labour force	5,809.2	6,994.6	7,726.6
Agriculture	4,020.4	4,085.7	4,406.4
Mining and quarrying	10.8	13.0	21.1
Manufacturing	352.7	560.6	713.1
Electricity, gas, water	21.0	22.6	36.8
Construction	120.7	113.3	158.8
Transport	138.9	203.3	260.2
Commerce	439.5	590.4	641.4
Other services	701.7	1,051.8	1,369.4
Unspecified	3.5	353.9	119.3

Source: Population Census 1960, Vol.II, Supplementary Table IV; Mabro, R. (op.cit.), p.205

Industrial employment grew from a very small base (its share in the total was only 6.1% in 1937) and in relation to the period growth of industrial output after the 1952 Revolution, manufacturing employment expanded at a moderate rate (1.9% annually between 1947 and 1960, to be compared with an average rate of growth of real industrial output of some 7 or 8 per cent).<sup>61</sup> The very nature of modern industrial development - which leads to the adoption of labour-saving technology and involves structural shifts towards capital-intensive industries such as chemicals, petroleum, paper, and metals - explains this performance.

The bulk of the increase in the labour force found employment in the tertiary sector (including activities which the census failed to specify). The share of this sector in total employment increased from 24% in 1937 to about 30% in 1947, and to 31% in 1960. An interesting feature is that the increase in this sector during the period from 1947 to 1960 was very small due to the shift towards manufacturing and industry. As construction, transport and commerce, the increase of employment in these sectors was relatively moderate. The more interesting feature is the increase in employment in the services sector in the provinces, due to the concentration of most of the industries in the main cities and towns.

Changes in the sectorial pattern of employment after 1960 follow the same general trend as shown in Table 15. But there are certain differences. The rate of growth of total employment was much faster than between 1947 and 1960 (2.6 per cent against 1.0 per cent),<sup>62</sup> approximating the rate of population growth. Industrial employment expanded faster than before because of a higher rate of investment as well as a result of employment policies; after nationalisation in 1961 and 1962 the government compelled public companies to engage more persons than they actually required. The

inadequacy of these policies reflect to a large extent the inadequate resources of an underdeveloped country faced with a war with Israel, population explosion, and subjected to internal and external pressures for rapid development.

The apparent increase in construction, transport, commerce and services seems overstated: the High Dam, irrigation workers and land reclamation, and investments undertaken under the first and second Five-Year Plans (1960/1 - 1969/70) only explain a large part of the increase. Thus, the country is moving from a stage where agriculture is dominant to the stage where the share of industry and other sectors are becoming large.

TABLE 15: EMPLOYMENT BY SECTORS 1960/1 - 1969/70

a) Total numbers (thousands)			
Sectors	1960/1	1964/5	1969/70
Total employment	6,511.9	7,373.9	8,274.7
Agriculture	3,600.0	3,751.0	4,048.3
Industry and electricity	638.7	843.0	938.9
Construction and transport	418.7	629.1	735.1
Commerce	663.0	729.7	801.7
Services	1,191.5	1,421.1	1,750.7

b) Annual average rates of growth (percentage)			
	1960-1965	1965-1970	1960-1970
Total employment	3.2	2.3	2.6
Agriculture	1.0	1.5	1.3
Industry and electricity	7.1	2.2	4.4
Tertiary	5.3	3.2	4.2

NOTE: estimates seem restricted to the employment of industry within establishments, thereby excluding jobbing artisans, services include the government but not the army.

Source: Ministry of Planning, Follow-up Reports, various issues.

The labour force is defined as the portion of the population whose energy can be used in economic activity whether they actually contribute to the production of economic commodities and services, or otherwise are capable of and willing to work and also looking for work.<sup>63</sup> In accordance with this definition, the percentage of individuals of employment age (15-65) in Egypt is less than its counterpart in developed countries such as the USA and UK, and the percentage of children and unemployed women is higher than its counterpart in these countries too. However, these last two groups require commodities and services as consumers, so the age structure in Egypt has a harmful effect on production.

However, the rate of labour force to the whole population has a tendency to decrease; it was about 27.4% in the year 1969 and reached about 26.4% in 1970. This is due to the policy of the State which enables the individuals to carry on the education to a greater extent than before.

As a result of employment policy, the percentage of unemployment is not very high, it was estimated at about 2.2 per cent of the labour force in 1970. The maximum rate of unemployment reached 5.4 in the big towns and about half of this rate (2.9 per cent) in other towns. But the rate of unemployment reached its minimum (1.1 per cent) in the countryside. In Table 16, most of the unemployment belonged to the age category between 20 and 29 years as this group contributes to the total unemployment with the largest proportion of 30 per cent. In fact, the females of this group contribute to a large extent in the unemployment among this group, since they get married and leave work within this stage. However, the percentage of unemployment of the labour force within this age group is 2.9 per cent. The maximum rate of unemployment is 5.3 per cent among the age group category between 15 and 19 years old, this is due to the fact that most of the members of this group

are students in secondary education.

TABLE 16: PERCENTAGE DISTRIBUTION OF THE UNEMPLOYED BY AGE GROUPS  
(1970)

Age Groups	Distribution of Unemployed	Rate of Unemployment %
10-14	15.0	4.1
15-19	27.0	5.3
20-29	30.3	2.9
30-39	12.0	1.2
40-49	8.0	1.1
50-64	6.7	1.0
65 and over	1.0	0.6

Source: C.A.P.M.S., Facts and Figures, Cairo, 1972, p.17;  
Statistical Reports, various issues.

The lack of entrepreneurship and managerial skills was one of the biggest obstacles impeding industrial progress. At the end of the 1950, the most authoritative study on this subject concluded that all the plants studied "suffered from critical shortages of competent administrators, experienced professional staff and trained supervisors."<sup>64</sup> On the other hand, the new organisations such as the Suez Canal Authority, and Oil Refinery, "are headed by young and competent administrators, in a great many cases by officer-engineers drawn from the Egyptian army, who are eager to adopt any procedure or technique, foreign or domestic, which they think will work." But even in the refinery, "it was difficult to develop a new spirit in the old working forces which were accustomed to the routines of government bureaucracy."<sup>65</sup>

The government has attempted to develop managerial skills by founding,

with the help of the International Labour Organisation and the United Nations, a Vocational Training and Productivity Centre, and Institutes of Public Administration and of Personnel Management.<sup>66</sup> As regards technicians, there has been a very marked improvement in the last two decades, owing to the entry into industry of many thousands of Egyptians who have studied abroad. The great expansion of local engineering faculties has also helped considerably: "In the opinion of outside observers, training for engineering particularly at Cairo and Ain Shams Universities, is fairly up to date by Western standards."<sup>67</sup>

It is certain that the efficiency of Egyptian workmen has risen considerably during the last two decades, but there is equally no doubt that the productivity of Egyptian workmen is still far below that to be found in the developed countries. Harbison and Ibrahim in 1958 pointed out that:

"In many factories which we visited in Egypt, six to eight workers were employed to produce what one, with comparable machinery and equipment, would turn out in the United States."

68

Many factors account for the low productivity of Egyptian workmen. First there is their health problem. Second, there is the prevalence of illiteracy due to the drift from the rural areas to the cities and towns where the industries are concentrated. Third, there is the lack of training and skills. This is partly being remedied by the spread of technical and general education and by the growing habit of providing in-service training. Nevertheless, lack of skill still shows itself in the high percentage of waste products. Thus, to take only one example,

"... in the finer counts of cotton yarn, waste amounts to 12 per cent compared with 4-5 per cent in England, and the Misr textile works installed labour-saving

machinery primarily to reduce waste of raw materials."

69

However, the Egyptian workman has shown himself to be intelligent and adaptable and given better leadership and training, as well as more favourable living conditions, there is no reason why he should not equal those of other developed countries.

What remains to be considered now may be the most important part for economic development in Egypt, that is, the shortage of skilled labour and its relation with the educational system.

It seems that Egypt failed in its attempt to provide efficiently 'skilled labour' to the Egyptian economy over the period 1952-1967.

A Report made in 1967 by the Ministerial Committee for Manpower about the educational policy in Egypt stated that:

"The expansion of education in Egypt has been carried out in quantitative direction without paying due attention to the qualitative needs, which are required for social and economic development. Therefore, the country is faced by surplus among some kinds of graduates, while an acute shortage is felt among some others, especially skilled workers, semi-skilled workers, and technicians."

70

The shortage of semi-skilled workers was estimated at 433,000 in 1970 and 500,000 in 1975, and it is expected to amount to some 656,000 in 1980. The shortage of skilled workers was estimated at 139,000 in 1970, 267,000 in 1975, and it is expected to mount to some 759,000 in 1980. The shortage among this group is attributed to the great numbers of students preferring to join general secondary education rather than technical education, and the lack of skills among general secondary school leavers. A great shortage has been felt among technicians estimated at 213,000 in 1970, 263,000 in 1975, and it is expected to rise to about 373,000 in 1980, see Table 17.

TABLE 17: SUPPLY AND DEMAND OF LABOUR POWER (1970 - 1980) (in 000)

Categories	1970		1975		1980	
	Demand	Supply + -	Demand	Supply + -	Demand	Supply + -
Managers and Specialists	216	225 +9	256	277 +21	338	346 +8
Technicians	513	300 -213	610	347 -263	780	407 -373
Clerks	720	505 -215	856	846 -10	1170	1330 +160
Skilled Workers	1152	1013 -139	1370	1103 -267	1872	1113 -759
Semi-skilled workers	2160	1727 -433	2568	2068 -500	3510	2854 -656
Unskilled Workers	4239	5230 +991	5040	6059 +1019	5330	6950 +620

Source: Dr Youssef Khalil and W.M.Erd, Planning Labour Power in the Arab Republic of Egypt; Institute of National Planning, The Planning for Labour Force on the long run, Memorandum No.611; Ministerial Committee for Manpower, Report about the Educational Policy in Egypt, Cairo, 1967, pp.13-14

The needs of skilled workers, for the industrial sector alone, as estimated by the Ministry of Higher Education were 59,300 workers annually (from 1974 up to 1980) while the annual graduates from industrial secondary schools did not exceed 18,704 annually, with an average shortage exceeding 40,000 workers annually. A study made by the same Ministry to estimate the needs of technicians referred to the figure 8,100 as an annual need up to 1985, while the present average of graduates did not exceed 1,800 annually.<sup>71</sup>

The shortage of technicians, nurses, agricultural assistants, technical supervisors, and other sub-professional personnel is generally even more critical than the shortage of fully qualified professionals. For this there are several explanations.<sup>72</sup> First, Egypt, as a modernising country, usually failed to recognise that the requirements for this category exceed by many times those for senior professional personnel. Second, the few persons who are qualified to enter a technical institute may also be qualified to enter a university, and they prefer the latter because of the higher status and pay which is accorded the holder of a university degree. Finally, teachers are almost always in great demand and in short supply. Curriculum is very crowded and dependent on memorisation and systemisation.

### 3. Demographic Change

#### a) Population Growth

The rate of the population growth in Egypt is one of the highest in the world. The rate of growth began to rise gradually in the last four decades; from 1.09 per cent in 1927 to 1.14, 1.78, 2.38, 2.54 and 2.62

in 1937, 1947, 1960, 1966 and 1971 respectively. It is clear in Table 18 that the population in Egypt has doubled in 40 years between 1927 and 1966.

TABLE 18: POPULATION OF EGYPT IN CENSUS YEARS (1927-1971)

Census years	Population in thousands	Average annual growth rate
1927	14218	1.09
1937	15933	1.14
1947	19022	1.78
1960	26085	2.38
1966	30076	2.54
1971	34076	2.62

Source: C.A.P.M.S., Population and Development: A Study on Population and its Challenge to Development in Egypt, Cairo, 1973, p.22

This was, on one hand, due to the amelioration of the health conditions and its effect on the reduction of death rates, on the other hand, the latter having dropped from 27.2 per thousand in 1937 to 13.1 per thousand in 1971. But the death rate in Egypt is still high compared with countries of an older standing in economic, social and medical progress. It is still about double the rate in Japan which is 7 per thousand and against 9.4 per thousand in the USA and 11.8 per thousand in the UK.<sup>73</sup>

This fast drop in the death rate was realised by the improvement of the methods of treatment and the use of antibiotics, disinfectants and insecticides which reduced the propagation of epidemics and contagious diseases. And the improvement of social services has also contributed to the reduction of infant mortality rates. Therefore, Egypt must expect a net annual increase of three per cent, or one million new population a

year, in the late 1970s.

b) Age and Sex Composition of the Population

The distribution of population according to age reveals several important aspects and characteristics of the community. For example, it shows the size of the manpower, the burden presented by children and the aged persons on the productive elements of the population and on the government. In fact, each of these three categories has its special needs of consumption commodities and public services of all kinds. These needs differ with varying degrees in the distribution of the population according to age, and for this reason it is inevitable taking into consideration the changes which occur in this distribution when studying the economic and social characteristics of the population.

A comparison of the main age groups in Egypt with those in some other countries, on the basis of the 1960 census, reveals that the percentage of children under 15 in Egypt comprises 43% of the whole population, the 15 to 44 group represents 40.5 per cent and the 45-64 group constitutes 13 per cent; above 65, the proportion does not exceed 3.5%.<sup>74</sup> It is also noteworthy, that the percentage of males in the first group is little higher than that of females, contrary to what it is in other groups.

In other countries of different demographic characteristics, the proportions of the corresponding groups are different. The United States and Britain, for example, represent the group of countries which have passed the stage of development and have reached the stage of demographic stability to a great extent. China, India, Brazil, and Egypt may be taken to represent the group of developing nations which have not yet passed all the demographic stages. Japan stands at the present in between these two groups, see Table 19.

TABLE 19: PERCENTAGE OF POPULATION IN AGE GROUPS IN SELECTED COUNTRIES

Countries		Age Groups				Total
		0-14	15-44	45-64	65 and over	
Egypt	M	43.88	39.87	13.05	3.20	100.0
	F	41.61	41.08	13.55	3.76	100.0
	T	42.76	40.47	13.29	3.48	100.0
China	M	42.38	45.02	10.65	1.95	100.0
	F	42.05	44.33	10.59	3.03	100.0
	T	42.22	44.68	10.62	2.48	100.0
India	M	41.05	44.69	12.02	2.24	100.0
	F	40.38	45.18	11.85	2.59	100.0
	T	40.72	44.93	11.94	2.41	100.0
Brazil	M	42.44	44.26	11.04	2.26	100.0
	F	41.29	45.65	10.43	2.63	100.0
	T	41.86	44.96	10.73	2.45	100.0
Japan	M	36.68	43.80	15.26	4.26	100.0
	F	34.22	45.50	14.68	5.60	100.0
	T	35.44	44.66	14.96	4.94	100.0
USA	M	27.87	44.11	20.36	7.66	100.0
	F	26.45	44.81	20.05	8.69	100.0
	T	27.16	44.46	20.20	8.18	100.0
UK	M	24.05	43.58	23.08	9.29	100.0
	F	21.33	41.82	24.61	12.24	100.0
	T	22.63	42.66	23.88	10.83	100.0

Source: C.A.P.M.S. Population and Development, op.cit., p.43

It appears from comparison that Egypt is characterised by the highest proportion of children (less than 15 years) surpassing both the first and the third categories of nations, being almost double the figures in Britain in this respect. It also exceeds the proportion in China, India and Brazil.

On the other hand, the population proportion of the 15-44 age group in Egypt is less than in other countries. However, this group is of particular importance as it represents the productive part of the population in both sexes. In fact, this proportion in Egypt is the lowest among the seven countries mentioned above, and next to that of the UK, although this comparative diminution in the UK is counterbalanced by a higher proportion in the next two age groups (45-64, and 65 and over) than in all the other countries, thus life range in the UK is higher than in all other nations.

Egypt is also distinguished by the highest proportion in the last two age groups (45-64) and (above 65) among the developing countries in comparison (China, India and Brazil), while not being much below the same proportions in Japan. This population pattern in which the percentage of the young age group is high and the old age group is low is characteristic of the demographic status of developing countries, and has a great effect on the efforts made in the field of economic and social progress.<sup>75</sup>

The results of the general census of the population in Egypt in 1960 point to the high proportion of children in the labour force, as children under 15 represent about 12% of the labour force, and those under 20 represent 23%. A comparison of the age structure in the last five censuses 1927, 1937, 1947, 1960 and 1970 (see Table 20), reveals an increase in children in the age groups 0 to 4 years, and 5 to 14 in the last census, but a decrease in the age group 30-49 than the preceding censuses. This is attributable to the steady decline in the infant mortality rate, and

the relative stability of the birth rate.

TABLE 20: PERCENTAGE DISTRIBUTION OF THE POPULATION BY AGE IN EGYPT

Age	1927	1937	1947	1960	1970
0-4	14.4	13.2	13.6	15.9	16.8
5-14	24.2	25.9	24.4	26.9	25.6
15-29	25.5	23.7	25.1	22.6	26.4
30-49	23.5	24.7	24.2	22.4	20.2
50-69	9.3	9.5	10.2	10.1	9.3
70 and over	3.1	3.0	2.5	2.1	1.7
Total	100.0	100.0	100.0	100.0	100.0

Source: C.A.P.M.S., Population and Development, op.cit., p.44

c) Fertility and Mortality

The age structure of the population in rural regions differs from its correspondent in the urban regions; the proportion of the group under 15 is less in rural regions than in urban regions. The evidence on differential patterns of fertility is scattered in a limited number of studies. They disclose, however, interesting and in some instances unusual features. Contrary to a common view about the impact of urbanisation on reproductive behaviour, differences in fertility between urban and rural areas seem insignificant. Data derived from the 1960 population census indicate that cumulative fertility rates were in fact slightly higher for Cairo and Alexandria (4.35 children born to a married woman) than for the rest of the country (4.14 children). Comparable rates from the 1947 census were 3.69 and 3.82 respectively. Table 21 shows that in 1947 and 1960, age-specific rates were higher in Cairo and Alexandria than in the provinces

for all brackets up to the age of thirty-five years.

TABLE 21: AVERAGE NUMBER OF CHILDREN BORN TO MARRIED WOMEN

Age	Cairo and Alexandria		Other parts of Egypt		All Egypt	
	1947	1960	1947	1960	1947	1960
Below 20	0.75	0.48	0.51	0.39	0.57	0.41
20-4	0.87	1.24	0.80	1.02	0.80	1.06
25-9	1.18	1.65	1.12	1.46	1.11	1.50
30-4	1.14	1.31	1.07	1.29	1.08	1.29
35-9	1.05	1.04	1.17	1.07	1.15	1.06
40-4	0.33	0.17	0.52	0.44	0.50	0.39
45-9	0.41	0.49	0.70	0.48	0.66	0.47
50 & over	0.07	0.30	0.05	0.09	0.02	0.02

Source: Hansen, B., Marzouk, G., Development and Economic Policy in the U.A.R. (Egypt), Amsterdam, 1965, p.45

The number of children born to illiterate women is significantly higher in towns (4.81) than in villages (4.37).<sup>76</sup> In all cases, however, fertility is inversely related to the mother's level of education, but there again the differences are more marked in urban than in rural areas. Differences in the educational level of husbands seem to result in significant fertility differentials. The same association was found with the mother's education, but here again in urban, not rural areas.<sup>77</sup>

In general, this difference is due to the decrease of the proportion of females in rural areas, below the urban areas. It is quite likely that women are healthier in urban areas than in villages, or that rates of participation in the labour force of the illiterate women are lower in towns than in the countryside. It should not be forgotten that females emigrate to the cities for work in household service.

If this interpretation was correct we would expect the fertility of low-income groups (agricultural workers, rural migrants, and urban poor) to rise as their standards of living improve and the fertility of other groups decline with increased education, urbanisation and economic development; as the two forces operate in opposite directions prediction of the aggregate effect is rather difficult. According to data<sup>78</sup> available, in the period post-1970 and until the coming population census, the population estimates will be made on the basis of a new rate of population increase equal to 2.24%, but it would be rash to expect an accelerated decline in birth rates in the medium term.

d) Family Planning

Nevertheless, Egypt does have a serious population problem since it cannot provide sufficient employment for the rapidly growing labour force or raise the social standard of the masses while the women are exhausted and prematurely aged through childbearing. At present there is unemployment in both towns and countryside, despite the increasing demands for skilled manpower. Although there is still no sign of a fall in the birthrate except among the middle classes of workers and educated people. In urban areas, there is a high inverse correlation between the fecundity of the wife and the husband's degree of education at the upper levels; however, there is no significant difference in fecundity between wives of men with elementary education and those of illiterate men. The percentage of families with two or less children is 35 among those with higher education, 22 among those with secondary education, and 8 among illiterates.<sup>79</sup>

It was not until ten years after the Revolution that President Nasser publicly advocated family planning. The National Charter, in 1962, made itself quite clear:

"This population increase constitutes the most dangerous obstacle that faces the Egyptian people in their drive towards raising the levels of income and production in an effective and efficient way ... family planning deserves the most sincere efforts supported by modern scientific methods ... regardless of the effects which may result from the experiment"

80

This heralded an immediate change in the public attitude to the problem which was discussed widely in the press, and the National Assembly. Wisely the government decided that the first necessity was to find out more about what the masses of the people thought, and several surveys were conducted by University groups and the Ministry of Social Affairs. Accordingly, an enormous number of family planning centres have been established all over the country, and a considerable part of the health units services have been devoted to family planning, and some experimental birth-control clinics established, the result is some decrease of birthrate suggested to be equal to 2.24 per cent.

#### 4. Political Change

##### a) Normative Change

The government has set itself the double task of redistributing power, wealth, and of increasing the national income to be enough for each citizen to lead a decent life. The National Charter stated that:

"First, political democracy cannot be separated 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 fair share of the national wealth.
- His mind should be free from all anxiety likely to undermine the security of his life in the future.

Second, political democracy cannot exist under the

domination of any one class. Democracy means, even literally, the domination and sovereignty of the people - the whole people."

81

These are high ideals for any country, especially for one which had long been subjected to the exploitation and dominance of one class. To carry out this policy, there were many social and economic obstacles in the way.

The government, with the approval of the great majority of the Egyptian people, has specifically rejected two methods of approach which have been tried with different degrees of success in other countries. One is liberal Capitalism, through which most Western powers and the USA achieved their first industrial revolutions in the nineteenth century. In all these countries most of the higher and middle classes provided the savings and capital for new economic advances, while a politically feeble industrial working class was unable to press its demands for a large share of the national wealth. By the time this class had gained much power in the twentieth century, these countries were so far ahead in the economic race that they could afford a substantial redistribution of income. The government was no doubt right when it believed that such a course of development would be impossible for Egypt in the mid-twentieth century; in addition to this, the workers of all countries have learned too much from the experience of those in the pioneer industrial states.

The other system which the Egyptian Revolution has rejected is Marxist-Leninism and Chinese Communism. Neither of these is a meaningful proposition for Egypt. In spite of the good relations with the Communist states, Nasser, and after his death, Sadat, have never wavered in their belief that a Communist system is inapplicable to Egypt itself.<sup>82</sup> While the Russian and

Chinese people have both suffered severely from the deliberate holding down of consumption, to be able to use the enforced savings to establish a solid base of heavy industry, the Egyptian Revolution has made the reverse; since the consumption industries and services have taken an important share of economic planning. In addition, Communism in its essence is atheistic, while the majority of Egyptian people have always been sincere Moslems or Christians with an unshakeable belief in an outside force they call God who watches over all destinies. For all these reasons, the very small Egyptian Communist group has never been allowed to act as the spearhead of the revolutionary movement.

The fundamental features of the new society, which the revolutionary regime intended to build are: 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 end, namely sufficiency (of production) and justice (of distribution)"; and Unity is "the restoration of the natural order of a nation, torn apart by its enemies against its own will and interests."<sup>83</sup>

b) Democratic Participation

Accordingly, in January 1953, the Revolutionary Command Council felt able to announce the dissolution of all political parties which were "only groups differing on personal questions."<sup>84</sup> And on 23rd January the R.C.C. announced the formation of Egypt's new political organisation, the National Liberation Rally, and on the 10th February a Provisional Constitution was promulgated which places supreme authority for the next three years in the hands of the leader of the Revolution and the members of the R.C.C. This was followed by other steps to the abolition of the monarchy; the Egyptian Republic was officially established on 18th June 1953. After intensive

discussions with Britain complete independence was accomplished according to the Treaty of Evacuation in 1954.

Representation of the masses underwent big changes. In the pre-revolutionary regime, two-fifths of the Parliamentary Members were appointed by the King, and the rest mostly belonged to the big landowners, Capitalists, and the members of political parties. Accordingly, the parliamentary discussions, as Wilber pointed out "hardly touched the lives of the bulk of the Egyptian people, the millions of fellaheen who live in thousands of little hamlets in the Egyptian countryside."<sup>85</sup> Contrarily, after Revolution mass representation has been achieved since 1956. According to the Constitution, "labourers and peasants must be granted the right of, at least, 50 per cent representation in Parliament membership as well as in all Legislative Councils."<sup>86</sup>

The Socialist form of democracy was adopted, after a time of thinking. The one single political party was established for all the people. Such parties took the form of 'National Liberation Rally' 1953-1957; the 'National Union' 1957-1962; and then the 'Arab Socialist Union'. Light will be shed on the last two institutions in regard to their important role in the life of the people in Egypt.

According to the 1956 Constitution, the National Union was established in May 1957, to replace all the political parties and the Liberation Rally, which had been founded in 1953. The National Union included the workers, peasants, educated people, professionals, national Capitalists, officers and soldiers. An important part of the National Union idea was that the basic committees which were established in all villages, districts and governorates, should appoint special auxiliary committees from among local citizens to help with social, cultural, and economic projects such as public

hygiene, literacy campaigns, and rural industries. The National Union played a leading role in the elections to the National Assembly in July 1957. About 2,500 candidates for the 350 Assembly seats were screened and the Assembly met between July 1957 and March 1958, when it was dissolved because the union with Syria required a reorganisation of the political structure.

Syria's secession from the union occurred in September 1961. In October a new government was announced, and on 25th November the Preparatory Committee of the National Congress of Popular Powers was formulated, its task was to prepare for a National Congress which would lay down a Charter of National Action. The Committee completed its work and recommended that the forthcoming National Congress be composed of 1,500 representatives, divided as follows:<sup>87</sup>

	Number of Representatives	Percentage
Farmers	375	25
Workers	300	20
Professional Unions	225	15
Employees	150	10
Non-union workers	135	9
University Professors	105	7
Students	105	7
Women's Organisations	105	7
Total	1,500	100

Countrywide elections took place for the 1,500 seats in the National Congress, and also for 250 members of the Preparatory Committee to complete 1,750 representatives. On May 21, 1962, President Nasser presented a 'National Charter' for the approval of the National Congress of Popular Powers. There followed a series of televised debates in which the President discussed various aspects of the Charter with the Congress; the discussions were then taken up by the Press and in towns and villages all over the

country. It was the most genuine popular debate that the country had known.<sup>88</sup>

This document was intended to provide broad guidelines and to be the source of inspiration for all new constitutions and laws, the political institutions of the country, the administration of the government, and the organisation of economic and social relations. After the final approval of the National Charter, some efforts had been made to associate the masses with both the short and long-term decisions of the government. All the members of the government had to devote a major part of their energies to making it work. Egypt has such a long tradition of heavily centralised government that any attempt to strengthen local authority is certain to be difficult.

The National Charter emphasised the need to create a new organisation to succeed the National Union. On July 4, 1962, the National Congress of Popular Powers charged President Nasser with the formation of a provisional Committee to prepare the groundwork for the Arab Socialist Union. The Committee was formed in October 1962. One of the first steps it took was the promulgation of the Statute of the Arab Socialist Union, which includes its objectives, regulations, conditions of membership, and the different levels of its organisation. The Statute was issued on December 7, 1962.

According to the Statute, the basic objectives of the A.S.U. are the following: 1) "To realise sound democracy represented by the people and for the people, and so that the revolution will be by the people insofar as its methods are concerned, and for the people in its objectives."<sup>89</sup> 2) To realise a Socialist Revolution, that is, a revolution of the working people. 3) To safeguard the guarantees embodied in the Charter: first to safeguard the minimum representation for workers and farmers in all popular

political organisations at all levels - so that in the organisation of the A.S.U. itself, farmers and workers will have at least a representation of 50 per cent, since they constitute the majority who has been deprived of its fundamental rights for so long. Second, to ensure the principle of collective leadership. Third, to support and strengthen co-operative and labour union organisations. Fourth, to establish, on sure foundations, the right of criticism and of self-criticism. Fifth, to transfer the authority of the State gradually to elected Councils.<sup>90</sup>

In its pyramidal structure, the A.S.U. has been organised on the basis both of geography - that is the governorate, the district, the village, etc. - and of economic and social sectors (such as workers, farmers, trade unions, teachers, lawyers, doctors, professors, national capital, feminine groups, and students).

The 'basic unit' is the base of the A.S.U. structure. The basic unit is set up in a village or equivalent grouping or in a public organisation. Electors of the basic unit elect a twenty-man committee which meets twice monthly and holds office for two years. Voting is compulsory for all males over eighteen and optional for women. The electors or members themselves constitute the basic unit conference, which is supposed to meet every four months. Each basic unit committee elects two members to represent it at the next level - the district (Markaz) - and together these elected members form the district conference, which meets twice yearly and itself elects a district council to meet twice monthly.

From each of the district councils two members are elected to represent them at the next level - the governorate - which also has a conference and an elected council. Above the governorates at the national level, this pattern is repeated, forming larger and more responsible circles until the

level is reached of the General National Congress and the Committee of the A.S.U. for the Republic, which is the highest authority. From its General Committee the Higher Executive Committee is elected, which is a decision-making body with a Secretary-General and a Secretariat with thirteen departments.

Arab Socialist Union is a structure, in fact, that can be accommodated to extreme centralisation or an extremely democratic process. However, its effects in the life of the people is significant, especially at the basic unit level, where the responsibilities are limited and the contact between the members and the Unit Committee is so easy.

Parliament is not an A.S.U. body, nor are its members elected to represent the A.S.U. as such, but, as Egypt is a one-party State, in practice no one becomes a Member of Parliament who has not previously been selected for office at some level by the A.S.U. The two organisations are coordinated by a Parliamentary Committee. There appears to be some overlap of functions, but whereas Parliament legislates, the A.S.U. is largely an executive body. The President works with a Consultative Committee consisting of four leaders: the Deputy President, the Prime Minister (selected by the President), the Head of Parliament (elected by the Members of Parliament) and the A.S.U. leader. In matters affecting the interest or welfare of the masses, such as literacy campaign, the press, popular organisations and syndicates, and so on, it is the A.S.U. leader who is charged with carrying out the policy.

The general elections for the National Assembly took place on 10 March 1968, with about 1,750 candidates standing for the 350 seats. Of these 993 were workers and farmers and twenty-eight were women. After the final count it appeared that more than half the members of the Assembly were workers and farmers, while eight were women. Voting was compulsory with

a penalty of £E1 for failure to do so.

The government is responsible to the Assembly, which will discuss its political declarations and its reports. The Assembly has the right to withdraw confidence from the government or any one of its members. Ministers may take part in the meetings of the Assembly or any of its committees whenever they wish, but they have no votes unless they are members of the Assembly. Any member of the Assembly has the right to question any Minister, who must respond. A motion of censure on the government may be introduced by ten members, and if it is adopted the government must resign. The President has the right to dissolve the Assembly, but he must call fresh elections within sixty days. A member of the Assembly has full parliamentary immunity, and he can only be deprived of his seat by a two-thirds majority of the Assembly.<sup>91</sup> In his speech at the inauguration of the Assembly, Nasser said:

"... the Assembly, which is based on the will of the people, should remain with the people; it should not set itself above the people by ignoring their demands or fall below their hopes through neglect."

92

It is fair to say that this has turned out to be a more lively and independent-minded body than many people expected. Some of the members are deadwood, as any parliament, but many of those elected for the first time in their lives have, after losing their initial shyness, made important contributions to the Assembly debates, Committee discussions, and questioning of Ministers. Furthermore, the device of reserving half the seats to workers and fellaheen has been successful in producing a parliament which is far more representative of the Egyptian people as a whole than any of its predecessors.

Inspired by the 'open door' policy of 1974, the political door was the last and perhaps the most important to be opened. It was recognised that,

in the absence of a political opposition, there must be a politically acceptable institution for different approaches to Egypt's socio-economic and political problems. So, since 1975 there developed the concept of 'tribunes' to step up the development of Arab Socialist Union. The nature of 'tribunes' was a subject of debate in which members of professional associations, workers' trade unions, the Universities and all groups in society were taking part. In the event, the 'tribunes' became a pilot study for the establishment of a party system of government. In 1976, an election was held on the basis of the three political trends within the A.S.U., namely, the Right, Left and Centre. The result was an overwhelming victory for the Centre (the government party), the right gained 12 of the 342 elected seats, the left gained only 2, while 48 seats were gained by Independents.<sup>93</sup>

It was hoped that the new political system would not only quieten fears of those seeking safeguards against the possibility of abuses by a single-party organisation, but would also enable the leader to reach sound decisions based on the will of all the people and provide opportunities to discuss in a democratic way differences of opinion concerning the application of policies, not differences in ideology and objectives. The very surprising thing, however, is that the Arab Socialist Union was still existing beside the new political parties.

Under very different circumstances in 1977 and 1978, the Left party stopped its activity and the Right party dissolved. The Centre party changed its name to the National Democratic Party, and a new party called the Labour Socialist Party has been established. Political debates have been going on ever since about the possibility of success or failure of this experiment: is it safeguards against the possibility of abuses by a single-

party organisation, is it just facades for new leaderships looking for a role, is it a true democracy? Only the future can tell.

It is fair to say, however, that many serious decisions have been taken by individuals outside the political institutions rather than inside them. The absence of political education and curriculum integration has contributed a very important role to the problem of democracy in Egypt and to the political passivity which characterises many Egyptians.

## 5. Educational Change

### a) Reorganisation of Education

Most newly independent nations regarded education as the key to development and progress, but none more than Egypt.<sup>94</sup> Immediately after the Revolution the dual system was abolished; elementary and primary education were unified in one school (primary education) from the age of six to twelve, and primary education became free and compulsory by law (No.210 in 1953).<sup>95</sup>

Preparatory education was introduced for the first time in 1953, covering four years. Eligibility for this stage is based on merit proved in a competitive examination held at the end of primary stage. A pupil who fails in this examination has another chance to enter the same examination the next year. According to Law No.55 in 1957, modification had been made, and education in this stage was reduced to three years, from 12 to 15, and became free under the supervision of the State.

The reorganisation of secondary education has been according to the 1951 and 1968 laws.<sup>96</sup> This stage covers three years from the age of 15 to 18. In this stage, in addition to general secondary education, emphasis is

placed on technical, agricultural, industrial and commercial education. Eligibility for secondary education is based on merit proved in a competitive examination at the end of preparatory education. Students with the highest marks enter general secondary education, and students with lower marks enter technical education. According to the previous laws, education in this stage is free for those students under the supervision of the State.

Before the Revolution there were 300 foreign schools which produced a social and cultural elite in Egypt. The standards at these schools were often the same as those of the best in Europe, but so also were the ideas and assumptions on which their teaching was based. Egyptian boys and girls who went there frequently could neither read nor write Arabic, and prided themselves on not being able to do so.<sup>97</sup> They felt no sympathy for the great mass of their fellow countrymen and it is not surprising that the revolutionary government regarded such schools as a breeding ground for one of Egypt's worst social evils, its irresponsible aristocracy. During the ten years after the Revolution, the foreign schools have all either been nationalised or put under close State control and forced to change their curricula to conform with the State system.

In the past, education was confined to a certain category of the population which had sufficient means to pay the fees. The government of the Revolution paid special attention to the development of the different stages of education and endeavoured to provide the free educational services at the different levels even in the university, because it believed that education is the right of every citizen in society regardless of his income or social status. The effect of this policy was evident in the increase in the rate of educated people, as is shown in Table 22, from 15 per cent in

1937 to 30 per cent of the population (10 years and over) in the census of 1960, and to 35 in 1966. In 1937 the rate of educated women did not exceed 6 per cent, then it gradually increased until it reached 17 per cent in 1960 and 21 per cent in 1966. This shows clearly the attention paid to the education of women after the Revolution.

TABLE 22: PERCENTAGE OF ILLITERATES TO TOTAL POPULATION 10 YEARS AND OVER

Census Year	Males	Females	Total
1937	76	94	84
1960	56	83	71
1966	52	79	65

Source: The 1966 Census; Population and Development, op.cit., p.217

State expenditures on education increased from some £E23 million in 1952/3 (less than 3% of GDP) to about £E126 million in 1969/70 (almost 5% of GDP). Public investment in education similarly increased from about £E2.5 million in the first year of the Revolution to £E33.3 million in 1965, a remarkable thirteenfold increase. After 1964/5 the level of investment fluctuated around £E25 million a year representing between 6 to 8 per cent of the total annual investment in the economy.<sup>98</sup> The expansion in the number of pupils and students at various educational levels may be summarised from Table 23. The fastest growth is in secondary technical education which expanded from a very small base. In this category, however, commercial schools tend to dominate in this group. The proportion of enrolment in technical education increased from 12.4 per cent in 1953 to

40.2 per cent in 1969,<sup>99</sup> and to 52 per cent in 1974. The figures in Table 23 suggest that technical secondary education and general secondary education - taken together - expanded almost as fast as primary/preparatory (164 and 814 per cent increase as against 298 per cent between 1952 and 1971). General secondary education is mainly sought by those who aim at universities, and the curricula are oriented in that direction. It seems that the country stands to benefit from a change in educational policies: more secondary schools of the vocational type and less higher education. Economic and social incentives would no doubt induce many students to seek vocational rather than university studies.

TABLE 23: NUMBER OF STUDENTS AND PUPILS 1952/3 and 1970/1

Year	Primary and Preparatory	General Secondary	Technical Secondary	Teacher Training	Universities
Numbers					
1952/3	1,540,202	181,789	33,366	20,140	41,496
1970/1	4,589,138	297,887	271,638	25,526	176,023
Indices					
1952/3	100	100	100	100	100
1970/1	298	164	814	126	425

Sources: Mabro, R., *The Egyptian Economy*, op.cit., p.156; C.A.P.M.S., *Statistical Indicators*.

The government employed graduates from technical schools at a starting salary of fE18 per month while university graduates were employed at fE20 per month, and recently increased to fE25 per month. If the starting salary were the only relevant consideration many would find that four or five years' forgone earnings in university are not worth the differential. But the life

earning prospects of the graduate are far superior to those of the technician and his social status higher.

Universities expanded at a higher rate. The private returns from higher education are both certain and substantial because of the government employment policy. All graduates have a right to a job in either the administration or the public sector. The government is both committed to employ the educated and pressured into educating those who seek a relative well-paid and secure job. The social returns for higher education are low for certain branches such as the arts, commerce and law. It is worth noting that the proportion of arts students in universities declined from 52 per cent in 1950 to 26 per cent in 1965; the share of students in scientific or technical colleges increased from 25 to 40 per cent in the same period.<sup>100</sup> The government attempted in 1968 to restrict the influx to universities by limiting the number of new entrants to 35,000 a year. It also stipulated that at least 60 per cent should enrol in scientific or engineering colleges and 10 per cent in Teachers' Colleges. Despite these measures, the proportion of entrants to the colleges of arts, law and commerce increased again during the period from 1967 to 1973, from 4.5 to 11.3; from 4.4 to 10.6 and from 12.7 to 19.6 per cent respectively, see Table 24. And the proportion of entrants to the colleges of medicine, dentistry, chemistry, engineering and veterinary surgery declined in the same period from 13.1 to 7.7 per cent, from 2.3 to 0.9 per cent, from 3.8 to 2.1 per cent, from 17.7 to 8.3 per cent and from 3.3 to 1.6 per cent respectively. This decline may be due to the difficulty of study in these colleges and the long period (5 to 6 years) that must be spent in them. It is true too, that the policy of admission to the universities limits the numbers of students who should be taken by every college every year.

**TABLE 24: COMPARATIVE FIGURES BETWEEN THE ADMITTED STUDENTS  
TO THE UNIVERSITIES (1967/8 - 1972/3)**

Colleges	1967/68		1972/73	
	Numbers	Per cent	Numbers	Per cent
Arts	842	4.5	5427	11.3
Law	821	4.4	5099	10.6
Commerce	2389	12.7	9397	19.6
Economy	166	0.9	378	0.8
Science	680	3.6	2578	5.4
Medicine	2458	13.1	3683	7.7
Dentistry	443	2.3	417	0.9
Chemistry	721	3.8	981	2.1
Engineering	3329	17.7	3985	8.3
Agriculture	2059	11.0	6220	13.0
Veterinary Surgery	617	3.3	765	1.6
Dar-al-oloom	782	4.2	896	1.9
College of Girls	659	3.5	1616	3.4
Monumentals or Egyptology	-	-	454	0.8
Information	-	-	252	0.5
Nursing	397	2.1	258	0.5
Education	2421	12.9	5563	11.6
<b>Total</b>	<b>18,784</b>	<b>100.0</b>	<b>47,919</b>	<b>100.0</b>

Source: The Higher Council for Universities, Cairo, 15/9/1974 (in Arabic); The National Council for Educational Scientific Research and Technology, Cairo, June-September 1974, p.107 (in Arabic).

#### b) Selective System

The Egyptian educational system is a highly selective one. Selection starts as early as the end of primary education where a public examination is held to select pupils for the preparatory stage. At the end of the

preparatory stage, another selective examination is held to select and distribute successful pupils to general and technical schools. Pupils with the highest marks go on to general secondary schools. Others with lower marks go on to technical schools. In 1973-1974, 48% of pupils were in general secondary school alone, while the 52% in technical school were divided into 14.1% in industrial schools, 5.9% in agricultural schools, and 32% were in commercial schools.<sup>101</sup>

The traditional attitudes towards technical education are reflective of earlier European educational systems.<sup>102</sup> Parents tend to favour general schools, because they are the customary stepping stones to prestigious university degrees. Although graduates of technical schools do not usually go on to university, outstanding students can, however, be admitted to some colleges of the university. While technical schools offer a choice of curriculum - commercial, agricultural, and industrial - for students graduating at the age of fifteen from preparatory schools, general secondary schools have no choice of curriculum for their students.

The selection can be discussed also in terms of the movement of an apparent cohort. Data for 1976 suggest that over 85 per cent of the first year primary pupils reach the final grade; in preparatory, the final year enrolment appears to be equivalent to 132 per cent of the original cohort, because of very high repetition in the final year which may amount to 25-30% and the extent of wastage is rather low. The general secondary final year enrolment is equivalent to 130 per cent of the cohort also, and the number of graduates varies from 80 to 85 per cent. The progression rate from the primary to the preparatory levels is about 70%. The rate from preparatory to secondary is about 60%, success at the final examination of preparatory schools is low, fluctuating between 50 and 60 per cent. Success at the

final examination of general secondary schools fluctuates between 70 to 75 per cent.

Social, political and economic considerations have strong pressure on the direction of the educational system. The population growth at a rapid rate of 2.54%, places a severe strain on the country's limited financial resources to provide even normal requirements for educational facilities. The massing of this large population (35,619,000 in 1973),<sup>103</sup> in comparatively small areas of the country has some compensations; it allows for the most part for more economical, large-sized schools. Rationalisation of facilities through centralisation is made possible where there are no natural barriers making long detours necessary. On the other hand, there are many hundreds of small and relatively isolated communities where 'uneconomic' services have to be provided if the principle of social equity is to be respected.

The strain on public resources is compounded by the public pressure for higher and higher levels of education. It is encouraged by the government policy of a virtually free and open door to entry into secondary and higher education, and the employment and wage structure policy which guarantees a job.

On the other hand, there remains the problem of the comparatively low participation rate of females at the primary level (38%) especially in the rural areas. This partly explains why the rate of illiteracy was reduced between 1960 and 1974 only from an estimated 74% to 65%.<sup>104</sup> Over one million primary school age children are not enrolled in schools and these are in the majority girls and rural children. This could be a bottleneck to rural development programmes. Such programmes, institutionalised or on-the-job, require basic literacy and numeracy.

c) Administration

Education in Egypt is controlled and financed directly by the State. There is a general belief among people that education is the responsibility of the government. Educational plans are formulated and adopted by the Ministries of Education in collaboration with other bodies responsible for the comprehensive plans of development of the country. These Ministries are also responsible for following up the execution of these plans and issuing the legislations needed. The educational zones in the governorates execute the plans and suggest ideas and ask for the necessary requests for developing education quantitatively and qualitatively in their zones.<sup>105</sup> There has been a tendency towards a balanced combination of central and local powers. This is particularly true of the situation in Egypt since the introduction of the new system of local government in 1960.

It is possible to identify in Holmes's line the various state levels of control over education. On the level of public interest, the President, who exercises the executive authority; he has the right to appoint and dismiss Ministers, including of course, the Minister of Education and also he can promulgate laws by decrees if the People's Assembly is not in session. The People's Assembly exercises the legislative authority of the State. It has also certain powers over the executive authority and can question the Ministry of Education, discuss educational plans, and promulgate educational laws. The main responsibility of the Arab Socialist Union, as officially stated, is to safeguard the public interest in all fields including, of course, education.

On the managerial level there is the bureaucracy of the Ministry of Education and other concerned Ministries, and the bureaucracy of the educational zones in the governorates. As officially pronounced, the Ministry's

main functions and responsibilities are:

"to plan for education; to estimate funds needed for educational projects; to draw up schemes and programmes for implementation; to ensure a well-balanced geographical distribution of educational services; to prescribe syllabuses and text books; to lay down standards of the teaching staff; and to evaluate and follow the progress of education on the national level."  
106

The ultimate authority over the Ministry of Education rests in the hands of the Minister himself. He appoints or recommends the appointment of its high officials, and promotes them. Any alterations in syllabuses, purchasing the rights of textbooks' authorships, and the organisation of general examinations are his absolute authority. Nevertheless, there are checks over his powers and his decisions usually activated, after considerations, by either the bodies of the Ministry concerned, or ad hoc committees, which include educationists and other professionals from outside the Ministry. On the other hand, the Minister is responsible to the President of the Republic who appoints and relieves him of his post. He is also responsible to the People's Assembly, as is usually the case in democratic countries.<sup>107</sup>

The Minister of Education is advised by Councils on various aspects of education. There are the Central Advisory Council for General Education and the Central Advisory Council for Technical Education, composed of high officials from the Ministry of Education, other Ministries and government organisations, and the universities. Individuals representing society group interests are also appointed as members.

Higher Education has its own Ministry. Very recently the Ministry of Higher Education and the Ministry of Education have become one: the Ministry of Education. However, each of the universities is autonomous under the

supervision of the 'Higher Council of Universities' headed by the Minister of Education.<sup>108</sup>

The local government law of 1960 and its amendments envisaged a programme of decentralisation from national ministries to the governorate and local council levels but this task has not yet been achieved and until it takes place, the national government will continue to exert more than advisory and technical assistance which is to be its ultimate sphere of action.

The educational zones, which were established in 1939, are organised along similar lines as the Ministry of Education. Their responsibility is to plan for the development of education according to the needs of the area. This task has not been achieved because the local government law of 1960 has not been fully executed. It is the responsibility of educational zones to make full use of the local financial resources in educational schemes and to encourage the people to take part in educational activities. Each zone is headed by a director appointed by the Minister of Education. Helping in the work of the zone are assistant directors and a corps of inspectors.<sup>109</sup>

On the technical and professional level there are the university departments and the professional organisations, most important of which is the teachers' syndicate. Specialised teachers at preparatory and secondary schools are teaching separate subjects and textbooks prescribed in detail and published by the Ministry of Education. Checks over their work are usually activated by specialised inspectors and school headmasters.

What has been dealt with in this chapter so far is the analysis of social, economic, political and educational changes which have or have not taken place in Egypt since 1952. These changes and non-changes in Egyptian

conditions have created demands on secondary school in general and its curriculum in particular. What are the reflections of those demands and needs in the general secondary school curriculum? The answer is the subject of the next chapter.

NOTES

1. Issawi, C., Egypt: An Economic and Social Analysis, London, Oxford University Press, 1947.
2. The word 'fellaheen' is the plural of 'fellah' which means a peasant or cultivator of the soil.
3. Egyptian Association for Social Studies, Report issued in Cairo,
4. Economist, 'Trade in Egypt,' 14th October, 1933, p.3
5. Egyptian Association Report, op.cit., p.29
6. Ibid.
7. Journal of the Egyptian Medical Association, Cairo, 1939, p.21
8. Issawi, op.cit., p.150
9. Cleland, W., The Population Problem in Egypt: A Study of Population Trends and Conditions in Modern Egypt, USA, Pennsylvania, Science Press Printing Company, 1936, pp.92-3
10. Ibid., p.93
11. Ibid., p.94
12. Issawi, op.cit.
13. The 1947 Census, Annex 1, p.68 (in Arabic).
14. Ibid.
15. Ibid., p.69
16. Ibid.
17. Ibid., p.70
18. Owen, R., and Blunsum, R., United Arab Republic Egypt, The Country and its People, London, Queen Anne Press Ltd., 1966, p.28
19. The National Charter, Cairo, Ministry of National Guidance, 1962, p.31
20. Mansfield, P., Nasser's Egypt, Great Britain, Nicholls & Co.Ltd., 1965, p.44
21. The National Charter, op.cit., p.9

22. All these and the following estimations are based on data from: Ministry of Agriculture, Agricultural Censuses, various issues, Ministry of Agriculture, Agricultural Economy, various issues (in Arabic). Income data from Ministry of Planning, Follow-up Reports.
23. Ministry of Treasury, Budgets and Budget Reports, various issues, (in Arabic).
24. Ibid.
25. Mabro, R., The Egyptian Economy 1952-1972, Oxford, Clarendon Press, 1974, p.30
26. C.A.P.M.S., Population and Development: A Study on the Population Increase and its Challenge to Development in Egypt, Cairo, 1973, p.46, table (B).
27. C.A.P.M.S., Statistical Abstract of Arab Republic of Egypt, 1951/2 - 1971/2, Cairo, 1973, p.102
28. Ibid., p.114
29. For knowing more about the expansion of different kinds of services, see: C.A.P.M.S., Population and Development, op.cit., p.461, and Mabro, op.cit., pp.156-63
30. Mansfield, P., op.cit., p.94
31. Wilber, D.N., United Arab Republic - Egypt: its people, its society, its culture, New Haven Harp Press, 1969, p.94
32. The National Charter, op.cit., p.92
33. Morsi, M.M., Administration and Organisation of the General Education, Cairo, The World of Books, 1974, (in Arabic).
34. C.A.P.M.S., Statistical Handbook, U.A.R., Cairo, 1965, p.45
35. Department of Enquiry, The Annual Book U.A.R., Cairo, 1961, p.426 (in Arabic).
36. Mansfield, op.cit., p.46
37. Wilber, D.N., op.cit., p.316
38. The National Charter, op.cit., p.82
39. Arab Republic of Egypt, Facts and Figures, Cairo, 1974, p.16
40. C.A.P.M.S., Statistical Handbook, op.cit., p.52
41. Wilber, op.cit., p.304

42. C.A.P.M.S., Population Development, op.cit., p.157
43. C.A.P.M.S., A.R.E., Economic Indicators, 1961-1971, Cairo, 1972, p.9
44. Arab Republic of Egypt, Facts and Figures, Cairo, 1972, p.16
45. The Constitution of Arab Republic of Egypt, 1964, and 1971, article 23.
46. The National Charter, op.cit., p.73
47. Wilber, op.cit., p.290
48. Hansen, B. and Marzouk, G., Development and Economic Policy in U.A.R. Egypt, Amsterdam, 1965, p.298
49. Wilber, op.cit., p.292
50. Mabro, op.cit., p.124
51. Hyde, G.D.M., Education in Modern Egypt: Ideals and Realities, London, Routledge & Kegan Paul, 1978, p.21
52. Al-Ahram, No.33680, 26 February 1979, p.11
53. Facts and Figures, op.cit., p.17
54. Economic Indicators, op.cit., p.9
55. Owen and Blunsum, op.cit., p.64
56. The National Charter, op.cit., p.83
57. Extracted data from Ministry of Treasury.
58. Wilber, op.cit., p.250
59. C.A.P.M.S., Statistics on Employment, Wages and Hours of Work, various issues, (in Arabic).
60. Mabro, op.cit., p.155
61. Ibid., p.205
62. United Arab Republic, Institute of National Planning, and International Labour Organisation, Research Report on Employment problems in Rural Areas, U.A.R., Cairo, 1965-1968, 10 vols, Report B, p.56
63. C.A.P.M.S., Population and Development, op.cit., p.175

64. Issawi, C., Egypt in Revolution, Oxford, O.U.P., 1963, p.188
65. Harbison, F. and Ibrahim, A., Human Resources for Egyptian Enterprise, New York, 1958, p.67
66. For more details, see *ibid.*, pp.124-29
67. *Ibid.*, p.119
68. *Ibid.*, p.136
69. See Sayigh, Y., Management-Labour Relations in Selected Arab Countries, International Labour Report, June 1958, referred to by Harbison and Ibrahim, *op.cit.*, p.52
70. Ministerial Committee for Manpower, Report, About Educational Policy, Cairo, 1967, p.12 (in Arabic).
71. The National Council for Education Scientific Research and Technology, first turn, June-September, 1974. Report presented to the Republic President, Cairo, 1974, p.61 (in Arabic).
72. Harbison, F.H., 'Human Resources Development Planning in Modernising Economies,' in the International Labour Review, May 1962, volume lxxxv, No.5, p.437
73. C.A.P.M.S., Population and Development, *op.cit.*, p.11
74. *Ibid.*, p.29
75. Mansfield, *op.cit.*, p.112
76. Mabro, *op.cit.*, p.30
77. El-Badry, M.A., Trends in the Components of Population Growth in the Arab Countries of the Middle East: a survey of present information, Demography, 2, 1965, pp.152-3. See also, Rizk, H., Fertility Patterns in Selected Areas in Egypt, unpublished Ph.D. thesis, Princeton University 1959. On Rizk's results, see Hansen and Marzouk, *op.cit.*, p.32
78. C.A.P.M.S., Statistical Handbook, *op.cit.*, p.7
79. Issawi, Egypt in Revolution, *op.cit.*, p.80
80. The National Charter, *op.cit.*, p.79
81. *Ibid.*, p.57
82. Mansfield, *op.cit.*, p.193
83. The National Charter, *op.cit.*, pp.18-19

84. Issawi, Egypt: An Economic and Social Analysis, op.cit., p.170
85. Wilber, op.cit., p.140
86. The Constitution of Arab Republic of Egypt, 1971, op.cit., article 87, p.28
87. Wilber, op.cit., p.150
88. Mansfield, op.cit., p.197
89. C.A.P.M.S., Statistical Handbook, Arab Republic of Egypt, Cairo, June 1972, p.289
90. The National Charter, op.cit., p.59
91. The Constitution, op.cit., articles N.93,114,124,125,126,128, 134,135 and 136.
92. Al-Ahram Newspaper, Cairo, December 19, 1964.
93. Hyde, op.cit., pp.208-9
94. Mansfield, op.cit., p.120; and Wilber, op.cit., p.106
95. For more details, see Morsi, M.M., Public Education in the Arab States, Cairo, The World of Books, 1974, pp.304-20 (in Arabic).
96. Ibid., pp.318-20
97. Mansfield, op.cit., pp.121-2
98. C.A.P.M.S., Population Development, op.cit., pp.203-4
99. Ministry of Education, Follow-up Reports, various issues.
100. Data from Statistical Indicators, various issues, referred to by Mabro, op.cit., p.157
101. The National Council for Education Scientific Research and Technology, op.cit., p.61
102. El-Kammash, M., Economic Development and Planning in Egypt, New York, Frederick A.Praeger, Publishers, 1968, p.125
103. C.A.P.M.S., The Fundamental Statistics, Arab Republic of Egypt, 1952-1973, Cairo, 1974, p.12
104. Ministry of Education, Education and Training in Egypt, Cairo, Ministry Press, February 1976, p.3

105. A.R.E. National Centre for Educational Research, Report on the Development of Education during 1974/1975-1975/1976, Cairo, 1977, p.7
106. Morsi, M.M., 'Education in Egypt: Retrospect and Prospect,' in Sullivan, J. (ed.), Egypt in Perspective, Cairo, The American University in Cairo Press, 1975, p.86
107. Ibid., p.87
108. A.R.E., Report on the Development of Education during 1974/1975-1975/1976, op.cit., p.9
109. Morsi, op.cit., p.88

CHAPTER 7  
CURRICULUM DEVELOPMENT IN  
THE GENERAL SECONDARY SCHOOL  
IN EGYPT SINCE 1952

## I. THE FRENCH INFLUENCE

In order to understand the French influence on education in Egypt in general, and on the curriculum in particular, it is essential to trace its history back to the days of Mohamed Ali. It is customary to mark the emergence of modern Egypt by Mohamed Ali who came to power in 1805 following the defeat of the French Expedition. He was born in 1769 at Cavalla, a small Macedonian port on the Aegean Sea. During his early years he was looked after and introduced to the French culture by a French tobacco merchant.<sup>1</sup> He used to pride himself on being born in the same year as Napoleon, whose action and political views so profoundly influenced Mohamed Ali's own career. He came to Egypt, however, with the Albanian forces sent by the Ottoman Empire to drive the French out of Egypt which at that time was a part of the Empire.

For centuries before the advent of Mohamed Ali the educational scene in Egypt remained traditional in nature and stagnant in character. The most common places for formal education were the ungraded Koranic schools known as 'Kuttabs' (one class with one teacher known as Sheikh) where courses were confined to the three R's and the memorisation of Koran.

Mohamed Ali determined to turn over a new leaf. Prompted by his ambitions to have an independent State, he concentrated on a utilitarian approach to educating people for technical and administrative jobs in the army and the government. As Boctor pointed out, "like Napoleon he was keenly interested in raising a big army and conquering the world around him."<sup>2</sup> So, a modern system of State education modelled on French lines was soon established, geared towards providing military and government personnel. The running of the schools was entrusted to the War Department and the

students were given military ranks in the schools.

Mohamed Ali started from the top of the ladder. His constant contact with the French inspired him with the idea that a French physician was the first thing needed. The next step was to send, in 1816, 12 graduates of Al-Azhar who succeeded in learning French to medical schools in France. Those students returned in 1831 to Egypt with medical degrees and were employed as professors in the school of medicine which was started.<sup>3</sup> Also 319 students were sent to study in different branches of knowledge in Paris, Milan and Florence.<sup>4</sup> In 1834 some of these students returned to Egypt. Mohamed Ali in a ceremonial and formal fashion handed each a French book in the branch of knowledge he studied to translate it. The students were shut in the Citadel and were not given their liberty until the task was accomplished. These books were printed and used later as textbooks. Ever since curricula of secondary schools in Egypt have followed the French model, "which immediately found a suitable soil in the virgin Valley of the Nile."<sup>5</sup>

It could be said, therefore, that since the arrival of Napoleon with soldiers as well as experts in different branches of knowledge in 1799, and since Mohamed Ali's rule in the first half of the 19th century until the end of the first half of the 20th century, enlightened Egypt had been French in education, language, customs, food, and social etiquette. The Frères and the Jesuit Orders, the Lycées, the French convents and institutions had touched the aristocracy as well as the bourgeoisie of Egypt, both men and women. In the streets of the big cities, of Lower Egypt especially, as well as in the lobbies of the principal hotels and in the 'Salons' or reception rooms of high and middle class families the language and manners were French.

The highest ranks of Egyptian government officials were French in

culture, sympathy, and civilisation. As Boctor pointed out:

"Is it any wonder that no leader or Premier of Egypt in his political negotiations has been able to come to an understanding with the British."

6

Table 1 shows the number of schools and enrolments in each of the American, English and French schools in Egypt in 1913 and in 1927/1928. The number of French schools was more than double of either the American or English. And the number of enrolments was more than threefold of either American or English.

However, after the British Occupation in 1882, the British wanted to destroy the French as well as the French culture. As Shafik pointed out:

"Little by little the French language was eliminated from government schools ... why? The English found the French language popular not only among the higher classes of Egyptian but also among the upper strata of the middle class. In religious as well as secular schools, French, Italian, and Jewish, among whose students the Egyptians were a majority, French was the principal language. It was only in American and English mission schools that English was spoken."

7

TABLE 1: NUMBER OF AMERICAN, ENGLISH AND FRENCH SCHOOLS AND THEIR ENROLMENTS IN 1913 and 1927/1928

Years	Country	Schools	Enrolments
1913	American	32	5,304
	English	37	2,636
	French	145	22,175
1927-1928	American	78	6,914
	English	74	4,322
	French	279	32,812

Source: Extract from Statistical Data issued by Ministry of Education in 1913 and in 1927; Boctor, A., School and Society in The Valley of The Nile, Cairo, Elias Modern Press, 1936, pp.117 and 137

Whatever the British intention was, the French took advantage of the situation and succeeded in promoting their cultural ideas and system of education.

## II. MAJOR CHANGES SINCE 1952

### 1. Normative Change

In 1952, Egypt launched its major Revolution which changed the features of society. The main basis of work was six principles declared immediately after the Revolution. Outstanding among them was "Establishment of social justice," and the "Establishment of a sound democratic system."<sup>8</sup>

The National Charter issued in 1962 emphasised the following principles:

- "- The right of each citizen to receive an education which suits his abilities and talents.
  - The right of each citizen to secure the job which accords with his abilities and interests and the type of education he has received.
  - Since the children of today are the makers of our future, it is the duty of working generations to provide them with all the chances that will enable them later to assume successfully the responsibility of leadership.
  - The major economic and social problems confronting our people, at present, must be resolved on a scientific basis."
- 9

Therefore, educational institutions, research centres and universities "are not ivory towers but rather forerunners discovering a mode of life for the people."<sup>10</sup>

The National Work Programme, issued in 1971 went a step further in drawing up a framework for educational policy for the ten years from 1971 onwards.<sup>11</sup> In the field of educational planning, the programme emphasised the following principles:

1. The ten-year plan for education should realise the full absorption of all pupils of compulsory age.
2. Measures should be taken to raise the age of school-leaving to fifteen.
3. The teaching process must be more efficient and of a higher standard so as to eliminate private lessons.
4. The introduction of technical subjects, in general secondary education providing the students, thereby, with balanced general and technical background.<sup>12</sup>
5. Education must be relevant and linked to the needs of the community.<sup>13</sup>

The International Bureau of Education (UNESCO), emphasised the importance of establishing a suitable system of examination through which a sort of evaluation of students can be provided.<sup>14</sup>

The most important addition made by President Sadat in the October Working Paper in 1974 was his assertions on the elimination of the distance between thought and action.

"Education is no longer limited to rigid study curricula which the student must absorb. Education should organically, be linked to the action and requirements of society."

15

This Working Paper emphasised also the importance of eliminating "the theory of the social differences between one form of education and another."<sup>16</sup>

"We should get rid of this overwhelming disease whereby many consider education as an instrument for acquiring a special social privilege, while the principal target for some educated people has become office jobs disregarding their value in the movement of society."

17

The paper asserted also the significance of organising seminars and constant training programmes at all levels. The significance of these programmes is

to provide the teachers for the new information and trends in the different fields and "to prepare them for the participation in developing curricula and teaching methods."<sup>18</sup>

## 2. Institutional Change

Hence, a policy of social justice has been adopted to bridge the gulf between rich and poor. The welfare of the long deprived masses has become the main concern of the State. As a result of agrarian reform, the High Dam, and land reclamation, 400,000 families including about three million individuals benefited by the redistribution of land. Co-operative Societies were established all over the countryside. Labourers enjoy, according to the Socialist Law, 50 per cent representation on boards of directors, 25 per cent of the annual net profit of the factories where they work, and insurances against sickness, retirement or accidents. The status of women has substantially improved. They have been given franchise rights since the 1956 Constitution. They have also been given equality with men in most types of work.

Radical economic changes were put into practice to improve living standards. The market economy was replaced by a Socialist one depending on economic planning and State control over 75 per cent of means of production. Agrarian economy was replaced by an agro-industrial one. Due attention was given to agricultural expansion both horizontally and vertically. Consideration has also been given to the modernisation of the existing industries and to the establishment of new ones. Consequently, the distribution of the labour force has shifted from agriculture to industry and services. The dominantly individual ownership before the Revolution has changed through a series of nationalisation schemes to three styles of

ownership: public, co-operative and private.

During the 1960s, the net national product increased at an average rate of 4.9% annually. Per capita income increased at a rate of 2.2%. Accordingly, per capita real income increased from £50.2 in 1959-60 to £63 in 1969-70. It is true that economic development and planning originally aimed at increasing national income at a rate of 7.2% annually. However, the actual rate of economic growth has not exceeded an average of 5% annually. This is still a great achievement in the light of the many obstacles which hinder such efforts.

One big obstacle to economic development in Egypt is the high rate of population increase, especially in the numbers of dependent children and old people. The government has tried by several measures to curb increased population. One of these methods is to pay allowances for fewer children. Another is to establish birth control centres all over the country and to distribute birth control information. However, major results of such programmes will take years to show up. The big question here is, what does that mean to the secondary school curriculum? In other words, what is the contribution of the general secondary school curriculum in solving this problem? As will be noted later, the curriculum planners have not paid direct attention to such a problem.

Another obstacle in the path of economic development in Egypt is the mere transfer from a free market economy to a planned economy. The transfer period involves problems of management, planning and pricing incentives as well as others. For example, one can look at the importance of the problem of management to the Egyptian economy. In a very short period of time there were created about 4,800 co-operative organisations, all of which needed well-trained managers who were unavailable. Also, the introduction of many

new, complicated industries and the modernisation of others required technically skilled labour which is in great demand and short supply. How could the general secondary school curriculum contribute to this problem? General secondary schools are turning out annually thousands of young people who are going to sit at desks, disturbing work instead of fulfilling work. Or, at least, they may be added to the surplus number of clerks which already existed.

Considerable political changes have occurred. From monarchy, the Republican regime was established. Complete independence was accomplished. Political parties which were dominated by the King, feudalists, and capitalists, were replaced by one political organisation for the whole people. Mass representation has been attained since 1957. Peasants and labourers have been granted the right of 50 per cent representation in parliament membership as well as in all legislative councils.

The democratic trend is manifested in the accelerated reduction of the barriers between classes of society. This is grounded in the widely spread conviction that an educated electorate is essential to the welfare of society. Society has, therefore, moved away from education for the few to education for the many.

However, democracy as it has been established in Western nations has never been achieved in Egypt. This could be attributable to a combination of lack of experience, a high rate of illiteracy, and lack of political as well as economic awareness even among educated people. What contribution did the curriculum make to this problem, and how can it help in solving it? The answer to such a question will come later.

In education, in the light of the foregoing goals, Law No.210 of 1953<sup>19</sup> was issued which provided for the establishment of (six years) unified

primary education (from 6 to 12) and removed the gap between the former elementary and primary education. This stage has since become free and compulsory. It aims at helping the child achieve an integral and well-balanced development, physically, mentally, emotionally, spiritually and socially. It also aims at the creation of a good citizen, able to participate in a democratic society.

The foreign language required (often English) was dropped in this stage. Promotion tests were also abolished. The primary education examination at the end of six years was also cancelled, and the admission of pupils to the preparatory stage was allowed between the age of ten and twelve as from the end of fourth form primary, for pupils who could pass an enrolment test especially held for this purpose. As for sixth form primary pupils they had to take a bearing test held by the section inspector.<sup>20</sup>

A conference on free and compulsory education in the Arab States was held in Cairo in 1954,<sup>21</sup> in co-operation with UNESCO. Outstanding among the Conference resolutions is the one calling for the introduction of a minimum six-year compulsory education period for all children. In 1956, Law No.213<sup>22</sup> was issued to introduce six-year primary courses for all children. A general examination at the end of the sixth form is held by the local authorities. Table 2 reflects the growth of primary education enrolments between 1953/54 - 1975/76.

The reorganisation of preparatory education was passed in the 1957 Education Act No.55,<sup>23</sup> which put an end to the overlapping and duplication between primary stage and this stage. This Act made the preparatory stage an independent stage of three years (from 12 to 15), instead of the former four. This stage ended with a public examination held by the respective

TABLE 2: THE GROWTH OF PRIMARY SCHOOL ENROLMENTS, AND THE GROWTH OF TEACHERS DURING THE PERIOD FROM 1953/54-1975/76

Year	Boys	Girls	Total	Teachers	Ratio
1953-1954	866,613	526,110	1,392,741	45,869	
1957-1958	1,302,743	783,961	2,086,704	54,766	
1966-1967	2,135,669	1,357,266	3,492,935		
1972-1973	2,472,893	1,516,285	3,989,178	93,502	
1974-1975	2,518,121	1,556,772	4,074,893	100,901	
1975-1976	2,535,663	1,582,273	4,120,936	112,649	

Source: Extract from reports on the Development of Education, the issues of 1957; 1968; 1973; and 1977; and Helmy, M.K., Report on the Results of Public Examination in the Academic Year 1974-1975, Cairo, 1975, p.6 (in Arabic).

educational zones. Successful students are given the Preparatory Education Certificate.

As an intermediate stage, it is supposed to supply pupils with types of manual, artistic and mental experience and skills appropriate to their age and mental standard, and capable of discovering their abilities and interests for the type of Secondary education they desire to choose. It is also supposed to prepare a good citizen who can earn a living.

In reality, the transformation from preparatory to the different types of secondary education is based only on the student's marks in the preparatory certificate examination. Thus, most of the students with the highest marks go to general secondary education, and of the rest, those who wish to continue their education go to technical schools. Therefore, no consideration is given to the student's attitudes and interests, since no educational guidance or abilities, attitudes and intelligence tests are used. Table 3 shows the intake of students in general and technical

secondary education, and the proportion of students in each type during the period from 1953/1954 - 1973/1974.

**TABLE 3: THE INTAKE IN GENERAL AND TECHNICAL SECONDARY EDUCATION  
1953/1954 - 1973/1974**

Year	Intake in G.S. Education	%	Intake in T.S. Education	%	Total %
1953-1954	109,711	87.6	15,566	12.4	100.0
1960-1961	140,524	69.2	67,186	30.8	100.0
1966-1967	244,979	67.5	119,810	32.5	100.0
1969-1970	292,109	59.8	197,054	40.2	100.0
1973-1974	-	48.0	-	52.0	100.0

Source: Extract from Soliman, M.A.; Labib, R., History of Education in A.R.E. (Egypt), Cairo, Anglo-Egyptian Press, 1972, p.291, and The National Council for Education, Scientific Research and Technology, The 1974 Report, p.61 (in Arabic).

It should be noted in this table that there is a steady decrease in the proportion of students registered in general secondary education and vice versa in technical secondary education. This could be attributed, on the one hand, to the changing attitude towards manual work, and the difficulties of study and examinations in general secondary education. On the other hand, the planning for the First Five-Year programme (1961-1965), was designed to ensure the gradual expansion of technical education.<sup>24</sup> Moreover, although general secondary education is often the only path to universities and higher institutes, a graduate is not sure that he will get a place in higher education.

The universities are faced each year with more students than they can admit. Table 4 indicates the magnitude of the problem.

**TABLE 4: GENERAL SECONDARY SCHOOL GRADUATES AND THOSE ADMITTED TO UNIVERSITIES AND THE SURPLUS**

Academic Year	Secondary school Graduates	Number of those Admitted	Surplus
1955-1956	22,967	11,645	11,322
1956-1957	22,649	8,615	14,034
1957-1958	38,629	9,829	28,800
1958-1959	29,531	13,842	15,689
1959-1960	35,078	14,367	20,711
1965-1966	50,700	29,150	21,550
1966-1967	53,200	29,150	24,050
1967-1968	55,770	29,150	26,620
1968-1969	58,100	28,850	29,250

Source: Extract from El-Said, E.M., The Expansion of Higher Education in the United Arab Republic, Cairo, Cairo University Press, 1960, p.15 and Ministerial Committee for Manpower, 'Report on Educational Policy,' Cairo, 1967, p.73 (in Arabic).

It was, therefore, essential to work out a fair criterion to determine the most eligible. University authorities were once inclined to hold a competitive examination, as usually happens under similar circumstances. However, the fact that the secondary school certificate is uniform throughout the country renders such an examination superfluous, hence it was decided to use the secondary school certificate as the basis for admission. Applicants are required to express their preference for more than one faculty. They are then arranged in order of merit.

This system suffers from two obvious defects: first, it gives too much weight to the marks in the final secondary school examination, and thus eliminates those who may prove brighter at a later stage of their education.

Second, and more serious, it directs some students to faculties of their second or third or sixth choice.<sup>25</sup> This occurs whenever their first choice faculty is fully occupied by more advanced competitors.

It goes without saying that the universities try to admit as many as they possibly can. This policy, however, has compromised the standard of education, especially as regards the average student.

But faculties vary a great deal in this respect. Some of them, such as Medicine, Engineering and Science are strict in their admission policies which are limited by the available laboratory facilities. Others such as law, arts and commerce, etc., are able to be more liberal in their admission policies. Hence they account for the greatest proportion of students, see Table 5.

Up to 1953, the secondary stage covered five years after primary stage. The 1953 Education Act No.211<sup>26</sup> replaced the former system, and general secondary education courses have since been designed to cover three years (15-18), after preparatory education.

According to Al-Qabbani who served as Minister of Education between 1952 and 1954, the quality of education should come before quantity, especially in secondary and higher education, and any nation which sacrifices quality for the sake of quantity in these two kinds of education is committing suicide. But Taha Hussein, the Sorbonne graduate who took his inspiration from the French ideals of humanitarianism, natural right, equality and liberty, believed that education is not a luxury but an absolute necessity like air and water and should not be bought and sold; it should be free and available to all who desire it. In his 'Future of Culture in Egypt' of 1938, he presented a critical analysis of Egyptian education and made constructive proposals for its future reorganisation, most of which

**TABLE 5: COMPARATIVE FIGURES BETWEEN THE ADMITTED STUDENTS IN DIFFERENT FACULTIES IN THE ACADEMIC YEARS 1967/68 - 1972/73**

Faculties	1967/68		1972/73	
	Number of students	%	Number of students	%
Arts	842	4.5	5427	11.3
Law	821	4.4	5099	10.6
Commerce	2389	12.7	9397	19.6
Science	680	3.6	2578	5.4
Medicine	2458	13.1	3683	7.7
Engineering	3329	17.7	3985	8.3
Economy	166	0.9	378	0.8
Dentistry	443	2.3	417	0.9
Chemistry	721	3.8	981	2.1
Veterinary Surgery	617	3.3	765	1.6
Agriculture	2059	11.0	6220	13.0
Dar-Al-ulom	782	4.2	896	1.9
Girls College	659	3.5	1616	3.4
Education	2421	12.9	5563	11.6
Egyptology	-	-	454	0.8
Nursing	397	2.1	258	0.5
Information	-	-	252	0.5
<b>Total</b>	<b>18784</b>	<b>100.0</b>	<b>47969</b>	<b>100.0</b>

Source: Report of The National Council for Education, Scientific Research and Technology, Cairo, first issue, June-September 1974. Annex No.9, p.107 (in Arabic).

were later accepted and put into practice either by himself when he was Minister of Education between 1950 and 1952, or by others.

So, the secondary education law of 1949 is associated with Al-Qabbani, then Under-Secretary of the Ministry of Education, and the 1951 law is associated with T.Hussein, then Minister of Education. These two laws of secondary education represented two different policies or schools of thought whose successive conflicts produced the law of 1953. However, general secondary education is regulated at present by the General Education Law

of 1968.

T.Hussein's policy was accepted by the Revolution government of 1952, and ever since there has been an enormous increase of the enrolments in general secondary schools. Table 6 shows an apparently rapid decrease of enrolments in the academic year 1953-1954, but in reality this was a result of dividing the former five-year secondary schooling into two stages, preparatory and secondary. It also shows that the number of girls nearly doubled within the period 1954-1960.<sup>27</sup>

The total number of students enrolled in the general secondary education is steadily increasing, but the rate of growth is gradually decreasing. This is evidenced by the fact that this rate was 9.6% in the academic year 1965/1966, whereas it dropped to 6% in the academic year 1967/1968.<sup>28</sup>

It is noticeable, however, that despite the decrease in the rate of enrolments in general secondary schools, the rate of enrolment in the girls' schools is higher than that in the boys' schools, especially in 1966/67 and 1967/68, see Table 7.

In comparison between the male and female enrolments in 1969/70 and 1970/71, for example, it is noticeable that the rate of enrolments in boys' schools increased in 1970/71 by only 1.2% whereas this rate rose to 2.4% in the girls' schools. Therefore, the percentage of female to the total number of students was 31.7% in 1969/70, and rose to 32% in 1970/71.<sup>29</sup> This is an evidence of the people's positive attitude and their increasing awareness as regards to education for girls.

The number of teachers was 3.8% less in 1970/71 than in 1969/70. This was due to two major factors: 1) the number of teachers sent by the government to other Arab States, and 2) teachers required for military service owing to the atmosphere of war in the Middle East.<sup>30</sup>

TABLE 6: THE DEVELOPMENT OF CLASSES, STUDENTS AND TEACHERS DURING THE PERIOD FROM 1951/1952 to 1959/1960

Academic Year	Schools	Annexed Sections	Classes	Boys	Girls	Total	Teachers	Teacher-pupil ratio
1951-1952	209	171	4,136	130,171	21,035	150,206	6,960	
1952-1953	220	192	4,971	155,796	25,993	181,789	8,087	
1953-1954	200	80	2,667	79,159	12,903	92,062	7,401	1.12.4
1954-1955	197	82	3,198	89,769	16,326	106,095	7,271	
1955-1956	208	86	3,545	50,566	17,046	107,612	8,238	
1956-1957	201	75	3,522	90,877	18,273	109,103	7,831	
1957-1958	202	74	3,574	90,672	18,723	109,395	7,981	
1958-1959	199	83	3,629	94,902	20,706	115,608	8,411	
1959-1960	211	80	3,671	97,296	23,471	120,767	8,534	1.14.1

Source: U.A.R. Ministry of Education, Department of Statistics, 'A Guide for Educational Statistics,' Cairo, Ministry of Education Press (extract from issues cover the period from 1951/1952 to 1959/60).

NOTE: up to 1952-53 secondary education extended for five years after obtaining the primary education certificate.  
 Since 1953-54 the secondary education course lasted three years after the preparatory education certificate.  
 Teachers' figures for the years 1951/52 and 1953/54 cover teachers, headmasters and sub-headmasters; but they cover teachers only in subsequent years.

TABLE 7: THE DEVELOPMENT OF CLASSES, STUDENTS, AND TEACHERS DURING THE PERIOD FROM 1960/1961 to 1975/1976

School Year	No. of Schools	No. of Adjusted Sections	No. of Classes	Intake		No. of Pupils		No. of Teachers		Total
				Male	Female	Male	Female	Male	Female	
1960-1961	225	102	3968	31,751	11,433	103413	28748	7550	1555	9105
1961-1962	226	118	3926	15,643	5,771	96148	28459	7646	1590	9236
1962-1963	225	130	3965	25,902	9,885	96244	30830	7518	1714	9232
1963-1964	248	126	4206	34,269	14,283	101944	35802	7725	1902	9627
1964-1965	251	190	4862	43,346	18,211	124712	47517	7969	2432	10401
1965-1966	263	234	5702	47,101	19,726	149701	58880	8326	2666	10992
1966-1967	272	254	6290	46,953	21,307	166125	68494	9075	2859	11924
1967-1968	-	-	7323	-	-	194044	81047	9962	3201	13163
1969-1970	-	-	7557	-	-	200319	92825	10467	3492	13959
1970-1971	-	-	7757	-	-	202811	95076	297887	3609	13424
1971-1972	-	-	8135	-	-	212234	100255	-	-	-
1972-1973	-	-	8264	-	-	218561	103342	10588	4132	14720
1973-1974	-	-	8437	-	-	217515	106085	10378	4242	14620
1974-1975	-	-	8803	-	-	226784	113542	10859	4306	15165
1975-1976	-	-	9155	-	-	236143	122176	11918	4532	16450

Source: U.A.R. Ministry of Education, Department of Statistics, Extract from 'A Guide for Educational Statistics,' Cairo, Ministry of Education Press, 1960/1961 to 1966/1967; and Reports on the Development of Education in Egypt, Annual Reports cover the period from 1967/68 to 1975/76.

To solve the urgent problem of a shortage of teachers, the Ministry of Education took emergency measures. Private contracts for working abroad were suspended; civil servants working in some other sectors were encouraged to take up teaching; and those who had retired from the teaching profession were invited to come back.<sup>31</sup> But in reality these measures did not solve the problem especially in the long run, and they compromised the standard of education.

The increase in the number of boys in 1974/75 was some 9269 or 4.3% more than the figures in 1973/74. But the growth rate of girls in 1974/75 was even more, it was 7454 girls or 7.0%. Thus, the proportion of girls to the total number of students reached 32.8% in 1973/74, and 33.4% in 1974/75.<sup>32</sup> Table 8 shows the enrolments as percentage of relevant age group.

TABLE 8: ENROLMENTS AS PERCENTAGE OF RELEVANT AGE GROUP

Country	Year	Primary	Inter- mediate	Secondary	Higher	Literacy rate	GNP US
Egypt	1973	74%	46%	31%	10%	35-40%	240
S.Arabia	1973	54	25	10	2.3	20-30	1300
Iran	1973	77	38	24	3.0	50	723
Algeria	1973	67	21	8	3.0	25	320
Morocco	1972	56	14	2.5	-	25	290
Lebanon	1972	130	62	37	11	68	754
Jordan	1972	104	63	31	27	59	270
Ecuador	1972	95	35	19	6.5	69	313
Venezuela	1973	97		42	14.0	77	1056

Source: A.R.E. Ministry of Education, Education and Training in Egypt, Cairo, Ministry of Education Press, February 1976, p.3

Despite a low GNP, Egypt, like Jordan and Lebanon, shows high participation rates in all levels above primary stage.

### III. THE GENERAL SECONDARY SCHOOL CURRICULUM NON-CHANGE

#### 1. Aims

General secondary education is an independent stage which provides free education for a selected group of boys and girls between the age of fifteen and eighteen. The basic requirement for admission to this type of education is the pupil's aggregate in the examination of preparatory education. The courses of study comprise three years divided into one year general course, followed by two years special course, either in arts or in science sections. In 1976/77, the science section of the third year was divided into two sections, science and mathematics.

The main aim of the curriculum in this type of education is to serve as a selection base for higher education. Programme of study is relatively rational, deductive and intellectualised. Emphasis is placed upon the academic aspect and the development of the student's mind. The intellectual training is carried up through the main subjects of the curriculum.

Despite the fact that one of the stated aims is to satisfy the developmental needs of late adolescence, to prepare for good citizenship and social usefulness and to prepare for earning a living,<sup>33</sup> this curriculum is characterised by being relatively unresponsive to social pressures arising from social, economic and political changes. It is the characteristics of encyclopaedic curriculum theory which, to some extent, the aims of general secondary school curriculum are confirming.

An educational programme, like any activity, is directed by the

expectations of certain outcomes. As for religious education, for example, the following statements are found:

"Constructing the student's belief in God and his Prophet and his law."

"Developing his understanding on how to build a family on moral values."

"Deepening his belief as a positive member of society."

"Making religion an aid in solving life's problems."

34

As for Arabic language, the following are some of the statements available:

"To increase the student's belief in his language as an original component of Arab personality and Arab nationality."

"To develop his ability in scientific thinking."

"To develop his ability to read, understand and formulate critical decisions about his reading and to benefit from all these in his practical life."

"To increase his ability to understand literary terms, to feel the beauty in them, analyse them and criticize them."

"To increase his ability to express his readings in his own words."

35

In English language, some of the statements are as follows:

"To read with understanding, both in class and at home."

"To widen the student's range of knowledge in both the culture of the U.A.R. and the culture of English speaking nations."

"To cultivate the habit of reading English."

36

In the natural sciences, the following statements are examples:

"Assisting students in acquiring functional knowledge in physics, chemistry and biology."

"Assisting students in using the scientific method of thinking."

"Assisting students in acquiring relevant skills."

37

In art education, the following statements are given as an example:

"Assisting the student in developing his personality, and realising his identity."

"To respect manual work and the workers."

"Discovering the artistic abilities in students and developing them."

38

The following are examples of social science statements:

"Knowledge of the important sources of wealth in the country and the means of benefiting from them and caring for them."

"Knowledge of national history and its glories, its civilisation and its struggle for freedom and independence."

"Developing the student's feeling towards Arab nationalism, and asserting that it possesses social, economic and cultural unity."

39

Finally, in mathematics:

"Training the student in using scientific methods and mathematical logic."

"Developing his creative abilities."

"Developing his scientific attitudes."

40

"Assisting students in using the mathematical language accurately, and in acquiring the skills of using calculators and investigating, analysing and criticising mathematic ideas."

"Supplying students with mathematic materials necessary for other areas or disciplines of knowledge, for facing practical life, and finally, for following up higher studies."

41

However, making verbal formulations of goals and objectives does not ensure that these goals and objectives will be realised. Before going further, three questions have to be answered: 1) what is the relation between these aims on the one hand and the teachers and students on the other? 2) what is the link between these aims and the curriculum content, experiences and the materials provided for the programme of instruction? 3) what is the link between these aims and the system of evaluation?

In reality, the Egyptian teacher is not involved in determining the

aims and objectives of his own subject. Neither the teacher nor the student is counselled or given a chance to express an opinion about the curriculum goals and objectives. They are not even available either for teachers or for students. They are not even published in a teacher's guidance book to be delivered to the teacher to guide him in his work.

The curriculum and textbook are, actually, imposed on the teacher and the student at the beginning of each academic year. As for the curriculum aims, the teacher does not even receive the objectives determined by experts in the Ministry of Education in Cairo, the only thing he actually receives at the beginning of each year is an outline determining how many lessons he has to teach (from a determined textbook) in the first session, and how many in the second and so on, in such a way so as to enable him to complete the textbook.

This does not mean that the teacher does not have - explicitly or implicitly - his own goals. The teacher usually does have his own goals. But these goals are often concentrated around how to transmit or impart the determined textbooks to the students.

The experts in each subject (they are usually accommodated in the Secondary Education Department in the Ministry of Education in Cairo), are the only people involved in setting curricula, the aims and objectives of the curricula, and textbooks for every single school throughout the country. Therefore, neither the teachers nor the students are involved in setting or even accepting educational aims and objectives. The only thing the student knows as an objective is to act or interact in such a way as to enable him to pass the examination.

The above mentioned aims are mostly vague, general and not operational. Therefore, it is better to call them aims, but not objectives. These aims

are not formulated in terms of the changes in students the curriculum is intended to bring about. The general secondary school curriculum is a curriculum without an explicit set of clearly defined goals and specifications. Examples of such aims are: "Each student ought to have the educational opportunity which could help him to develop himself to the maximum possible extent."<sup>42</sup> "To develop his ability of scientific thinking and to make use of it in his life ...", etc. These aims do not specify by what materials, experiences or content they should be achieved, neither do they specify in what sense the student should be taught the subject.

Therefore, once teachers are aware of these aims they may be confused about the possible way of achieving them. To accomplish curriculum goals and objectives, the curriculum makers must choose words that convey the same meaning to all intended readers, whether they are teachers or students. Statements like these, for example, 'Assisting students in acquiring relevant skills.' 'Assisting the student in developing his personality, and realizing his identity,' etc. Statements of objectives like these can be interpreted differently by different teachers, they give them no direction in selecting materials, organising content, and describing obtained outcomes, nor do they provide a common basis for instruction or evaluation. Thus, it is not surprising to find a discrepancy between the written aims and the reality in the Egyptian classroom.

Statements of curriculum objectives formulated in this way are often very broad in scope, such as, 'to assist the student to appreciate the value and power of mathematics in our life,' 'the development of good citizenship.' Such statements give no indication of the kinds of changes to look for in students, and the behavioural changes involved in these statements cannot be directly observed and thus, cannot be evaluated. In other words, because

of their vagueness, they cannot serve as an instruction model or plan, and it is better, therefore, to call them aims or goals rather than objectives. Bloom wrote:

"We feel that once objectives are defined clearly, they can become models or plans that help shape and guide the instruction and evaluation processes."

43

Thus, what statements of aims in the general secondary school need are the following steps. First, the general aim stated in broad terms should be broken down into a content component and a behaviour component. The content area refers to the specific subject matter to be conveyed. The behaviour refers to what we want the student to do with the materials. Second, the formulation of statements must describe definitely the minimum level of student performance.

Bloom has classified the educational objectives in the following way:

Cognitive Domain

- 6 - Evaluation
- 5 - Analogy or Synthesis (upper level)
- 4 - Analysis
- 3 - Application
- 2 - Comprehension (lower level)
- 1 - Recall or memory<sup>44</sup>

Bloom's taxonomy could be stated in this order for two reasons: first, because the mental process starts usually with recall first, then comprehension, and so on, up to the evaluation. So, each step depends on the previous ones, but not vice versa. Second, because recall and comprehension are the lower level of mental process, so the start should be from the bottom up to the top, not vice versa.

### Affective Domain

- 5 - Value characterisation
- 4 - Organisation
- 3 - Value or attitude
- 2 - Responding
- 1 - Receiving or acceptance<sup>45</sup>

The psychomotor domain has not yet been introduced. Some objectives aim to formulate psychomotor skills in students, and could be taught through art education, physical education, manual training, woodwork and so forth.

Accepting this taxonomy, we may find that curriculum aims and goals in general secondary school in Egypt are concentrated on the cognitive domain. Moreover, the concentration is on the lower level of the cognitive domain, while the values, attitudes and psychomotor skills have little attention, and this, in turn, has restricted the instruction process to recall and memorise.

The lack of attention paid to the affective side has made the terms such as 'moral values', 'attitudes', and 'beauty values' outward terms, empty of effectiveness. The teaching of these values has been restricted to oral or written composition rather than to practising them. The lack of attention paid to the psychomotor skills has led to the lack of practical studies, physical education and art education; and this, in turn, led to failure to respect of manual work.<sup>46</sup> This could be attributable also to the fact that little attention has been paid to the socio-economic and political needs of society.

## 2. Content

No phase of education in Egypt has aroused as much discussion as that of the curriculum content. The problem of what to teach and how much to teach

raises more discussion in educational debates than the subtle and difficult problem of how to teach.

The general secondary school has followed the encyclopaedic school of thought that all knowledge of the real world is useful and should be included in the content of its curriculum. In practice, however, curriculum content in this school emphasises the importance of native and foreign languages, mathematics, natural sciences and social sciences. The content consists of more than ten subjects and, therefore, arouses debates and contradiction about the depth and breadth of the content of the curriculum. The need has been felt for depth studies in the last two years of general secondary school in those subjects which students intended to specialise in the university. The Ministry of Education, therefore, is struggling to retain a broadly based curriculum while reducing the number of subjects.

According to the 1953 Education Act No.211, the courses of study in general secondary education have been designed to cover three years. The course of the first year is general and those of the second and third branch into two sections, literary and scientific. The main aim was defined as "to qualify students for universities and higher institutes."<sup>47</sup>

The following subjects were taught in the first year: 1) Religious education and Koran, 2) Arabic language, 3) the first foreign language and translation, 4) the second foreign language, 5) mathematics, 6) history, 7) geography, 8) Egyptian society, 9) physics, 10) chemistry, 11) drawing, 12) hobbies, and 13) physical education.

The following subjects were taught in the second and third years, literary section: 1) Religious education and Koran, 2) Arabic language, 3) the first foreign language and translation, 4) the second foreign language, 5) history, 6) geography, 7) principles of philosophy, 8) principles of

sociology, 9) hobbies, and 10) physical education. In addition to these, optional subjects (as a special level), were afforded, such as Arabic language the first foreign language, history and geography.

In the scientific section in the second and third years the following subjects were taught: 1) Religious education and Koran, 2) Arabic language, 3) the first foreign language and translation, 4) the second foreign language, 5) mathematics (including mechanics), 6) biology, 7) physics, 8) chemistry, 9) hobbies, 10) physical education. In addition to these, optional subjects were taught (as a special level), such as, mathematics, physics, chemistry and biology. The minimum lessons per week were not less than 36, of 50 minutes each.<sup>48</sup> See plan of study, Table 9.

The distribution of subjects on different forms, the number of weekly lessons for each subject, and the syllabuses were issued by ministerial decrees made by the Minister of Education himself.<sup>49</sup>

The teaching of German was started in 1955/56,<sup>50</sup> in the big cities and towns. The teaching of Italian was also introduced in zones where it was more commonly used, such as Cairo, Giza, Suez and Port-Said. It is worth noting that the teaching of one or two of these languages to the student has not been based on his own desire or according to his own ability or interest, but rather on his total marks in the Preparatory Certificate Examination. Successful students in this examination with the highest marks can join English classes in the general secondary schools, and those with lower marks can only join French or German classes. It is evident here that inequality of educational opportunity has no reasonable justification.

After the Suez Canal Crisis in 1956 stress was laid on military training which was introduced as an obligatory subject in the curriculum, "in order to create a tough and solid generation able to shoulder the re-

**TABLE 9: PLAN OF STUDY FOR GENERAL SECONDARY EDUCATION DURING  
THE PERIOD FROM 1953/54 - 1955/56**

Subjects	First Year	Second Year		Third Year	
		Literary	Science	Literary	Science
Religion	1	1	1	1	1
Arabic language	6	8	5	8	5
First foreign language	6	7	5	7	5
Second foreign language	4	5	4	5	4
History	2	2	-	2	-
Geography	2	2	-	2	-
Egyptian society	2	-	-	-	-
Principles of sociology	-	2	-	2	-
Principles of philosophy	-	2	-	2	-
Mathematics	4	-	7	-	7
Physics	2	-	3	-	3
Chemistry	2	-	3	-	3
Biology	-	-	3	-	3
Drawing	1	-	-	-	-
Hobbies	2	2	2	2	2
Physical Education	2	2	2	2	2
Special Courses*	-	3	3	3	3
<b>Total</b>	<b>36</b>	<b>36</b>	<b>38</b>	<b>36</b>	<b>38</b>

Source: Husri, S., Arab Cultural Annual '5' issued under the auspices of The Cultural Department of the Arab League, Cairo, 1957, p.563, and Boctor, A., The Development and Expansion of Education in the United Arab Republic, Cairo, The American University in Cairo Press, 1963, p.161

\* These represent advanced courses in physics, chemistry, biology or mathematics for the scientific section; and Arabic, English (or French), geography or history for the literary section.

sponsibility lying ahead in defending the fatherland."<sup>51</sup> Two lessons per week have been introduced ever since in the three years of secondary education.

Secondary school students have been taught the principles of co-operation and those articles of the Constitution relating to co-operation and social solidarity, as well as the Co-operative System on which certain international organisations are based.<sup>52</sup> However, no attention has been paid to the principles of democracy, and the different kinds of political systems in the world and the importance of the freedom of expression and criticism. In other words, no political education has been given at all. If we could take into consideration that general secondary education is the open door to universities and higher education, and most of the leaderships in social and political positions have been chosen from the university graduates, we could say that general secondary education has partly missed one of its important targets, that of helping to create a conscious, enlightened and democratic society.<sup>53</sup>

Following the Central Ministerial Decree No.11095 issued in February 1958,<sup>54</sup> hobbies and practical studies were introduced in all general secondary schools. Each school chooses the hobbies and studies most appropriate to its location and environment. The purpose of these studies is supposed to foster among the students the sense of dignity of labour and manual work and to give them practical experience which may help them in the future. But in reality, the shortage of teachers for these studies, and the shortage of materials and equipment required have made them either to be abandoned or converted to other lessons.

Starting with the academic year 1959-1960,<sup>55</sup> five general secondary schools were converted into experimental schools (four for boys and one for

girls). The main purpose was to introduce certain industrial and commercial subjects in boys' schools, and also certain industrial, commercial and feminist subjects in girls' schools. These subjects replaced the second foreign language and the practical studies in the general study plan. The Ministerial Decree No.1033 stated that:

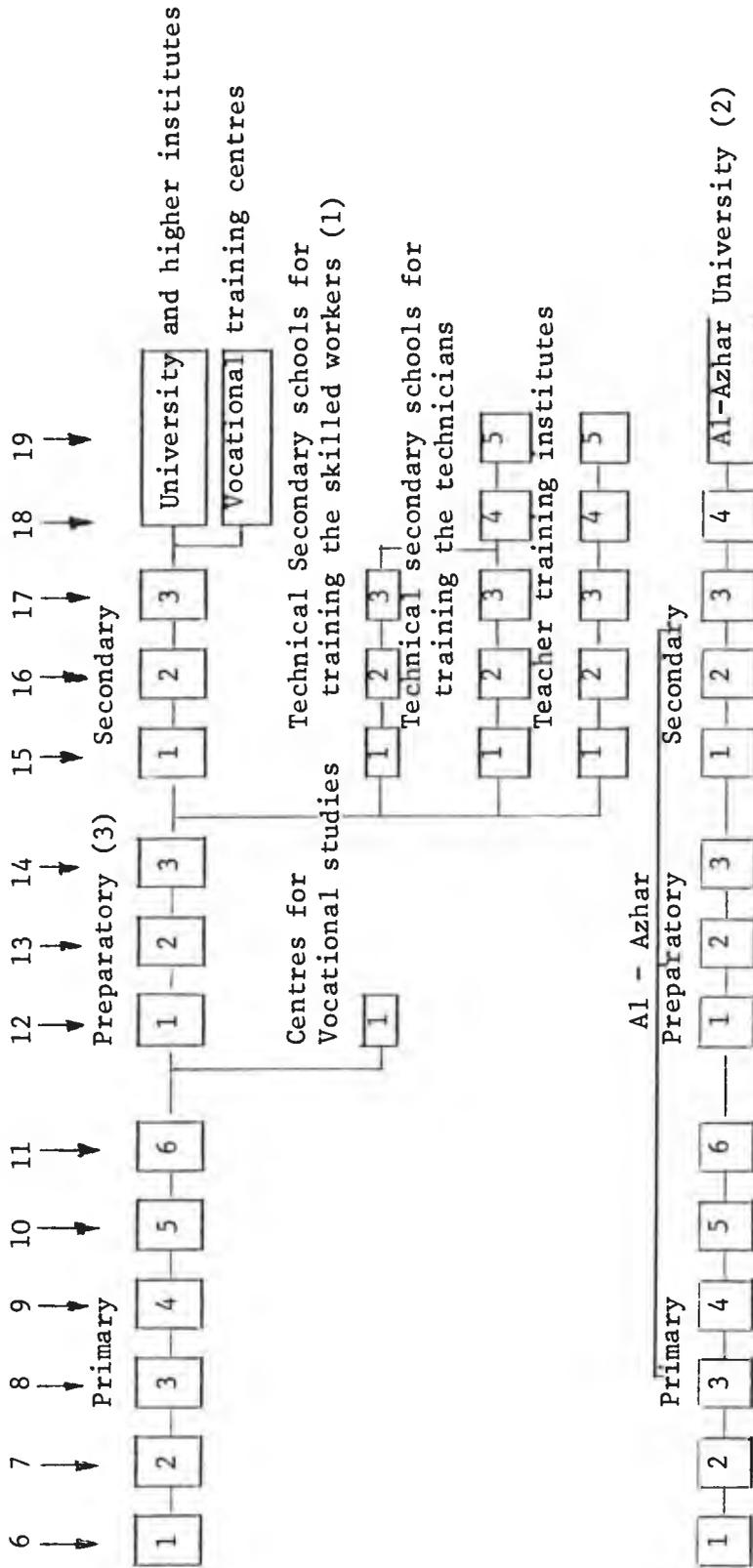
"The purpose of establishing these schools is to introduce vocational subjects into the curriculum of the general or academic secondary schools."  
56

After the declaration of the National Charter in May 1962, there was a tendency to expand the application of this plan in the preparatory and general secondary education.<sup>57</sup> But in spite of that, this tendency has never been in application so far. And this experiment was afterwards abandoned. Perhaps this could be attributable to the changeable policy which has always been directed by one man - the head of the Ministry of Education. The changeable policy can also be seen from the next examples; the special level subjects were provided during the 1950s and abolished during the 1960s<sup>58</sup> and came back afterwards in 1974-75. The teaching of the second foreign language in the first year was abolished in 1960/61, and provided again since 1965/66.<sup>59</sup>

According to the 1968 Education Act (No.68),<sup>60</sup> the preparatory technical schools have been converted to secondary technical or general preparatory schools. Thus, ever since there has been one unified preparatory school with academic spheres. This unification of preparatory schools has been done to facilitate matters, in future when the compulsory education is increased to cover both the primary and preparatory stages of education,<sup>61</sup> see the Educational Ladder in Figure 1.

With regard to the general secondary stage, it is still three years, free for the successful candidates at the age of 15 to 18, and most of the

FIGURE 1: EDUCATIONAL LADDER IN U.A.R. IN THE YEAR 1966/67



- (1) Technical secondary includes (commercial, agricultural, industrial) and technical secondary for girls. The bright graduates of these schools can continue higher education in University and higher institutes according to certain conditions.
- (2) There is a relation between Al-Azhar education and the general education, therefore students can be transferred from one type to another according to certain conditions.
- (3) State decided to unify education in preparatory stage in one type of school, where general and technical education are carried out, instead of the different type of schools in the former system which was carried out before 1963/64.

Source: U.A.R. Ministry of Education, Documentation Centre for Education, Report on The Development of Education in The United Arab Republic in the Academic Year 1966-1967, Cairo, Ministry of Education Press, 1967, p.3

secondary schools are under the supervision of the State.

In 1970, the Ministry of Education started an experiment in teaching modern mathematics for the secondary stage. The experiment was supported by new curriculum prepared by UNESCO and adapted by the Egyptians for the Egyptian students. New curricula for 'geography' and for 'Arab society' were introduced in 1970 in the third form. A new curriculum for physical education has been introduced in 1970 again, after it was ignored in the 1960s. As for geology, draughtsmanship, and technical drawing, they were all abolished in the new plan of 1970.<sup>62</sup> New textbooks were prepared for modern mathematics, geography and Arab society, see the Plan of Study in Table 10.

It suffices to say, from the first look at this plan of study, that the Egyptian student is given 13 to 15 different subjects, including three languages, or 36-38 lessons a week. It is surprising to know that the highest officials in the Ministry of Education are aware of the fact that the materials and the content offered may be far beyond the capacity of any human mind. Therefore the Ministerial Decree No.167 was issued on 26th August 1976<sup>63</sup> to make some revisions in the curriculum of the third form. This decree stated that:

"Because of the desire of giving the student more chance of choice among subjects, and more deep specialisation in the third form (scientific section), the plan of study in this section has changed for this academic year (1976-1977), to be as follows."

The scientific section in the third form has been divided into two branches: the science branch and the mathematics branch. First all students in the two branches have to study the following subjects: Arabic language, first foreign language, second foreign language, physics, chemistry, religious education, physical education and practical studies. Second, students in

TABLE 10: PLAN OF STUDY IN GENERAL SECONDARY EDUCATION (1970)

No.	Subjects	1st year	2nd year		3rd year	
			Lit.	Sci.	Lit.	Sci.
1	Religious Education	2	2	2	2	2
2	Arabic language	7	7	5	7	5
3	First foreign language	6	7	6	7	5
4	Second foreign language	3	5	3	5	3
5	History	2	3	-	3	-
6	Geography and Maps	2	3	-	4	1
7	Arab society	1	1	1	1	1
8	Sociology	-	1	-	-	-
9	Economy	-	1	-	-	-
10	Philosophy, Logic & Psychology	-	-	-	3	-
11	Mathematics	4	-	7	-	8
12	Biology	2	-	3	-	3
13	Chemistry	2	-	3	-	3
14	Physics	2	-	3	-	4
15	Artistic Education	1	1	-	-	-
16	Physical Education	2	2	2	2	2
17	National Education	1	1	1	1	1
18	Practical studies (agri. work for boys and domestic science for girls)	1	2	1	2	1
Total of lessons		38	36	37	37	38

Source: Ministry of Education, The Modified Curriculum for General Secondary Stage, Cairo, 1970; General Department of Secondary Education; Curricula and textbooks Department 1211 of 1970; and A.R.E. Ministry of Education, Documentation Centre for Education, 'The System of Education in the A.R.E.,' Cairo, Ministry of Education Press, 1973, p.19

the science branch have to study, in addition to the above mentioned subjects, biology of an average 4 lessons a week, and mathematics on an average of 4 lessons for traditional mathematics or 5 lessons a week for modern mathematics. Third, students in the mathematics branch have to study, in addition to the above mentioned subjects in the first category, mathematics of an average 8 lessons a week for traditional mathematics or 9 lessons a week for modern mathematics.<sup>64</sup>

All students in the two branches have the right to choose only one language to be studied on a 'special level' if they desire to do so.<sup>65</sup>

The Plan of Study in the literary section is continued as it was in the academic year 1975-1976.<sup>66</sup>

The Plans of Study in the first form and in the second form (scientific section) are continued as they were in the academic year 1975-1976.<sup>67</sup> The Plan of Study in the third form of general secondary education in the academic year 1976-1977 is as follows in Table 11.

This modification in the plan of study in the third year has both its advantages and disadvantages. On the one hand it reduced the number of subjects since it cancelled the subjects of Arab society, national education and military training. It gives the student more chance to choose, since it has divided the study in the third form into three groups of subjects (literary, science, and mathematics), instead of the former two (literary and scientific). It has provided a guide for the student to choose the kind of faculties he prefers, since a student's choice of one of these three groups of subjects gives an indication of the kind of faculties and colleges which he intends to join after obtaining the General Secondary Certificate.

The Ministerial Decree No.167 has limited the faculties and colleges which are allowed to the graduates from each branch.<sup>68</sup> For example, the

**TABLE 11: PLAN OF STUDY FOR THE THIRD FORM OF THE GENERAL SECONDARY SCHOOL IN THE ACADEMIC YEAR 1976-1977**

Subjects	Literary Section		Scientific Section			
	Ordinary level	Special level	Science Branch		Maths Branch	
			Ord. Level	Special Level	Ord. Level	Special Level
Religious education	2	-	2	-	2	-
Arabic language	6	1	5	1	5	1
1st Foreign language	6	1	5	1	5	1
2nd Foreign language	5	-	3	-	3	-
History	3	-	-	-	-	-
Geography	3	2	-	-	-	-
Philosophy, Logic Psychology	2	2	-	-	-	-
Mathematics*	-	-	4 or 5	-	8 or 9	-
Biology	-	-	4	-	-	-
Chemistry	-	-	3	-	3	-
Physics	-	-	3	-	3	-
Physical Education	2	-	2	-	2	-
Practical Studies	2	-	1	-	1	-
<b>Total</b>	<b>31</b>	<b>3</b>	<b>32 or 33</b>	<b>1</b>	<b>32 or 33</b>	<b>1</b>

\* The plan of study in mathematics (in the science branch) is 4 lessons for traditional mathematics or 5 lessons for modern mathematics. In the Mathematics branch it is 8 or 9 respectively.

**Source:** A.R.E. Ministry of Education, Ministry Office. The Ministerial Decree No.167, 26 August 1976, concerning the plan of study in the third form of general secondary education in the academic year 1976/1977, Cairo, Ministry of Education Press, 1976, p.12 (in Arabic).

mathematics branch qualifies its students to join Faculties of Engineering, Technology, Science (Natural Science branches), Commerce, Economy and Political Science, and Faculties of Education (Natural Science branches). The Science branch qualifies its students to join Faculties of Medicine, Dentistry, Veterinary Surgery, Chemistry, Agriculture, Science (Biological Science branch), and Faculties of Education (Biological Science branch). Thus, a student when he chooses one of the three branches, knows in advance the places that shall be opened for him after obtaining the General Secondary Certificate.

On the other hand, this modification has closed opportunities that were open before the student to join any of all the above mentioned faculties according to his aggregate total marks. Second, this modification does not realise the depth of specialisation, since all differences between science and mathematics branches are restricted to 4 lessons for teaching biology in the science branch more than that in the mathematics branch, and 4 lessons for teaching mathematics in the mathematics branch more than that in the science branch. Third, this modification cancelled the subject matters of Arab society, national education, and military training, and this does not realise one of the secondary school aims, to prepare its students on the national level.

As for these innovations and modifications which occurred in the curriculum, how may they be classified? Are they curriculum improvements or curriculum changes? Perhaps the first requirement here is to differentiate between curriculum improvement and curriculum change,

"Curriculum improvement means changing certain aspects of the curriculum without changing the fundamental concepts of it or its organisation. Improvement consists mainly of an extension of the existing concept of the curriculum and its organisation."

In this sense, the innovations and changes carried out in the general secondary school curriculum may be considered as curriculum improvements, but not a curriculum change.

To change a curriculum means, in a way, to change an institution. Changing institutions involves changing both goals and means, although as Merton has pointed out, goals and institutionalised means may not always correspond. There may be emphasis on goals without an emphasis on means to achieve these goals.<sup>70</sup> Educational goals, such as educating the whole child, may be, as Coffey and Golden have pointed out, "an inspiration with little attention being paid to the institutional means of achieving it." Such aspirations are "likely to be idealistic or sloganistic."<sup>71</sup>

Textbooks are full of repeated information and cramming. The student in the scientific section has to study about 79 textbooks within three years, they contain 11,850 pages, with an average of 3,950 pages annually. In the literary section, the condition is no better; the number of textbooks is 66, containing 9,900 pages with an average of 3,300<sup>72</sup> pages annually.

Faced with this position the teachers compress the texts into abridged notes, which in turn the students abridge further into nutshell facts to be reproduced in the examination.

The number of subjects and weekly periods are so many and the items under every subject are so complicated and detailed, that the student's capacity cannot cope with them. The student's mental level has not been taken into account. For example, the syllabuses of mathematics in the first form contain algebra, geometry and trigonometry, they contain about 29 items. And in the second form (scientific section) there are algebra, geometry, analytical geometry, solid geometry, trigonometry and mechanics, they contain about 35 items. And in the third form (scientific section) there

are all the above mentioned subjects in addition to preference and integration, they contain 39 items,<sup>73</sup> complicated and detailed. In addition, the time allocated to these details is insufficient if a full treatment of the details is required. From the students' side, cramming is simply a way of meeting this situation, therefore, real love of scientific investigation and work is lacking as a consequence. The Ministerial Committee for Manpower reported that textbooks and syllabuses should be clarified and revised, and exaggeration, repetition and cramming should be avoided.<sup>74</sup>

It is fair to say, therefore, that this content, either implicitly or explicitly aims particularly at facts and mere information, rather than creative thinking and developing the whole student. Hence there is a lack of confirmation between the content and the aims which are assumed to be achieved through it. In other words, goals and means do not always correspond. In this sense, the content is not valid because it does not promote the outcome which it is intended to promote.

As can be noticed from the presentation of content, there is too little recreation and open-air activities, too little intimate and informal contact out of the classroom between students and productive activities (i.e. how to repair a motorcar, build a house, install electric wires, grow flowers, etc.). There is a necessity for selecting varied and limited learning experiences to assure that the desired goals are achieved. The experiences afforded in the general secondary school are lacking variety and comprehensiveness; since many of the goals expressed have little or nothing to foster corresponding experiences. It is as Tyler said,

"... if one of the objectives is to develop skill in problem solving, this cannot be attained unless the learning experiences give the student ample opportunity to solve problems."

But instead of this, the syllabuses and textbooks are full of information and facts which do not leave any chance for the student to depend on his own thinking, the result is lack of genius, hatred of learning and cessation of all mental activity at the end of the final examination.

The syllabuses and learning experiences, therefore, are lacking suitability, and the ability of developing the student's personality and his attainments. The students, in turn, have lost the kind of satisfaction from carrying on this kind of experience and as a result the repetition of the same grade, absence and drop-out have become evident.<sup>76</sup>

Many areas of skills have been neglected in the content. For example, the one which constitutes the basis for academic study, at least on the elementary level, as Taba pointed out:

"The skills necessary for independent and creative intellectual work, the ability to locate and evaluate information from sources other than textbooks and the processes of solving problems and analyzing data."

77

This area of skills is especially important in the programme of instruction which can make a transition from 'following the textbook' to assignments which require the use of multiple sources.

To prepare students for the complicated life outside school that they are likely to face, emphasis on problem solving suggests a need for additional skills, such as the ability to define a problem, to plan a method of inquiry and to limit the sources for particular purposes, and the ability to master simple research skills, such as tabulating and classifying information and experimenting with different ways of organising and interpreting.<sup>78</sup>

This area is entirely neglected in the general secondary school curriculum. Moreover, the teacher may resent the use by a student of any book not prescribed by the Ministry of Education, even if this book deals with

the same subject. Therefore, both the teacher and the student are slaves to the prescribed textbook. A summary of it is often made by the teacher, and dictated to the student; the latter boils this down still more until the skeleton - the bare facts only - remain, cold and lifeless. The student repeats and repeats these facts until the last minute before the examination begins. So, the nature of the curriculum in this school does not leave a chance to the student to master a subject nor pursue any scheme of reading outside the textbook prescribed. This 'disease' moved, even, to the parents who dislike to see their children reading any books other than textbooks.

Another needed skill is that of using authority democratically. In school as well as out of school, there are many occasions to practice authority. This practice not only causes much conflict but also teaches undesirable methods of control. These dangers and the like could be avoided by a development of skills in democratic use of authority. For example, socio-dramatic training in resolution of conflicts provides opportunities for learning the more difficult democratic procedures for control.<sup>79</sup>

This has led us to another area of skills, which is neglected in the general school curriculum, they are skills related to the participation in and the conduct of groups. Group activity has become increasingly important in modern life, and, as a consequence, as Taba et al. pointed out,

"... the development of vastly improved techniques of group deliberation and of making group decisions is considered one of the major tasks of society today - and, therefore of the schools today."

80

In spite of the curriculum planner having recognised the importance of this area of skills,<sup>81</sup> no action has been taken for developing them and one of the most serious deficiencies is a lack of skills in the effective functioning of groups: thinking, planning, making group decisions and

participation in team work. Scarcely any analysis of these skills and the methods of learning them are available. Therefore, once again the content and learning experiences are lacking in variety and comprehensiveness.

Despite the fact that the general secondary school is a school for a potential elite, who may consider it as a bridge to university and higher education, and subsequent leadership,<sup>82</sup> teaching appropriate leadership roles is another area neglected in the syllabuses and learning experiences. Many of the Egyptian Cabinet and Parliament Members today are doctors and engineers (with Ph.D. degrees), and an enormous number of them are doctors, engineers and lawyers with university degrees who, during the course of their education often passed through the general secondary school. Therefore, practising a reasonable range of possible leadership roles, and training in carrying out a variety of these roles is important, both for immediate effectiveness and productiveness in adult life as well as in the future of the country.

The emphasis on the importance of introducing this kind of training is needed if Egypt is willing to correct the current practice of throwing into leadership roles persons who already show a capacity and who, because of their home background or cultural advantages, already have developed the qualities and skills necessary for assuming such roles.

### 3. Organisation and Method

As an encyclopaedic curriculum in the general secondary school, it is organised along the subject-centred approach. A high value is placed on reason and logical organisation of the content. Since logical organisation of the curriculum content is first in importance, the problems and interests of pupils as well as the socio-economic and political demands are ignored or

treated as of secondary importance. There is a very strong insulation between the 'pure' and the 'applied' knowledge. There is a weak relationship between the educational knowledge and everyday community knowledge. The insulation between the curriculum and everyday community knowledge would be weak if the separate subjects are grouped, integrated and taught together.

It is recognised that learning is more effective when facts and principles from one field can be related to another, such as relating what is learned in mathematics to what is learned in science using the ideas generated in the study of literature to explain the perception of a historic period, or relating ideas about historic causality to causality as it functions in the dynamics of community life, so that there is unity in the student's outlook, skills, attitudes and the like.<sup>83</sup>

Would not the insights gained about Egyptian and Arabic life from reading Arabic literature enrich the perceptions gained from the study of history? Would not the idea of function learned in mathematics reinforce or elucidate the functional relationship expressed in the law of supply and demand? Logical reasoning learned in geometry would be much more realistic when also applied to criticism of a newspaper or magazine article.

The general secondary school curriculum, however, is far from achieving integration, partly because as yet no basis has been found for integrating school subjects, and partly because of lack of recognition among teachers, headmasters and inspectors of the importance of unifying and integrating school subjects. And finally, for those who have recognised the bad effects of fragmentation and compartmentation of the curriculum and as a result, of the minds of young people, it still seems to them that too many obstacles are in the way for achieving this purpose: new teacher training, new curri-

culum planning and organisation, and new administrative procedures are needed.

Integration as a relationship between different areas of knowledge has no existence in the general secondary school curriculum. Instead of replacing grammar, composition and literature with language arts, or combining geography, history, and national education into social studies, on the reverse, each of these has been taught as a separate subject, in a separate lesson, and separate textbook, and of course, by separate specialised teachers. Each of these subjects is evaluated as a separate course in a separate examination paper.

Even within one subject matter, isolation and separation have taken place. For example, mathematics has been taught as three separate branches: algebra, geometry and pure mathematics, with three textbooks and three separate lessons. Arabic language has been taught as four branches: composition, literature, grammar and rhetoric. Each of these branches has been taught in a separate lesson and with separate textbook, and each has its own details and exercises.

The chronological sequence is followed in most subjects, such as history, geography and literature. This has been carried out without consideration to the mental development of students, since the ancient eras have been the subject of the first form, the middle eras the subject of the second form, and the modern eras are placed as subjects of the third form. This has resulted in many difficulties especially when the language used is drawn from the content of history in each era. In literature, for example, the student has to study the era Pre-Islamic state of Paganism in the first form, where many events, skills, and a difficult vocabulary exist, whether in poetry or in prose; while in the second and third forms, when he is

more able, he is given the easy eras.

There is a tremendous variety of institutions engaged in preparing teachers for secondary education. Some of these institutions follow the successive method, and others follow the integrated method, such as faculties of education which have been annexed to the universities since 1968.<sup>84</sup> University degrees (not certificates) are obtained by graduates of both methods. However, reports made by the International Bureau (UNESCO) in 1971-1973, the National Council for Education, Scientific Research and Technology in 1974; and the National Centre for Educational Research in 1973-1975, all expressed the lack of sufficient and suitable buildings, equipment, textbooks, audio-visual aids, and the insufficiency of highly qualified teachers. Table 12 shows the shortage of teachers in different subjects in preparatory and secondary schools and the supply and demand (average) of teachers within 1976/77 - 1980/81.

**TABLE 12: THE SHORTAGE OF PREPARATORY AND SECONDARY SCHOOL TEACHERS IN 1975-76, AND SUPPLY AND DEMAND WITHIN 1976/77 - 1980/81**

Subjects	Shortage in 1975/76	Average of Graduates annually in 1976/77 - 1980/81	Average required annually in 1976/77 - 1980/81
Arabic language	7,000	2,000	5,000
English "	4,000	1,700	2,700
French "	600	450	900
Science	300	1,600	2,600
Mathematics	600	1,900	2,500
Social Science	300	1,020	1,200
Philosophy	50	460	500
Art Education	2,200	600	1,200
Domestic Science	1,400	220	850
Music Education	1,800	70	700
<b>Total</b>	<b>18,250</b>	<b>10,020</b>	<b>18,150</b>

Source: A.R.E. Ministry of Education, Minister.Office 30/3/1976.

The shortage of teachers increased from 830 in 1960 in the general secondary school alone to 18,250 in preparatory and secondary schools in 1975-76. This could be attributable in part to the enormous increase of enrolments and the increase of borrowed teachers for other Arab States. Moreover, only two-thirds of the teachers in preparatory education and 74% of the teachers in general secondary education are qualified, see Table 13.

Teachers especially in secondary education, are expected to keep pace with educational developments and current world events through books, periodicals, lectures, conferences, refresher courses and the like. In Egypt, however, with the exception of occasional refresher courses of a more routine nature, there is little being done to enrich the teachers academically in general and professionally in particular.<sup>85</sup> Books of real value are too expensive for teachers to buy, school libraries are very poorly equipped and even almost non-existent. Even those schools who have libraries with new books and periodicals do not offer any facilities to enable either teachers or students to benefit from them. In many cases, these books and periodicals are locked up most of the time and are beyond the reach of those who desire to read them.

As a result teachers, on the whole, do not grow. They teach the same thing in the same way and entertain the same ideas and methods to such an extent "that they become stagnant, plodding along in the same groove from the time they start teaching until the time they retire."<sup>86</sup>

Judging from interviews of school principals, teachers, curricula experts, educators and students in faculties of education, there is a lack of interest among many of those who join teachers' education faculties, since most of them are forced to join these institutions, because of their failure

TABLE 13: GENERAL SECONDARY EDUCATION - TEACHERS BY QUALIFICATION AND SEX

Years	Qualified		Unqualified		Total Qualified	Total Teachers	Qualified %	Female %
	Male	Female	Male	Female				
1963-1964	5,689	1,408	2,036	494	7,097	9,627	74	20
1964-1965	5,931	1,891	2,038	541	7,822	10,401	75	23
1965-1966	6,416	2,137	1,910	529	8,553	10,992	79	24
1966-1967	7,087	2,320	1,988	539	9,407	11,934	79	24
1967-1968	7,847	2,553	2,096	542	10,400	13,038	80	24
1968-1969	8,057	2,674	2,223	592	10,731	13,546	79	24
1969-1970	-	-	-	-	-	-	-	-
1970-1971	7,972	2,730	2,428	811	10,702	13,941	80	25
1971-1972	-	-	-	-	-	-	-	-
1972-1973	7,882	3,087	2,680	924	10,969	14,573	75	28
1973-1974	7,596	3,099	2,782	1,143	10,695	14,620	73	29

Source: Ministry of Education, The National Centre for Educational Research, Education and Training in Egypt, Cairo, Documentation Centre for Education, February 1976 (Unpublished Report).

to get higher marks in the general secondary certificate examination. Otherwise, many of them would prefer to join other colleges such as medicine, engineering, science, and the like. Therefore, many of the teachers seem to look upon their work as a routine job to be carried out mechanically and thus exhibit no zeal or interest in the pupil or the task.

An old problem that bothered school authorities in the past and is still bothering them now is the fact that in secondary school more emphasis is laid on memorisation and rote learning than on thinking. This is apparently the residue of the old 'Kuttab' and Al-Azhar methods of learning and teaching. It has, however, been accentuated by the nature of the examination system. Efforts are being made at present to mitigate the tendency to memorise, but it is still the rule rather than the exception to depend upon memorisation and systematisation. Boctor pointed out:

"Students still absent themselves from school one month or six weeks before final examinations in order to cram and memorise. Examination questions often test facts and information rather than thinking."

87

Teachers concentrate their efforts on preparing their pupils for examinations. They teach precisely the subjects named in the curriculum, guiding themselves by prescribed detail, textbooks in use and they obey cheerfully the instructions issued by the national and local authorities, so far as they can understand them. A teacher of physics and chemistry, for example, applies himself to inducing children to learn facts, laws, and theories, prescribed in detail in the textbooks, and to perform experiments with chemicals and balance. The children at the cost of much effort learn to repeat verbally the things they hear or read, or the things which may assist them to pass examinations successfully. Most of them perhaps are

unable to apply this new knowledge in new fields, they have little understanding of scientific method, their attitude seems unchanged, their thinking still uncritical. The science teacher does not pay attention to industrial applications or social consequences, and never talks about the relation of science and democracy. This may answer the question why in Egypt democratic participation is lacking even among educated people.

Teachers influenced by tradition tend to solve problems for their students through dictated notes instead of training students to ask questions and find answers for themselves. The following poem by an unknown teacher explains this idea most eloquently:

"I am my student's Bible.  
He reads me most of all.  
Today he reads me in the class;  
Tomorrow in the hall.  
He may be prodigy or slow  
Or only average be.  
He may not read the Book of Books;  
But he is reading me."  
88

Nowhere in this analysis of the curriculum has there been reference to the important subject of counselling and guidance, whether educational, occupational, social or personal, for the simple reason that it does not exist. Boctor pointed out:

"Any consideration of the behaviour of children and adolescents in relation to their background and early treatment is rarely tackled in the schools."  
89

Therefore, delinquency and truancy are in reality symptoms of maladjustment of a student with subjects, teachers, method of teaching, repeated failures in examinations, and the whole school atmosphere. To ignore these problems or to leave them to chance is in contradiction of the educational goals.

One scarcely needs to emphasise the importance of critical thinking as a desirable ingredient in human beings in a democratic society. In the era of explosion of knowledge, the appearance of new ideologies, theories, and laws, and in a society in which changes come fast, individuals cannot depend on routinised behaviour or tradition in making decisions, whether on everyday problems or professional matters, moral values, or practical issues.<sup>90</sup>

In Egyptian society now, there is great concern that individuals should be capable of critical thinking and independent thought. It is no surprise then, to find that the development of critical thinking is a goal to which we only pay lip service but which we do not practise in our schools.

Applying facts and principles to the solution of new problems and to the prediction and explanation of new phenomena is another aspect of thinking. Taba pointed out:

"The fact that the effectiveness of school learning depends on the extent to which students can apply to new situations what they have learned makes the transfer of learning an extremely important objective. And the greater the leap of transfer, the more profitable the learning."

91

Yet as has been pointed out before, this ability is by and large not provided for in the general secondary curriculum. Students in this school are not adept either at analysing and attacking problems or in using what they know to solve them.

It is evident that not all students learn most effectively by the same method, the same type of activity, or by using the same materials. While some students are stimulated to thought by books, others need group discussion or teacher explanation to obtain the same purpose. However, the teachers and headmasters scarcely discussed the individual differences and

the need for corresponding variations approaches to achieve tasks. The use of identical methods of teaching for all students, no matter what their abilities and attitudes, is a highly questionable procedure from the viewpoint of efficiency in stimulating and using intelligence.

Too often there is an implicit tendency to depend more or less on one method of teaching and thus to limit the scope of learning. Often this method is the traditional one, such as reading textbooks or, rarely, discussion. The teacher may be forced to restrict himself in one method or two, either because of his poor professional training or because his old-fashioned inspector advised him to teach in this way, or because of the overcrowded classroom (from 35-40), or because of his own heavy load of lessons (about 24-30 lessons a week). A teacher working under such pressures obviously cannot look after his students; their individual differences, interests, and abilities. Such a dependence on one way of learning deprives many students of an adequate access to learning.

#### 4. Evaluation

Written, oral and practical examinations are used to judge the student's achievements and the efficiency of the curriculum process as a whole. According to the 1953 Education Act No.211, the promotion examinations for the first and second forms were held at the end of the year. A student could not move from one form to another unless he obtained at least 50% of the maximum marks of all subjects involved in the examination. Where a student obtained 50% of the aggregate maximum marks but failed in one subject, he could move to the next form but could not move again to another new form unless he succeeded in that subject.<sup>92</sup> 75% of the aggregate maximum marks were devoted to the examination, and 25% were devoted to the year's work.<sup>93</sup>

TABLE 14:

No.	Subjects	Max.marks	Min.marks
1	Religion	20	10
2	Arabic language	40	20
3	First foreign language	40	16
4	Second foreign language	30	12
5	Mathematics	40	16
6	Egyptian society	40	16
7	Geography	30	12
8	History	30	12
9	Physics	30	12
10	Chemistry	30	12
11	Drawing	20	4

Source: Husri, S., Arab Cultural Annual '4' issued under the auspices of the Cultural Department of the Arab League, Cairo, 1954, p.228 (in Arabic).

TABLE 15: 1. LITERARY SECTION 1953/54 - 1955/56

No.	Subjects	Promotion Examination from 2nd to 3rd form		General Secondary Certificate Exam.	
		max.marks	min.marks	max.marks	min.marks
1	Religion	20	10	-	-
2	Arabic language	40	20	50:40+10	25
3	1st foreign language	40	16	50:40+10	20
4	2nd foreign language	30	12	40	16
5	History	30	12	30	12
6	Geography	30	12	30	12
7	Philosophy	20	8	20	8
8	Sociology	20	8	20	8
9	(Special level) Subject	40	16	40	16

Source: Husri, '4', op.cit., p.228

At the end of the third year, the General Secondary Certificate Examination was held in two turns: the first in June and the second in September. Successful candidates were awarded the General Secondary Certificate. The second turn examination was held for those who got at least 50% of the aggregate maximum marks, but failed in one or two subjects only, those who failed to get at least 50% of the aggregate maximum marks because of their failure in one or two subjects, and those who could not enter the first turn examination with accepted excuse.<sup>94</sup>

The General Secondary Certificate Examination was a written examination in all subjects, and an oral examination was held in the Arabic language and the first foreign language for the literary section only. Concerning students in private schools which were not under the supervision of the State, they had to examine the whole three year subjects at the end of the third year, before they could get the General Secondary Certificate.<sup>95</sup> A student was not considered successful in the General Secondary Certificate Examination unless he obtained the minimum marks of each subject and at least 50% of the aggregate maximum marks for all subjects involved in this examination.<sup>96</sup> A student passed this examination with at least 60% of the maximum marks of a subject was considered surpassing in that subject, and this was mentioned in his Certificate.

Table 14 shows the subjects and the maximum and minimum marks of each subject in the promotion examination from the first year to the second year (1953/54 - 1955/56).

Tables 15 and 16 show the subjects and the maximum and minimum marks of each subject involved in the promotion examination from the second form to the third form, and in the General Secondary Certificate Examination.

TABLE 16: 2. SCIENTIFIC SECTION 1953/54 - 1955/56

No.	Subjects	Promotion Examination from 2nd to 3rd form		General Secondary Certificate Exam.	
		max.marks	min.marks	max.marks	min.marks
1	Religion	20	10	-	-
2	Arabic language	40	20	40	20
3	1st foreign language	30	12	30	12
4	2nd foreign language	20	8	20	8
5	Mathematics	60	24	60	24
6	Physics	30	12	30	12
7	Chemistry	30	12	30	12
8	Biology	30	12	30	12
9	(Special level) Subject	40	16	40	16

Source: Husri, op.cit., p.229

As far as examinations were concerned, the 1953 Education Act was criticised for disregarding the students' interests and abilities, when it insisted on his success in a subject in which he may lack interest and it required him to exert equal effort in all subjects, thus ignoring his aptitudes and depriving him of the opportunity of choice which is given full regard in all progressive educational systems.

Education Act No.319 of 1956<sup>97</sup> was, therefore, passed to remedy these defects. However, this Act did not give students the opportunity to choose the subjects they wished to study, but instead the Act laid down the following bases:

"Article one, requires a minimum mark of 40% for each subject (with the exception of 50% assigned for Arabic language to keep up its standard), whether in promotion or final examinations. Article two, allows the student to pass the examination in case he fails in one or two subjects, on one condition that he must obtain at least 25% of the examination mark for either."

In reality this Act caused some damage and prejudice not only in secondary education, but also in higher education. On the one hand, this Act weakened the general standard of secondary education, since it allowed students to pass the examination by obtaining only 40% of the maximum marks for each subject. On the other hand, many students, according to the Act, abandoned two subjects from the beginning of the school year as they called them 'failure subjects'. And many students, for example, because of their high marks in the final secondary school examination, could join faculties of engineering despite their failure in mathematics, and others could join faculties of medicine despite their failure in biology or chemistry. Thus, according to this Act, secondary education missed, partly, one of its major targets as to preparation of students for universities and higher institutes.

The examinations were carried out in three sessions a year. In the late 1950s, the Ministry of Education observed that the second session examination was a strain on the student, teacher, and parent, besides the effort and expenditure sustained by the State. Accordingly it was decided to cancel this examination.<sup>99</sup> This measure was coupled with the adoption of the student's card system. The card is a continuous up-to-date register which follows up a student's growth in character, social and academic behaviour, and spots his weaknesses in time to allow for their treatment before they take root. In reality, the card system was abandoned after a short time. This could be attributed in part to the whole schooling system in general, and to the teachers in particular, since the card system did not carry much conviction for most of them, and they were and still are overloaded with work, both inside and outside the classroom, which is beyond their capacity.

It was noticed by the Ministry's Planning Body in 1961 that the above mentioned examination Act led to lower foreign language standards among students, in the Planning Body terms:

"This is because relaxed promotion rules would permit the promotion of a student to a higher class who had failed to pass the foreign language test. The result was the neglect of that subject by most of the students who made it a 'failure subject' and the presence of various levels at the same time."  
100

To cope with this problem, the Ministry of Education in 1961 deemed it advisable to make some amendments to the examination system and approved the non-admission to secondary schools of students who had failed to pass in a foreign language.<sup>101</sup> However, in the matriculation examinations of July 1966, for example, more than 60 per cent failed in English, 54 per cent failed in mathematics and 45 per cent in chemistry.<sup>102</sup>

Examinations which are all important in the Egyptian system, are rigid and unimaginative. Cramming facts and information is first in importance; in 1964,<sup>103</sup> for example, every student was certain that there would be a question on the High Dam and memorised all the facts accordingly. The whole attention, therefore, is focused upon examinations. From the beginning of the school year to the end, the teacher drills his students in the facts, especially those that the examiners are liable to stress. At the end of the year the teacher who does not pass a large percentage of his students is considered a failure. With such an attitude, from the first hour he teaches all his efforts are directed to this one end, namely, passing a comparatively large percentage of his students. Table 17 shows the flow of enrolments and graduates of general secondary education between 1963/64 and 1974/75. It also shows the higher percentage of success in the promotion

TABLE 17: GENERAL SECONDARY EDUCATION - FLOW OF ENROLMENTS AND GRADUATES 1963/64 - 1974/75

Year	No. of Schools	Intake	First Form	Second Form	Third Form	Total	Girls	Girls as %	Graduates
1963-1964	374	48,552	52,021	39,956	45,819	137,796	35,802	26.0	44,394
1964-1965	441	61,557	65,145	52,727	54,357	172,229	47,517	27.6	37,207
1965-1966	497	66,827	71,756	64,794	72,031	208,581	58,880	28.2	47,333
1966-1967	526	68,260	74,171	69,749	90,699	234,619	68,494	29.2	69,246
1967-1968	581	70,694	76,927	77,861	105,004	259,792	80,519	31.0	75,097
1968-1969	591	74,084	81,467	77,988	116,020	276,075	85,342	30.9	86,937
1969-1970	586	88,121	95,593	78,469	119,082	293,144	92,825	31.7	92,593
1970-1971	593	86,678	95,222	89,092	113,803	290,117	94,875	32.7	78,861
1971-1972	605	90,293	97,451	92,286	122,752	312,489	100,258	32.1	93,988
1972-1973	597	91,073	95,089	94,762	131,952	321,803	103,332	32.1	107,657
1973-1974	600	97,777	102,512	93,436	127,655	323,603	106,088	32.8	124,258
1974-1975	615	108,661	113,646	102,283	124,397	340,326	113,542	33.4	-

Source: Ministry of Education, The National Centre for Educational Research, Education and Training in Egypt, Cairo, Documentation Centre for Education, February 1976, (Unpublished Report).

examinations as well as in the final examinations, especially in recent years.

It often happens that the teachers who have the broadest professional training and a modern progressive point of view in education secure poorer results in passing their students through public examinations than others who are considered only fair. The explanation is easy. These progressive teachers try to apply modern methods to teaching and attempt to attack their teaching problems from a modern angle. The result is that more thinking is done in the classroom than abridging of information and cramming facts, hence the students fail or barely pass.

In 1972/73, the Ministry of Education reviewed the system in use with the aim of developing it and promoting educational progress by lessening the emphasis on end of year examinations. Certain resolutions were passed for remedial work to take place in small groups and to give extra lessons at the end of the school day to those who need them, for nominal fees to raise the standard of the students. But such resolutions encouraged some teachers not to exert special effort for the less able students, and added a new burden on the parents, and finally they encourage private lessons which have become harmful.

However, a new system of evaluation was established. A student's participation in everyday school activities plus his day to day progress all through the school year gained in importance as the percentage of marks allotted to this was raised to 30% of the maximum marks of each subject.<sup>104</sup> Instead of one written examination (in the promotion examinations) at the end of the year, another mid-year examination was established. And 35%<sup>105</sup> of the total marks were allocated to each of them. Each examination is restricted to those parts of the syllabus pursued during that term only.

As for the General Secondary Certificate Examination, it is still one written examination at the end of the academic year.

The present picture of the examination system in the general secondary school is as follows: the promotion examination in the first and second forms are carried out in three steps:

- a) The year's work (oral, written and practical activities, has 30% of the maximum marks of each subject allocated to this year's work.
- b) The mid-year written examination gains only 20% of the maximum marks of each subject.
- c) The end of year written examination gains 50% of the maximum marks of each subject.

As for the General Secondary Certificate Examination, it is held once at the end of the academic year at a republican level.<sup>106</sup>

In the light of the recognised importance of the evaluation role, it is surprising to note many deficiencies in the evaluation system in the general secondary school. There is a great discrepancy between the scope of the goals and objectives of curriculum and the scope of the evaluation; while the goals asserted the importance of developing the whole personality of the student, the teaching and learning process has concentrated on the intellectual side by cramming facts and information, and in turn, the examination has been concentrated on how much knowledge and facts the student got. And the questions are often concentrated on 'what' rather than 'how' or 'why'.

The essay tests are the dominant instrument, used by all teachers in Egypt in assessing a student's achievements. The validity of essay tests is relatively low; since they do not measure the thing which they intended to measure. This kind of test is unlikely to give correct evidence about a

student's achievement in the different areas of knowledge. The number of questions is often one question or two to be answered in two hours, or three questions to be answered in three hours.<sup>107</sup> This number of questions does not cover a subject matter, and is unlikely to give correct evidence about the extent of the student's mastering different skills required in the curriculum goals.

Examinations, therefore, like other components of the curriculum, are symptoms of one 'disease', namely blind faith in knowledge and undue emphasis on facts. The General Secondary Certificate Examinations are held annually, usually in the first week of June. The tents are pitched in the principal examination centres to accommodate the candidates. The army of teachers (about 200,000) from all over the country assemble in Cairo,<sup>108</sup> later to mark about two million papers.<sup>109</sup> Each paper is marked by two or more teachers, checked by a supervisor, reviewed by a Committee, signed by a president, and finally the general result presented to the Minister. The results are tabulated, those who pass are rearranged according to their total marks, their rank and schools are mentioned.

This does not mean that any fair marking system has been achieved yet. Quite the contrary is true. A group of examiners are assigned for one question, from 8 a.m. to 2 p.m. for two or three weeks, they correct only that question. The answer is already agreed upon and handed to them by the supervisor. So they read the answer, drink coffee, smoke, and give subjective marks. When all of the papers are finished, the total marks for all questions are added for each paper. Every answer is thus judged independently from the others. It is certain that the assessment is rather different from one teacher to another for the same question, and thus the examination has lost its reliability as well as its validity.

El Ghareeb, in her studies on the examinations system in Egypt, found that different marks had been given by a group of teachers who had the same opportunity to mark the same answer separately.<sup>110</sup> Thus, unreliability has a big statistical indication, especially in the literary and philosophical subjects. She carried out a questionnaire on a group of teachers. 70% of the teachers who were involved in this questionnaire pointed out that the proportion of marks allocated to the oral examinations and year's work is not used in an accurate manner, since it is subjected to the teacher's mood and his subjective assessment.<sup>111</sup>

It is not surprising to find that even in pure mathematics, when a research was carried out on the mental abilities which are required for the achievement in pure mathematics, it was found that the only ability recalled was memory rather than comprehension, application, analysis, analogy and/or decision making.<sup>112</sup>

It is not exaggerating to say the examinations are the greatest event of the year. The whole society is concentrated on the examinations and their results. To say nothing of the sensational news about the failures who commit suicide, or those accepted to repeat the same year as a lesser of two evils.

Each student exerts his efforts to get higher marks in the General Secondary Certificate Examination to be able to join a university, otherwise he might be forced to repeat the same year for getting more marks. More and more people have tried to overcome this problem by providing their children with private lessons. Private lessons, therefore, have become a serious disease especially for the equality of educational opportunity; since most people are not capable of providing their children with private lessons, these have become very expensive as a consequence. All of

these problems are, partly, due to the misunderstanding of the function of examination, and the concentration on memorisation and systematisation in teaching and learning.

Now what is most needed in Egypt is partly a change of its curricula to meet individual, social and cultural demands which have taken place since the Revolution of 1952. To change a curriculum means, in a way, to change an institution. Changing institutions involves changing both goals and means, and this is the subject of the final chapter.

NOTES

1. Morsi, M.M., 'Education in Egypt: Retrospect and Prospect,' in Sullivan, J. (ed), Egypt in Perspective, Cairo, The American University in Cairo Press, 1975, p.79
2. Boktor, A., School and Society in the Valley of the Nile, Cairo, Elias Modern Press, 1936, p.113
3. Al Rafii, A.R., History of the Nationalist Movement in Egypt, Part III, p.446 (in Arabic).
4. Ibid., p.451
5. Boktor, op.cit., p.138
6. Ibid., p.139
7. Ibid., p.140
8. The National Charter, Cairo, Ministry of National Guidance, 1962, p.9
9. Ibid., pp.92-109
10. Ibid., p.109
11. A.R.E. Ministry of Education, The National Centre of Educational Research, Report on the Development of Education in Egypt during the Period 1971-1973, Cairo, 1973, p.16
12. This trend was first introduced in 1960, in five secondary schools, as an experimental project. Despite the emphasis laid on this tendency by the Ministerial Committee for Manpower in its report in 1967, and the National Council for Education, Scientific Research and Technology in its report in 1974, this tendency was afterwards abandoned.
13. The 1971 Constitution, article No.18 (in Arabic).
14. A.R.E. The National Centre for Educational Research, an Inquiry of the International Bureau of Education (UNESCO), Major Trends in Educational Development in A.R.E. during the period 1971/72 - 1972/73, Cairo, 1973, pp.1-2
15. El Sadat, M.A., The October Working Paper, Cairo, Ministry of Information, State Information Service, 1974, p.70 (in Arabic).
16. Ibid., p.71

17. Ibid., pp.71-2
18. Ibid., p.73
19. Harby, M.K., El-Azzawi, El, M., Education in Egypt (U.A.R. in the 20th Century), Ministry of Education, Education Documentation Centre of U.A.R., Cairo, Government Press, 1960, p.60
20. Ibid., p.61
21. Arab League, General Culture Department, Conference on free and compulsory education in the Arab States, recommendations from 219 to 259, Cairo, 1954 (in Arabic).
22. Law No.213 of 1956 issued on 14th April, 1956 (in Arabic).
23. Harby and El-Azzawi, op.cit., p.69
24. U.A.R. Ministry of Education, Education Documentation Centre, Report on the Development of Education in the United Arab Republic (during the year 1959-1960), Cairo, Ministry of Education Press, 1960, p.40
25. El-Said, E.M., The Expansion of Higher Education in the United Arab Republic, Cairo, Cairo University Press, 1960, p.15
26. Harby and El-Azzawi, op.cit., p.71
27. A Guide for Educational Statistics, Cairo, Ministry of Education Press (extract from issues cover the period 1951/52 - 1959/60).
28. U.A.R. Ministry of Education, Documentation and Research Centre for Education, Report on the Development of Education in the United Arab Republic in the School Year 1967/1968, Cairo, Ministry of Education Press, 1968, pp.16-17
29. U.A.R. Ministry of Education, Documentation and Research Centre for Education, Report on the Development of Education in U.A.R. in the academic year 1970/71, Cairo, Ministry of Education Press, 1971, p.5
30. Ibid., p.8
31. Arab Republic of Egypt, Ministry of Education, The National Centre for Educational Research, Report on the Development of Education in A.R.E. in the year 1971-1973, Cairo, Ministry of Education Press, 1973, p.38
32. A.R.E. The National Centre for Educational Research, Report on the Development of Education in A.R.E. during the period 1973/74 - 1974/75, Cairo, Documentation Centre for Education, 1975, p.65

33. Morsi, op.cit., p.90
34. Religious Syllabuses for General Secondary Education, in The Modified Curricula for General Secondary Education, Ministry of Education, Cairo, 1970, pp.3-5 (in Arabic).
35. Arabic language syllabuses for General Secondary Education, in The Modified Curricula, op.cit., pp.48-9
36. English language syllabuses for General Secondary Education in The Modified Curricula, op.cit., pp.164-5
37. A.R.E. Ministry of Education, The National Centre for Educational Research, The Development Curricula for Natural Science in the General Education, Cairo, Ministry of Education Press, 1975, pp.34-5 (unpublished syllabuses, in Arabic).
38. A.R.E. Ministry of Education, The National Centre for Educational Research, The Developmental Curricula for Art Education in the General Education, Cairo, Ministry of Education Press, 1976, p.22 (unpublished syllabuses, in Arabic).
39. Social Science Syllabuses for General Secondary Education in the Modified Curricula, op.cit., pp.172-3
40. A.R.E. The National Centre for Education, Developmental Curricula for Mathematics in the General Education, Cairo, Ministry of Education Press, 1975, p.1
41. Ibid., p.23
42. El-Ghareeb, R., School Examinations: its Advantages and Disadvantages, Research prepared to the Experts Conference held in Kuwait under the auspices of the Arab League for Developing the Evaluation System in the Arab States in 1974, Document No. 31B, p.2 (in Arabic).
43. Bloom, B.S., Hastings, J.T., Madaus, G.F., Handbook on Formative and Summative Evaluation of Student Learning, New York, McGraw-Hill, 1971, p.21
44. Bloom, B.S. (ed.), Taxonomy of Educational Objectives: the Classification of Educational Goals. Handbook 1, Cognitive Domain, New York, McKay, 1956, pp.201-7
45. Krathurshl, D.R., Bloom, B.S. and Masia, B.B., Taxonomy of Educational Objectives: the Classification of Educational Goals, Handbook 2, Affective Domain, New York, McKay, 1964, pp.176-85
46. El-Mawgood, M.E., 'The Scientific Bases for Formulating the Educational Objectives,' in Science and Instruction Magazine, Tunisia, No.3, 1975, p.22 (in Arabic).

47. Harby and El-Azzawi, op.cit., p.71
48. Husri, S., Arab Cultural Manual, '4', issued under the auspices of the Cultural Department of the Arab League, Cairo, 1954, pp.224-5 (in Arabic).
49. Article 28 of the Education Act No.211 in 1953, in Husri, op.cit., p.225
50. Harby and El-Azzawi, op.cit., p.71
51. Ibid.
52. U.A.R. Ministry of Education, Report on the Progress of Education during the school year 1957/1958, Cairo, Ministry of Education Press, 1958, p.30
53. Harby and El-Azzawi, op.cit., p.53
54. Boktor, A., The development and expansion of education in the United Arab Republic, Cairo, The American University in Cairo Press, 1963, p.55
55. U.A.R. Ministry of Education, Education Documentation Centre, Report on Development of Education in the U.A.R.(during the year 1959-1960), Cairo, Ministry of Education Press, 1960, p.39 (in Arabic).
56. Ministerial Decree No.1033, January 11, 1959, Centre for Education, Report on Development of Education in the U.A.R. (during the year 1960-1961), Cairo, Ministry of Education Press, 1961, p.21
57. U.A.R. Ministry of Education, Documentation and Research Centre for Education, Report on the Development of Education (during the school year 1962-1963), Cairo, Ministry of Education Press, 1963, p.8
58. U.A.R. Ministry of Education, Documentation and Research Centre for Education, Report on the Development of Education in the U.A.R. (during the academic year 1962-1963), Cairo, Ministry of Education Press, 1963, p.24
59. U.A.R. Ministry of Education, Documentation and Research Centre for Education, Report on the Development of Education in U.A.R. in the academic year 1965/66, Cairo, Ministry of Education Press, 1966, p.36
60. Morsi, M.M., General Education in the Arab States, Cairo, The World of Books, 1974, p. 316, (in Arabic).

61. U.A.R. Ministry of Education, Documentation Centre for Education, Report on the Development of Education in the United Arab Republic in the School Year 1966/67, Cairo, Ministry of Education Press, 1967, p.4
62. U.A.R. Ministry of Education, Documentation and Research Centre for Education, Report on the Development of Education in U.A.R. in the school year 1970/71, Cairo, Ministry of Education Press, 1971, pp.14-15
63. A.R.E. Ministry of Education, Minister. Office, The Ministerial Decree (No.1167) dated 26/8/1976, concerning the plan of study in the third form of general secondary school (in the academic year 1976-1977), Ministry of Education Press, 1976 (in Arabic).
64. Article one, in the Ministerial Decree No.167, op.cit., pp.10-11
65. Article two, ibid., p.11
66. Article four, ibid., p.11
67. Article three, ibid., p.11
68. The Ministerial Decree No.167, op.cit., p.7
69. Taba, H., Curriculum Development, Theory and Practice, New York, Harcourt, Brace and World, 1962, p.454
70. Merton, R.K., Social Theory and Social Structure, New York, Free Press, 1957, p.67
71. Coffey, H.S. and Golden, W.P., 'Psychology of Change Within Institutions,' in National Society for the Study of Education, In-Service Education for Teachers, Supervisors and Administrators, Fifty-Sixth Yearbook, p.1, University of Chicago Press, 1957, p.83
72. U.A.R. Ministerial Committee for Manpower, Report on the Educational Policy in Egypt, Cairo, 1967, p.33 (in Arabic).
73. Ministry of Education, The Modified Curricula for General Secondary School, Cairo, 1970, pp.272-81
74. The Ministerial Committee for Manpower, Report on Educational Policy in Egypt, op.cit., p.35
75. Tyler, R.W., Basic Principles of Curriculum and Instruction, Chicago, The University of Chicago Press, 1949, First British (31st American) Impression, 1971, p.65
76. A.R.E. Ministry of Education, The 1973/74 - 1974/75 Report, op.cit., p.58

77. Taba, op.cit., p.225
78. Ibid.
79. Taba, H., Brady, E. and Robinson, J., Curriculum in Inter-Group Relation: Secondary School, Washington, D.C., American Council on Education, 1949, p.109
80. Taba, H., Brady, E. and Robinson, J., Intergroup Education in Public Schools, Washington, D.C., American Council on Education, 1952, p.47
81. A.R.E. Ministry of Education, The National Centre for Educational Research, A Project for Urgent Plan for Developing Education Curricula (Aims), January 1974, pp.16-18 (in Arabic).
82. Ibid., p.16
83. Tyler, op.cit., p.86
84. U.A.R. Ministry of Education, The National Centre for Educational Research, Report on the Development of Education in the United Arab Republic in the academic year 1967-1968, Cairo, Ministry of Education Press, 1968, p.31
85. Boctor, op.cit., p.166
86. Ibid.
87. Ibid., p.167
88. Ibid.
89. Ibid., p.162
90. Taba, op.cit., p.215
91. Ibid., p.218
92. Article (29) of the Education Act No.211 of 1953, in Husri, op.cit., p.225
93. Article (30), ibid., p.226
94. See ibid., pp.225-6
95. Ibid., pp.226-7
96. Ibid., p.227
97. Harby and El-Azzawi, op.cit., p.73

98. Ibid.
99. Ibid., p.74
100. U.A.R. Ministry of Education, The 1960-1961 Report, op.cit., p.22
101. Ibid., pp.22-3
102. Efrat, M., 'Educational Progress in the U.A.R.,' in New Outlook, Vol.XI, No.8, October 1968, p.26
103. Mansfield, P., Nasser's Egypt, London, Nicholls & Co.Ltd., 1965, p.175
104. A.R.E. Ministry of Education, The 1971-1973 Report, op.cit., pp.38-9
105. Ibid., p.39
106. A.R.E. Ministry of Education, The Minister. Office, The Educational Movement in Egypt between the Past, Present and Future, and some Principles and Attitudes of the Reform, (unpublished book) presented by the Minister of Education, Dr M.K.Helmi, Cairo, 1974, pp.50-1 (in Arabic).
107. El-Sayied, F.E., Developing the Evaluation in the Arab States, Research prepared for the Experts' Conference held in Kuwait in 1974 under the auspices of the Arab League, Document 4/D, Kuwait, 1974, p.4 (in Arabic).
108. Since 1974 there have been two centres for marking examination papers, in Cairo and Alexandria. The number increased to four centres recently.
109. A.R.E. Report on the Result of Public Examination, op.cit., p.24
110. El-Ghareeb, op.cit., p.8
111. Ibid., p.15
112. Ibid., p.20

PART FIVE

CHAPTER 8  
BASES FOR A  
CURRICULUM MODEL

This part of the thesis consists of one final chapter, that is Chapter 8. The intention of this chapter is, first to sum up the contextual variables in the USA, England, and Egypt which have been specified in Chapters 2, 4 and 6, and the extent to which curricula in the three countries have or have not responded to such variables. Second, to establish new bases for curriculum development in Egypt. The nature of man, the nature of society, and the nature of knowledge that Egypt is seeking to develop are suggested as the new bases for curriculum development. Having done that, general principles on which the secondary school curriculum ought to be based will be extracted from the normative analysis of man, society and culture. For realising these general principles, suggestions will be put forward concerning both the reorganisation of secondary education and the development of general secondary school curriculum. This will be done keeping in mind all the time the Egyptian conditions and the curriculum theories identified earlier.

#### I. GENERAL REVIEW

This thesis has been concerned to explore changes in contextual social variables in three countries, as these variables have implications for curriculum theory and practice. The curriculum theories identified - following Holmes' classification - are: essentialism, encyclopaedism, pragmatism and polytechnicalisation. They both constrain and assist educationists faced with the problems of adjusting school curricula to changes in contextual variables in society and in school systems.

However, it has not always been the case that curriculum theory has been weighed in terms of its implications for change. This thesis, therefore, has been concerned with the implications of some of these curriculum theories.

The major question was to what extent are these theories implemented in practice in the countries concerned, and to what extent have curricula been adjusted to meet the socio-economic, political and educational changes in these countries.

Accordingly, an analysis of socio-economic, political and educational conditions and changes in the USA, England, and Egypt has been carried out in Chapters 2,4 and 6. An analysis of the pragmatic curriculum in American secondary schools, the essentialist curriculum in English secondary schools and the encyclopaedic curriculum in the Egyptian secondary school has been carried out in Chapters 3,5 and 7.

In the USA, at the turn of this century a high-school education was the criterion that separated the lower-middle class from the working class. It was scarce, it brought prestige, it brought a white-collar job and a higher income. Now some of these distinctions persist but, under the impetus of technological change and the increase of graduates from high school, all these distinctions are weakened. Much office work has been mechanised, and much factory work has been made easier.

Technological change, population increase, immigration, democracy, and educational change have created social mobility and movement from one class level to another. More technological progress has been made in the twentieth century than in all of the previous history in the world. Moreover, the pace of technological change has increased sharply since the Second World War. Automation, in particular, has had a dramatic impact on many American industries. While the older industries used large numbers of production workers, the newer ones show roughly a one-to-one ratio between production workers and scientist-engineers. Agriculture has been dramatically affected by technological change in the broadest sense, with the result that the

United States is producing much more food with less than half the manpower of two generations ago. Behind the agricultural revolution has been a tremendous network of systems research, primary government research in agriculture, and the unique role of the American university.

The pace of technological change and the emphasis placed upon the importance of scientists and engineers has created a shortage of scientists, technologists and technicians. The fast technological change and the greater emphasis placed on educational competence have meant that groups which lose out early in the educational race will be quickly excluded from the productive life. The complexity of modern technological society makes it necessary for the curriculum to help provide two things: a) a scientifically literate population, and b) a scientific and technological training.

In such a rapidly changing society, educating for adaptability to change in skill requirements is thought to be vital. This means not only skill training which is broad enough to enable the individual to pick up new techniques with comparative ease as his changing jobs demand them, but the emotional adaptability to accommodate himself to the changes created by technological innovations.

Changes in the size and composition of the population have important socio-economic and educational effects. Population in the US increased from about 80 million at the turn of the century to more than 200 million in 1970. The demographic change, combined with some other variables have been affecting the enrolment in the public high-school. The growth pattern of this school is spectacular. By the turn of the century only about 10 per cent of children aged fourteen to seventeen were actually in schools. In the 1970s the proportion comes close to universal secondary education. Thus, a diversity of curriculum offerings and extra-curricular activities seemed necessary.

Democratic ideas and democratic institutions have been growing up throughout the years in the united States. However, in the post-war era, the USA has been called upon to play the role of leadership in international affairs which Britain and France previously undertook. Although curriculum aims have been changed, the institutionalised means have not yet been adequately geared to this task.

One of the democratic institutions in the United States is education itself. In many different ways the American leaders said that if society were to prosper and endure, then the people who elected the government, held office, made laws, enforced laws, and consented to be ruled, must be educated as responsible citizens. Democracy was never for illiterates. The educational solution to this problem, devised by the Americans, was a common school, with teaching in English, to which all children of all social backgrounds could go together and learn how to live together and govern themselves. The curriculum should provide opportunities for children to learn the skills needed in the making of democratic decisions. It should enable them also to work out the possible consequences of any policy and judge policies in the light of these consequences.

Secondary schools changed under the impact of these demands. Secondary schools until about the end of the nineteenth century were characterised by a single aim - that of college preparation. With the increased influence of progressive education and the advent of the 1930s' depression and the introduction of compulsory attendance laws, there was some change in the general rationale of the high-school curriculum. 'Meeting the needs' of youth as well as serving the community evolved as the general aims of secondary school curriculum. In addition to that much attention is now given to the phrase 'equal opportunity for all regardless of social background.' The

comprehensive secondary school is intended to meet the needs of a variety of social groups.

Curriculum aims and objectives have included both academic achievement and vocational skills. Curriculum programmes of instruction have been adapted to serve a variety of needs on the part of those students who will enter the labour market at various stages as well as those who must also be prepared for a variety of higher institutions of learning. Foreign languages have been influenced by the political climate at a given time. Solid projects in natural science and mathematics have been introduced shortly after the Russian success in space in 1957. In short, a common core curriculum, which includes the basic knowledge of science and technology as well as some grounding in the humanities and social studies has been studied as a basic level of education by all students.

Since the pragmatic approach to aims emphasised the preparation of the student for productive life, attention has been given to curriculum developments in industrial arts, agriculture, business education, distributive education, home economics and practical studies in general. Attention has also been given to student activities such as music, art, speech, drama and physical education.

It could be concluded that the socio-economic and technological changes in the USA in the twentieth century have been matched, to a great extent, by curriculum changes at the secondary level. In an increasingly technological society the focus of the secondary curriculum has been upon a broad general education with an understanding of occupational requirements, rather than upon an attempt to prepare the students for a specific job. The sophistication of technology and the college entrance requirements have stressed academic achievements. In addition, greater emphasis has been placed on vocational

offerings in secondary school. The increasing leisure-time and the prospect of earlier retirement and longer life spans have resulted in much attention being paid to the cultural area and students' activities. However, the curriculum at secondary level has not yet been geared adequately to the political changes.

The socio-economic, political and educational changes combined with the changing pattern of occupational distribution after the Second World War have created movement up and down the social scale. Whereas the United States is characterised by high upward but low downward mobility, the main positive trend in England is towards a reduction in upper-lower and lower classes and an increase in the lower-middle class.

Many of the basic issues in economic, technological and political changes have been complicated by an educational system which tended to maintain traditional social class values. Since the abolition of fees in 1945, the number of working-class boys entering the grammar schools each year has increased. However, there were still marked differences in the chances which boys of different social origins had of obtaining a place when the system was widespread. Home background handicap is partly responsible for the lower general rate of success on the part of children from working-class families.

On the basis of social justice and equality of educational opportunity, the reorganisation of secondary education on comprehensive lines has been gaining ground since the 1960s. However, this change at organisational level has not been matched by adequate changes in the curriculum. Some curriculum changes of recent years have been prompted by a concern over problems of social class differences, the social mobility function of education, and this continues to be a major source of pressure on curriculum planners not least

through the work of those sociologists who have recognised that one major source of social inequality is the curriculum itself.

Technological changes in England after the Second World War constitute another source of pressure on the secondary school curriculum. After the war a number of Britain's industrial competitors concentrated on building up new capital equipment making use of the latest research and inventions. Nearly a quarter of manufacturing workers are now employed in engineering, electrical goods, and shipbuilding industries, with their highly variegated output of products which fifty years ago were largely unheard of. The post-war period witnessed the mechanisation of agriculture, the increased use of man-manufactured 'raw materials', and the development of nuclear energy.

However, Britain's slow growth compared with that of other advanced industrial countries has been affected by low capital investment. Many of the weaknesses of British industries and their failure to meet foreign competition can be attributed to shortage of scientists, engineers and skilled workers.

The inefficiency and lack of initiative on the part of managements has also been blamed. It is possible, at least, that the rate of technological change has been delayed to some extent by the slow rate of adjustment of the secondary school curriculum.

Since the war Britain has changed demographically as well; because of the large-scale movement of people within the country, the establishment of new towns and expanded towns. The movement also includes new immigrants from the Commonwealth, making the country a multiracial and multicultural one in which traditional social patterns are breaking down.

Politically, Britain has ceased to be the centre of an empire. Much foreign investment has moved from Britain to other industrial nations. So

the country's economic wellbeing depends on its own efforts, and its standard of living is directly related to its ability to sell goods and services abroad. Under all these pressures Britain had to communicate and co-operate with her European neighbours. It has become a medium-sized European power, albeit one with wide international connections and responsibilities. For all these, the education appropriate to its imperial past cannot meet the requirements of modern Britain.

It is the case that the socio-economic, technological and political changes in England have been accompanied by relative non-change in the secondary school curriculum. Moreover, there is a wide gap between the world of education and the world of work. Young people are not sufficiently aware of the importance of industries in their society and they are not taught much about it in a more direct fashion.

The attack of the socio-economic and political reformers has been directed to the public school and grammar schools and attitudes and values which are attached to them. The grammar school is still largely planned in the interests of pupils who intend to proceed to a university. However, in secondary schools, in general, after the war an awareness of the social needs as well as individual needs has been strongly expressed in the curriculum aims and goals. Curriculum aims also emphasised that students should be encouraged and trained to understand the wider implications of science and technology, and to understand the basic principles of the nation's economy and the dependence upon it of the nation's political position in the world. Teachers generally, however, rejected the achievement of vocational success as a major objective of the secondary school curriculum. Thus, the teaching of technological subjects has been relegated to the fringes of the curriculum content.

As society moves from the more closed to the more open position there

will be modifications in what society accepts as proper knowledge, and how it should be taught, and to whom. Any changes in these areas are bound to have an effect on the curriculum and the organisation and method of teaching. Early specialisation led in grammar school and then in the teacher training colleges to a narrow specialist teaching, and to the narrow specialisation in the fourth and fifth forms. In recent years, however, there is some expansion in the range of curriculum subjects, and some schools introduced mixed ability forms of grouping. This kind of innovation involves considerable changes of methods and approaches so that its success depends on the willingness of teachers to adapt their methods and approaches to the requirements of the changing needs.

In conclusion, although the socio-economic, technological, political and educational changes in England have not yet been matched by adequate changes in the secondary school curriculum, from the recent developments one can detect the beginnings of a shift from the pure to the impure universes of knowledge; from separate subject-matters to some degree of integration of subjects; and from a specialised to a less specialised type of curriculum and to a greater concern for the world of work. There is also a move towards recognising the nature of knowledge as a man made, towards diversity rather than purity. The move towards the integrated curriculum will represent a move towards recognising the changing needs of the economy and the needs of individual pupils.

Egyptian society pre-1952 Revolution was characterised by an unusual combination of very marked inequality with distinctive social classes. The higher class consisted mainly of landlords. A small group of people who did not exceed half a per cent of Egyptian population owned about 34 per cent of Egyptian land. Politically, the landlord class was all-powerful. The upper-

middle class was small in number and had little political influence. It consisted mainly of professionals, lawyers, doctors, directors of companies, etc. Although their intellectual dispositions and influence were distinct from those of the higher professional class, especially the lawyers used to merge socially and politically with the landlord class. However, most of the members of this class due to their higher degree of culture and social consciousness had a much keener awareness of Egypt's problems than the landlords.

The lower-middle class consisted of government officials, tradesmen, the less successful members of the professions, etc. Members of this class were passing through a severe crisis. They had to face the rivalry of foreigners. They were blocked by the foreign hands and foreign business.

The lower class consisted of two groups - town workers and the majority of Egyptian population - peasants, or 'fellaheen'. The life of members of this class was characterised by the poverty and the terrible overcrowding in which they lived, and malnutrition and ill-health. The result was the prevalence of pellagra, lung diseases, rickets, and dental caries, etc. The dual system of education, with elementary school for the masses, and primary, secondary and higher education - with fees - for the well-to-do people, prevented this class from improving its condition. With inadequate educational facilities, poor health and poor conditions, productivity of workers was very low. The poverty of the trade unions had also prevented them from meeting that deficiency.

Foreign communities consisted of Jews, Americans, Greeks, Italians, the French and the British. In Egypt, as elsewhere, the Jews tended to concentrate on and exert a large control over finance. Americans played a humble but useful part in industry and petty trade. The commercial character of Greeks

was especially marked. Although the French community was small in number, its cultural influence was the greatest. The cultural influence of the British, though growing, was inferior to that of the French. However, their influence on the political life was superior to all others.

The leaders of the 1952 Revolution believed that they could not achieve their aims for the people unless the Revolution went beyond the mere political goal of independence and tackled the roots of social and economic problems. Thus the ending of the foreign influence was not the objective of the Revolution, but rather the building up of a new social order characterised by sufficiency and justice. The social and economic policies of the Revolution were often motivated by distributional objectives: a reduction in the degree of income inequality accompanied by an increase in the income of the less-favoured groups, a better distribution of public goods and services such as education, health and social services.

The land reform and land reclamation were the main factors of change. Land reforms in 1952, 1962, 1964 and 1968 involved simple transfer of income from landlords to the smallholdings and landless people. The interesting feature of this change is, on the one hand, the fall in the number of landless families as well as the rise in real incomes, and the disappearance of the more than 100 feddan landlords, on the other hand.

Co-operative societies were established all over the countryside to offer various forms of aid to farmers. They encouraged mechanisation and scientific methods of cultivation, irrigation and harvesting. Nevertheless, the countryside is still lacking a sufficient number of educated people with knowledge and skills. Capital investment in the field of agriculture is not sufficient and the tools are still primitive.

The expansion of education, health and social services has been great

since 1952. The increase of consumption was enormous - to the extent that many economic difficulties arose due to it. The idea that the masses deserve to be compensated for their past sufferings coloured all government thinking. However, a degree of disparity because of the unequal distribution of social services between rural and urban areas still exists.

In removing Egypt's former cultural aristocracy from power, the government was trying to push through a technical and economic revolution. Egypt's new higher class is composed of the remaining landlords, scientists, doctors, engineers, army officers, and factory managers. In the universities, the brightest students generally take medical or engineering degrees, while the less promising study the social sciences. The members of the middle-class have been increased. The values of the old society are challenged, while the new ones are said to be contained within a kind of Socialism which replaces the society of families with a society where the workers and fellaheen have taken their place. Women were given franchise rights since the 1956 Constitution as well as formal equality with men.

The agricultural revolution was accompanied by industrial revolution and economic planning. About a thousand new factories and projects have been built since then. Outstanding among these projects are The Iron and Steel Factories and the High Dam. During the 1960s, population was shifting from rural to urban areas and the employment was shifting from agriculture to industry and services. Industrial projects before the Revolution were dominated by individuals, and aimed at realising quick profits without taking into consideration the national interests. The ownership of industries has been changed into two styles of ownership: private and public. The total value of industrial production rose by 285% from 1951 to 1968. While industry contributed in 1950 about 8.4% of the total national income this rose to about

22% in 1966. Despite obvious progress, however, industry suffers acutely from mismanagement, shortage of skilled and semi-skilled workers. And the countryside is still far from the required industrial level. The government benefited the industrial workers much more than the fellaheen and this has encouraged emigration from rural to urban areas.

The lack of entrepreneurship and managerial skills is one of the biggest obstacles impeding industrial progress. All plants studied suffered from critical shortages of competent administrators, experienced professional staff, trained supervisors and skilled workers. The lack of experience and shortages have created demands on secondary schools and their curricula. It is certain that the efficiency of the Egyptian worker has improved considerably during the last two decades, but there is equally no doubt that the productivity of Egyptian workers is still far below that to be found in the USA and Britain. Many variables account for the low productivity of the Egyptian worker. Among these are the drift of illiterate workers from rural to industrial areas and the lack of knowledge and skills needed on the part of secondary school curriculum.

Egypt's rate of increase in population is one of the highest in the world. Population has doubled in 30 years between 1937 and 1966. This was due to the amelioration of health conditions and its effects on the reduction of the death rate, and the improvement of social services and fertility. The government has been trying by several measures to curb increases in the population. However, major results of such measures will take years to show up. The overpopulation problem in Egypt has imposed certain demands on the secondary school curriculum, but the curriculum has responded weakly to such demands.

Considerable political changes have taken place since the Revolution of

1952. From monarchy, the Republican regime was established. Complete independence was accomplished. The political party system which was dominated by the King, feudalists and capitalists, was replaced by one political organisation for the whole people. Then the political party system was established again in 1976. Mass representation has been attained since 1957. Peasants and labourers have been granted the right of 50 per cent representation in parliament membership as well as in all legislative councils.

However, democracy as it has been established in Western Europe has never been achieved in Egypt. This could be attributable to a combination of lack of experience, a high rate of illiteracy, lack of political as well as economic awareness even among educated people and, above all, the absence of political education and curriculum integration.

The main aim of the encyclopaedic curriculum in the general secondary school in Egypt is to secure as a selection base for higher education. Little attention has been paid to the socio-economic and political needs of society. Little attention has been paid to practical studies, physical education, art, music, drama and students' interests. And this, in turn, led to the failure on the part of pupils to respect manual work. The curriculum is planned without an explicit set of clearly defined goals and specifications. Nor is it formulated in terms of the changes in students which the curriculum is intended to bring about.

The general secondary school has followed the encyclopaedic school of thought that all knowledge of the real world is useful and should be included in the content of its curriculum. Thus the content consists of more than ten subjects and produces debates and contradictions about the depth and breadth of the content of curriculum. The Ministry of Education, therefore, is struggling to retain a broadly based curriculum while reducing the number

of subjects. In the content of the curriculum, as was indicated above, little attention has been paid to the practical subjects, the art and music subjects, and little time allocated to physical education and students' interests. Despite the wide range of facts and information in the curriculum content, no emphasis is being put on political education, the principles of democracy and family planning.

Encyclopaedic in its assumptions, the curriculum in the general secondary school is organised along the subject-centred approach. A high value is placed on reason and logical organisation of the content. Since logical organisation of the curriculum content is first in importance, the problems and interests of pupils as well as the socio-economic and political demands are ignored or treated as of secondary importance. Integration as a relationship between different areas of knowledge and co-operation between teachers of different subjects has no existence. An old problem that bothered school authorities in the past and is still bothering them now is the fact that more emphasis is laid on memorisation and rote learning than on thinking and solving problems. It has, however, been accentuated by the nature of the examination system.

Examinations which are all important in the educational system are rigid and unimaginative. Only the traditional forms of examinations are used to judge students' achievements and the efficiency of the curriculum process as a whole. There is a great discrepancy between the scope of aims and objectives and the scope of evaluation; while aims assert the importance of the whole personality of the student, the teaching and learning process has been concentrated on the intellectual side by cramming facts and information and, in turn, the examination has been concentrated on measuring how much knowledge the student retained.

In conclusion, aims and institutionalised means have not always corresponded. There is an emphasis on aims without an emphasis on means to achieve them. Educational aims, such as educating the whole child or introducing a good citizen, may be considered as an aspiration with little attention being paid to the institutional means of achieving them.

## II. SOCIAL CHANGE AND CURRICULUM THEORIES

From the previous review it may be fair to say that the application of the pragmatic curriculum theory has encouraged socio-economic, technological and political changes in the USA. Despite increasing current debate the application of the essentialist curriculum theory in England has not yet been adequately directed in a way to meet the socio-economic and political change society is undergoing. The encyclopaedic curriculum theory, as implemented in Egypt, has blocked the way to change by its emphasis on the inclusion of all knowledge of the real world in the curriculum.

The growth of democracy, the rise of experimental science, and the rise of industrial civilisation constituted a solid relationship between the pragmatic curriculum theory and social conditions. With its realistic and empirical approach, this curriculum theory has given support to vocational training and practical preparation which encouraged proficiency in industry, agriculture and commerce.

The rise of experimental science has placed emphasis on experimentation, or learning 'how to think' rather than 'what to think', on learning by doing things rather than by reading about things, and on using the scientific method in solving problems. Reconstructionism as a pragmatic view relies upon the capacity of human experience to generate fundamental values (aims) and to direct a deliberate effort on behalf of their realisation (means). For all

these the relationship between the pragmatic curriculum theory and the changing needs of society is vital. So, in addition to the preparation for colleges, the preparation of youth for the changing conditions of society, and in particular for their future occupation through academic, technical or vocational programmes are the main aims of the pragmatic school of thought.

The learner is viewed as an experiencing, thinking, and exploring individual. The learner, therefore, is exposed 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. Books are regarded as tools in the learning process rather than as sources of indisputable knowledge. The school is a major social institution, it is held to be an active participant in change. It emphasises the teaching of how to manage change, and how to reconstruct the social order, and how to improve the way of life in society.

Essentialist curriculum theory gives support to change if it is adequately implemented. Its philosophical bases emphasise the importance of nature and environment as a source of knowledge. Factual mastery of content and organisation is necessary if one is to learn through observation and nature. It emphasises that the learner should be adjusted to or becoming aware of his relation to the physical world. The observable facts of the external world of nature constitute a source of knowledge. Thus, scientific facts and laws of nature are very important. Mathematics and natural sciences are examples of subjects which contribute to the learner's knowledge of his environment.

This theory suggests that the content of a truly liberal general education should consist of a few selected subjects. In England, the traditional concentration on a small number of freely chosen subjects has been questioned. The

problem, however, is how, out of the vastly increased body of knowledge can appropriate selection be made?

In formulating the secondary school curriculum most teachers support the inclusion of communication skills. Teachers and parents generally stress the development of critical skills, the development of character and of physical wellbeing, the development of an understanding of the world we live in and some understanding of the everyday moral and social problems. Teachers, however, generally rejected the achievement of vocational success as a major objective of education. So, a controversial issue has been to decide which are the 'essential' subjects.

The problem of essentialism in England is that it is a substitution for the Platonic view which supported three different kinds of curriculum for three different kinds of young people. For academic children, academic success and further education were the measure of success. For secondary technical schools, the aim was to relate this school to a particular industry or occupation or group of industries and occupations. Secondary modern schools intended to develop pupils' interests by not focusing primarily on the traditional subjects of school curriculum, but rather by offering courses covering arts, crafts, engineering, trade, general science, as well as academic subjects.

Even after the reorganisation of secondary education on comprehensive lines, curriculum division is still there. The Platonic view is still influential. Another source of difficulty to change is the insistence on the intrinsic logic of disciplines and the lack of integration between subjects.

The encyclopaedic curriculum theory is highly rational, deductive, and intellectualised. It promotes habits of thought favouring efficient regulation proceeding from general principles to the specification of detail. Its maintaining that all knowledge of the real world is useful and should be

included in the curriculum has impeded curricula which have followed it from being adequately responsive to social change. It combines the advantages of a clear philosophical foundation with the defects of being relatively unresponsive to social pressure arising from the social, economic, and political changes.

Despite the fact that the philosophy of Comenius, Descartes and other encyclopaedists oriented minds towards the study of science and maintained that action on things is a major aim of their philosophy, the general secondary school curriculum in Egypt is concentrated on academic subjects with little attention given to the technological and practical subjects.

It could be concluded that this curriculum is characterised by being relatively unresponsive to social pressure arising from social, economic and political changes. It is the characteristic of encyclopaedic curriculum theory which, to some extent, the general secondary curriculum is confirming. Thus new bases for curriculum development have to be established, taking into consideration the contextual variables of Egypt.

### III. THE NEED FOR A THEORY OF CURRICULUM DEVELOPMENT IN EGYPT

A country that imposes a curriculum on the schools from a central authority must be very careful to provide a curriculum which can be defended. It may have to make clear to the teachers and the public the principles on which the curriculum is based, and considerations which led to the inclusion of this and the exclusion of that. Only in this way can the central authority hope to gain the teachers' and public's acceptance and co-operation.

Curriculum development involves many kinds of decisions. Decisions need to be made about the general aims which schools are to pursue and about the

more specific objectives of instruction. Decisions need to be made about the selection of subjects and the specific content to be covered in each. Decisions are needed about the appropriate method(s) with which to implement both the content understanding and other objectives. Decisions are needed regarding how to evaluate what pupils are learning and the effectiveness of the curriculum process in attaining the desired ends. In Egypt, these decisions are made on a political and educational base. Some decisions about national education and military education are political. Some decisions about what to include in the humanities curricula are influenced by the political situation. Some subjects are included because of tradition, others - rather vaguely - because of children's needs in their future life.

"If the curriculum development is to be adequate, all these decisions need to be made competently, on a recognised and valid basis, and with some degree of consistency."

1

Another source of difficulty is the piecemeal approach of curriculum making. The whole history of curriculum revision has been piecemeal: a mere shifting of pieces from one place to another, taking out one topic and replacing it with another without a reappraisal of the whole pattern. The curriculum, therefore, has become a patchwork. Hence, a clear-cut methodology of thinking and planning seems to be lacking in curriculum making in Egypt today.

All curricula are composed of certain components. A curriculum usually contains a statement of aims and of specific objectives; it indicates some selection and organisation of content; it implies certain patterns of learning and teaching, whether because the objectives demand them or because the content organisation requires them; finally, it includes a programme of evaluation of the effectiveness of teaching and learning and of the outcomes.

"Curricula differ according to the emphasis given to each of these elements, according to the manner in which these elements are related to each other, and according to the basis on which the decisions regarding each are made."

2

If Curriculum Development in Egypt is to be made rational and scientific, the decisions about curriculum components need to be made on the basis of some valid criteria. These criteria, I suggest, are:

1. The nature of man or individual learner
2. The nature of society and its needs
3. The nature of knowledge

These higher valuations need to be taken into account as well as the preceding detailed analysis of the social specific initial conditions of Egypt. Ignoring such beliefs would invalidate the acceptability of any proposed curriculum.

1. The Nature of Man

From reviewing the secular as well as the religious documents such as the Constitution, the National Charter, the October Working Paper, the Quran, the traditions, and the notions of Muslim philosophers, a great many statements about man and his position in society and culture could be found.

a) Faithful to God

Man should have "unshakable faith in God, His prophets and His sacred messages which He passed on to humanity, in all places and at all times as a guide to justice and righteousness."<sup>3</sup> The National Charter states that:

"... the freedom of religious belief must be regarded as sacred in our new free life. The eternal spiritual values derived from religions are capable of guiding man, of lighting the candle of faith in his life and

of bestowing on him unlimited capacities for serving truth, good and love. In their essence all divine messages constituted human revolutions which aimed at the reinstatement of man's dignity and his happiness."

4

b) Free

All religions contain a message of progress and freedom. The National Charter points out that:

"The essence of all religions is to assert man's right to life and to freedom. In fact, the basis of reward and punishment in religion is equality of opportunity for every man. Every individual starts his life - before his Maker with a blank sheet, so to speak, on which are recorded his deeds accomplished by his own free will."

5

Many verses in the Quran support this notion such as,

"God will not burden any soul beyond its power. It shall enjoy the good which it has acquired, and it shall bear the evil for the acquirement of which it laboured."

From the Quran point of view, the causes of creation is for man to realise himself and to be judged according to his freely committed actions by a just God. For,

"Allah hath created the heavens and the earth with truth, and that every soul might be repaid what it hath earned,  
And they will not be wronged."

6

Reward and punishment are two concepts on which the Quran lays particular stress, and in connection with them asserts that Allah does no injustice towards anyone, not even so much as a fibre of a date or as a pit in the seed.

"Verily, God will not wrong men in aught, but men will wrong themselves."

7

"On that Day (Day of Judgement) will men proceed in companies sorted out, to be shown the deeds that they had done. Then shall anyone who has done an atom's weight of good, see it, and anyone who has done an atom's weight of evil, shall see it."  
8

It is also made very clear that the misfortunes and miseries that befall men in their life are due to them and not to God.<sup>9</sup>

Free man is the basis of a free society which he can set up. Freedom alone is capable of impelling man to move forward and to catch up with those who are ahead of him. The National Charter states that:

"The freedom of an individual to shape his destiny, to define his position in society, to express his opinion, and by means of his thought and experience, 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."  
10

#### c) Democratic

Criticism and self-criticism are among the most important guarantees to freedom and democracy.<sup>11</sup>

"Political democracy cannot be separated from social democracy. No citizen can be regarded as free to vote unless he is given the following three guarantees:  
a) He should be free from exploitation in all its forms;  
b) he should enjoy an equal opportunity to have a fair share of the national wealth; c) his mind should be free from all anxiety likely to undermine the security of his life in the future."  
12

#### d) Equitable

The National Charter states that: "God in His great wisdom has made equality of opportunity the basis of His judgement of all people."<sup>13</sup> Moreover, justice, which is the sacred right of every individual, should never

be an expensive commodity, beyond the reach of the average citizen. Justice should be accessible to every individual without material obstacles, or administrative complication.<sup>14</sup>

"No religion can accept a system of class distinction, by which the majority inherit the punishment of poverty, ignorance and disease while a small minority monopolise the reward of all prosperity."

15

Equality between men and women has been emphasised in the National Charter, the October Working Paper, and the Constitution. The October Working Paper states that:

"Women constitute one half of the society and to deny women opportunity to participate in our comprehensive strategy for progress is to deprive society of the capabilities of one half of its members. Education, labour and just human treatment are compatible with the tolerant 'Sharia' (Islamic Law)."

16

The Constitution stipulates that:

"The state ensures a co-ordination between the duties of women towards their families and their work in society. It also ensures equality between men and women in the political, social, cultural and economic aspects of life without violating the provisions of Islamic Law."

17

#### e) Responsible

The people do not call for change or endeavour to realise or even impose it merely for its own sake.

"They only do so in order to attain a better life and in an attempt to raise the level of their reality to that of their aspirations."

18

For doing so, it is the right of every individual to receive the kind of education which suits his abilities and talents.<sup>19</sup> The National Charter asserts that:

"Since the children of today are the makers of our future, it is the duty of working generations to provide them with all the chances that will enable them later to assume successfully the responsibility of leadership."

20

Woman must be regarded as equal to man and must therefore shed the remaining shackles that impede her free movement so that she might take a constructive and profound part in shaping life.<sup>21</sup>

"The family is the first cell in a society and it must, therefore, afford all means of protection so that it might be better able to preserve the national tradition, to rejuvenate its texture, and to carry along the whole of society in the direction of the goals set by the national struggle."

22

The importance of the community is so emphasised that it occupies a place, perhaps, prior to that of the individual.

#### f) Enlightened

Ibn Khaldun (A.D.1332-1406), one of the great Muslim philosophers, pointed out that man is a social animal, and his prosecution of learning is conditioned by the nature of the material, intellectual, and spiritual civilisation in which he lives. Man is distinguished from animals by his capacity to think: to think how to maintain himself, how to act as a member of a social order. "Learning and education are natural to civilised life."<sup>23</sup>

The National Charter stated that a man should have "a mind open to all human experiences, from which it benefits and to which it contributes with no fanaticism or complex."<sup>24</sup> The working man should become the master of the machine and not a cog in a wheel in the production set-up.<sup>25</sup> But how could this be accomplished? The October Working Paper points out that,

"it is our duty towards the Egyptian citizen, who is our principal asset, and by whom and for whom we work, to prevent his falling prey to illiteracy, disease, or backwardness. We should offer him the full chance to develop so that he may give of his best to his country."

26

g) Planner

Deep awareness of the necessity of planning in the individual's life is the decisive solution to his present and future problems. This awareness will change the individual's feeling of submission to fate as regards problems, and replace it with a feeling of responsibility that drives the individual to plan the family socio-economic and political affairs.<sup>27</sup>

"The Arab shall determine by himself the destiny of his nation on the fertile fields, in the huge factories, from the tops of the high dams and with the enormous energies of the driving power."

28

h) Skilful

The October Working Paper stated that,

"it is impossible to follow a comprehensive industrialisation policy for long without providing the necessary numbers of skilled workers, technicians and administrators at the different levels."

29

Moreover, the National Charter emphasised

"the right of each citizen to secure the job which accords with his abilities and interests and the type of education he has received. Beside being of economic importance in a man's life, work is an assertion of human existence itself."

30

Again the October Working Paper asserts that:

"Man makes development, and his happiness is its ultimate. Money without competent men is no more than paper stacked in safes. Machinery, however modern, is useless without human skill, and the most fertile soil remains barren unless ploughed by human labour."

31

The development of manpower means first, increasing its number and foremost increasing its capacity and productivity and its human potential through culture, education and training.<sup>32</sup>

## 2. The Nature of Society

The National Charter points out that there are three objectives which are a true expression of Arab national conscience, they are: a) Freedom, b) Socialism, and c) Unity. Freedom means freedom of the country and freedom of the citizen. Socialism means sufficiency in production and justice in distribution. Unity means the restoration of the natural order of the Arab Nation, torn apart by foreign powers against its own will and interests.

### a) Freedom

The sixth principle for the Egyptian Revolution was "Establishment of a sound democratic system."<sup>33</sup> The Constitution states that: "The system of Arab Republic of Egypt is democratic and socialist, and it is built on the alliance of working populace forces."<sup>34</sup> The Quran asserts that it is better and more lasting for those "who conduct their affairs by mutual consultation ..."<sup>35</sup> When Abo Baker, the first Orthodox Caliph, was chosen to administer the Muslim affairs, he said, "Omen, of a surety, I am entrusted with your affairs, I am not the best of you, if I did well support me, if I did wrong evaluate me."

The National Charter points out that 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 popular and political organisations based on free and direct election must truly and fairly represent the powers forming the majority of the population ..."

36

"The Constitution must ensure that the farmers and workmen will get half the seats in political and popular organisations at all levels."

37

Moreover, most of the documents assert that the freedom to earn a living is a necessary guarantee to the freedom of voting. The October Working Paper asserts that: "Political freedom has no significance to the hungry who is forced to sell his vote in elections."<sup>38</sup> So, the fourth principle for the Egyptian Revolution was "Establishment of social justice."

#### b) Socialism

But how to establish social justice? The answer comes from the National Charter, such as: Scientific Socialism is the suitable style for finding the right method leading to progress and social justice.<sup>39</sup> The Constitution re-affirms that,

"the economic base of Egypt is the socialist system based on sufficiency and justice in such a way as to prevent exploitation and aiming at dissolving the class distinctions."

40

Democracy is political freedom while socialism is social freedom.

"Socialism means the setting up of a society on a basis of sufficiency and justice, and equal opportunity for all, in work, production and services."

41

The wide gap between the advanced countries and those who are trying to catch up, no longer allows the method of progress to be left to desultory individual efforts motivated by mere selfish profits.<sup>42</sup>

The people's control over the tools of production does not necessitate the nationalisation of all means of production, neither does it mean the

abolition of private ownership or any infringement on the legitimate right of inheritance following therefrom. Such control can be achieved in two ways: first, the creation of a capable public sector that would lead to progress in all domains, and bear the main responsibility of the development. Second, the existence of a private sector that would, without exploitation, participate in the development within the framework of the overall plan provided.<sup>43</sup>

The National Charter states that:

"The Arab application of Socialism in the domain of agriculture does not believe in nationalising the land ... But it believes in individual ownership of land, with limits that would not allow for feudalism."

44

This conclusion is an outcome of responding to the sentimental longing of farmers for the ownership of land and the ability of the Egyptian farmers for creative work, under reasonable conditions.

The Arab application of socialism as the Charter points out, believes that the deprivation of the majority of people who suffered for so long should not be continued, so that the consumption of goods and services must be increased. But how can we increase production, and at the same time increase the consumption of goods and use of services? That, besides the constant increase of savings for the sake of new investments. This difficult equation with its three vital elements requires the following:<sup>45</sup>

- a) Fostering the work values, such as: work is duty, honour, and life.
- b) The existence of a highly efficient organisation capable of mobilising forces of production, raising their material and intellectual efficiency, and relating them to the production forces.
- c) These organisations must depend on centralisation in planning and

decentralisation in implementation.

- d) Doubling the national income, at least once every ten years.
- e) Using advanced science and technology in the production process.
- f) Raising the compulsory education up to 15 or 16 years of age, and relating curricula to the development demands.
- g) Reinforcing the family planning project to stop the enormous rate of increase in population.

c) Industrialisation

All revolutionary documents emphasised the importance of industrialisation. For example, the National Charter points out that,

"industry is the strong support of the national build-up. It is capable of realising the greatest hopes in the field of social and economic evolution."  
46

The October Working Paper reaffirmed that "Egypt's future depends on industrialisation."<sup>47</sup> Industry is responsible for establishing the essential equilibrium between development demands and consumer needs.<sup>48</sup>

The National Charter emphasised again that industry should not be concentrated in the big cities and towns, but that it should extend creative work all over the Egyptian land.

"The industrialisation of the countryside which is based on agriculture opens vast ranges for the changes of work and life in the country."  
49

Science, planning, prediction and creativity are all emphasised as means of realising the development demands. The National Charter asserts that "science for society should be the motto of the culture revolution ..."<sup>50</sup> The major economic and social problems confronting Egyptian people must be resolved on a scientific basis.<sup>51</sup> The organised national action which is

based on scientific planning is the path leading to the desired future.

"Development is not a haphazard action which takes place automatically. But development constitutes a scientific action based on forecasting changes expected to take place at particular times."  
52

The planning principle is centralisation in planning and decentralisation in implementation. "Once the general plan is defined, then all would move within its framework in freedom and flexibility."<sup>53</sup> Moreover, "creative human action is the only means before society for the realisation of its aims and aspirations."<sup>54</sup>

#### d) Arab Unity

The National Charter points out that: "Ours is an Arab people and its destiny is tied to the destiny of the Unity of the Arab Nation."<sup>55</sup> The October Working Paper states that "our people believe deeply in their affiliation to the Arab nation."<sup>56</sup> The Constitution states that, "... Egyptian populace is a part of the Arab Nation, and it works on the realisation of its comprehensive unity."<sup>57</sup> Complete unity is an ultimate goal. What is certain and must be realised is that economic and political co-operation can bear fruit and can be furthered despite differing political and economic systems in the Arab States. However, we live in Africa, therefore we cannot be isolated from its political, social and economic development.

#### e) Religion

The Egyptians believe in the messages of religions. They believe that a man's existence on earth is not an accident of nature but a purposeful act of the creative will of God. Man has a spiritual status which gives him dignity and raises him to a level above all other earthly creation. Men are not numbers or cogs in the vast machine of the Universe, but human beings

with free wills and inherent rights. The National Charter stated that:

"Our people have a sufficiently strong faith in God and in themselves to enable them to impose their will on life, in order to re-model it according to their aspirations."

58

The Egyptian people believe in peace as a vital necessity. Consequently, they spare no effort in working for it, with all those who share the same conviction.<sup>59</sup>

### 3. The Nature of Knowledge

#### a) Science and Democracy

Science for society should be the basis of the cultural revolution.<sup>60</sup>

The socio-economic and political problems confronting the Egyptian people at present must be resolved on a scientific basis.<sup>61</sup>

"... while the attempts at family planning with the aim of facing the problem of the increasing population, deserve the most sincere efforts supported by modern scientific methods, the need for the most rapid and efficient drive towards the increase of production necessitates that this problem should be taken into consideration in the process of production."

62

The attainment of the socio-economic and political goals "... is possible through economic and social planning, without sacrificing the living generations of citizens for the sake of those still unborn."<sup>63</sup>

Freedom is explicit in a democracy. The National Charter states that: "Exercising criticism and self-criticism always gives national action an opportunity to correct and adjust itself to its great objectives."<sup>64</sup> So, it argued, organised freedom must be explicit in the school. Each member of society (school) must have the right to share in the making of decisions. Each pupil must have the right to the kind of education which suits his

ability and interests.

Equality in education is one of the principles which follows directly from the fundamental religious tenet that all Muslims are equals and brothers; and according to a tradition of the Prophet's "it is the duty of every Muslim (men and women) to seek after learning." In fact, the educational institutions which Muslims established did not distinguish between rich and poor, higher classes and lower ones, or between men and women. They were free, and Muslims anywhere could come to them and find beside education, material support. Moreover, the Muslims were not content with founding those institutions, but also provided permanent funds - Wakfs - for their maintenance as well as for teachers and students alike.

The National Charter points out that scientific discoveries and their application have widened the gap between the advanced countries and the developing countries. "Here emerges the great role to be undertaken by the universities and educational centres on various levels."<sup>65</sup>

#### b) Theory and Practice

This guarantees that thought should always be in constant connection with action and theoretical doctrine should always be in connection with experimental application.<sup>60</sup> Therefore, the relationships between educational institutions and society have been emphasised. The National Charter, for example, states that:

"The responsibility of the universities and scientific research centres in shaping the future is not less important than the responsibility of the various popular authorities.... Therefore, universities are not ivory towers but rather forerunners discovering a mode of life for the people."

67

Education is the means of consolidating and honouring human freedom; it is also the energy which can rejuvenate national action and daily adds

new ideas to it and brings leading and serious elements to its various fields.<sup>68</sup> The October Working Paper adds that:

"The most important addition to the logic of education and research on the world is the elimination of the distance between thought and action. Education is no longer limited to rigid study of subject matter which the student must absorb. Education has become organically linked to the social change and its requirements."  
69

This pragmatic approach emphasises that

"the object of education is no longer to turn out employees who work in government offices. Thus ... the curricula should aim at enabling the individual human being to reshape his life."  
70

How does knowledge occur? From the previous statements it could be said that experience is the most important means of teaching and learning. According to Muslim tradition, parents are responsible for bringing up their children, by example and teaching, in the right way of living. They should see that they acquire and practise the common virtues, and they should approve and encourage them in this direction.<sup>71</sup>

Muslim thinkers have indicated two ways: experience on the one hand and revelation on the other. To Al-Ghazali (A.D.1058-1111),<sup>72</sup> knowledge has three degrees: a) knowledge of the common man, who is restricted by his sense experience and satisfied by whatever the people in authority tell him, b) scientific knowledge, which does not accept anything as valid except that which is established by proofs. These two ways are dependent upon experience, observation, reason and experiments. These two ways are the common tools through which knowledge occurs. c) Finally, the mystical knowledge, which occurs only after a long period of training and ends in a vision of the ultimate truth. This stage, which is above and beyond every other kind of knowledge, cannot be reached by reason, but through illumination only. It

is either the knowledge of prophets or the knowledge of mystics, which is obtained by divine grace and through a light that God sheds in the heart of man.<sup>73</sup>

Among the great philosophers of Islam are Al-Kindi (A.D.801-866), Al-Farabi (died A.D.950), Avicenna (Ibn-Sina, A.D.980-1037), and Averroes (Ibn-Rushed, A.D.1126-1198). To them the human mind is capable of reaching the truth by itself. Averroes devoted a treatise to "the agreement of religion and philosophy". According to him, the object of philosophy is to grasp the meaning of existence and to ascend from the knowledge of the created to that of the Creator. Religion, on the other hand, invites man to a profound and rational study of the Universe. Reasoning and inference do not contradict in any way the teaching of the Divine Law.<sup>74</sup>

Ibn Khaldun redeemed the reputation of Islamic scholarship by producing a new philosophy of history starting from first principles.<sup>75</sup> For him, man is a social animal, and his prosecution of learning is conditioned by the nature of the material, intellectual, and spiritual civilisation in which he lives.<sup>76</sup> He is

"one among those who emphasised most the importance of experience, urged nevertheless that the human soul should not be contented with individual experience, but must learn from the total experience of humanity as a whole, by studying it and criticising it."  
77

From the previous review, it could be said that experience, scientific proofs, reasoning and inference should be considered the major modes of teaching and learning.

#### IV. A NEW CURRICULUM MODEL

What have been identified so far are the nature of man, the nature of

society and the nature of knowledge. Accordingly, man ought to believe in God and all divine messages. He also ought to be free, democratic, equitable, responsible, enlightened, a planner and skilful. Egyptian society ought to be socialist, democratic, united, planned and agro-industrialised. In the nature of knowledge, emphasis has been placed upon science and democracy, closing the gap between theory and application, and upon experience, reasoning and the scientific method of thinking as a means for teaching and learning.

From the previous review of Egypt's normative position, new curriculum thinking stemming from Egypt's present conditions, can be suggested. The new ideas about the curriculum fall (in principle) somewhere between the pragmatic and polytechnical schools of thought. This could be judged from the following principles which have been emphasised in the previous documents. They emphasised that general education should have two parallel targets: first, to create the enlightened, democratic individual, more understanding of, and in harmony with, his society and his age, further able to study and criticise human knowledge, and more responsive to the general needs of his environment and his country. Second, to provide him with precise and advanced skills which would enable him to face his future problems in work or in further education.<sup>78</sup>

A rigid form of secondary education has been criticised,

"instead it should be diversified as much as possible to respond to the need for various expertise, specialisations and skills required in development in order to promote it all along a broad front."

79

In accordance with the polytechnical principles, reference has been made to the elimination of the distance between thought and action and the importance of linking education to the social change and its requirements.

It has been emphasised that certain types of schools should be linked to the environment, rural or urban, field or factory. Only in this way would Egypt avoid the return of illiteracy to many of her children. It would also avoid

"the other face of the same problem, namely the emigration of the educated individual from his environment, thus constantly impoverishing this environment by depriving it of the advantages resultant upon the spread of education therein."  
80

Reference has been made to the need of meeting the country's requirements of skills and expertise, and the need of raising the value of work or labour by eliminating the social difference between one form of education and another and changing the attitude of some people who may consider education as the instrument for gaining special social privileges irrespective of their value in the movement of society.<sup>81</sup>

In accordance with pragmatism, science and democracy have been emphasised. Science for society has been considered the basis for the cultural revolution. The social, economic and political problems that Egypt faces at present ought to be resolved on a scientific basis. Freedom and democracy have also been stressed. Organised freedom must be explicit in society and in schools. Thus, each pupil must have the kind of education which suits his ability and interests, and provides him with the knowledge and skills needed for the making of scientific and democratic decisions.<sup>82</sup>

Stimulated by technological change and the changing needs of society, continuous education or life-long education has been emphasised in the previous documents. The October Working Paper stated that:

"In this age, in which scientific, technical and technological progress proceed at an astonishing speed; in this world where often the machine becomes old and

obsolete as soon as it has been manufactured because something more modern has appeared - in this age, it has become imperative for active and productive elements to be in a state of constant education and continued acquiring of knowledge. Otherwise, the educated person will find himself backward compared to the new, whatever the degree of experience and culture he has acquired during his study."

83

This, in theory, is what ought to be. In reality, however, reference has been made in Chapter 6 to the general tendency for moving away from an elitist view of society to a more egalitarian view. Reference has also been made to the growing concern about equality of opportunity and the questions of social justice and democratic participation. There is a move away from dogmatic values to more rationalist ways of thinking. There is a move away from primitive industry to more modern, technological industries. All these create demands that school and curriculum should provide opportunities for children to learn the skills needed for their future work in society, the skills needed for solving the problems they are likely to face in their adult life, and the skills needed in the making of democratic decisions. The curriculum analysis carried out in Chapter 7 revealed that the curriculum responded weakly to such demands. These demands have very important implications for the organisation of secondary education, the organisation of curriculum content and learning experiences, the role of teachers and the interaction of these elements with the planning of curriculum.

#### V. THE NEED FOR REORGANISATION OF SECONDARY EDUCATION:

##### A PROPOSED SOLUTION

The analysis carried out in Chapter 6 reveals that the Egyptian Revolution has changed the cultural climate of the country. The new aspirations to power

are of a degree and kind that will require the transformation of the traditionally passive Egyptian masses into a source of rational, active, socio-economic and political strength.

It has been revealed from the analysis of contextual variables that industries in Egypt suffer acutely from mismanagement and shortage of skilled workers and technicians. The agriculture sector is still in need of a more educated and trained labour force who are able to use mechanised and scientific techniques to improve cultivation, irrigation and harvesting. The increase of urbanisation requires more goods and more services. The urgent need, therefore, is for universal literacy and a basic education that would provide the country with skilled workers and technicians and enable the highly intelligent among the workers to qualify for various grades of management. The absence of political education and curriculum integration, among other things, has contributed to the problem of democracy in Egypt.

In the light of emerging concepts of democracy and in harmony with the new knowledge concerning the nature of man and his needs, the nature of society and its requirements, and the nature of knowledge, the entire system of education should be re-examined and re-organised and the curriculum should be changed.

The secondary school should be transformed from an institution conceived for the few to an institution conceived for all. From an adjunct to the university, it should become an agency with no less goal than the amelioration of every individual and social need. From concentration on the past to the preparation for present and future as well as for democratic participation. In consistency with Egypt's contextual variables described in Chapter 6, and with the nature of man, society and cultural requirements and needs, the time has come to establish for secondary education an independent entity

closely linked to the needs of its students, the demands of society and the cultural requirements. This should be done in a way that would ensure for the student, as he goes through the stage, a build-up of his responsibility that would enable him to succeed to continue growing and developing the faculty of self-determination whether he should choose to join higher or university education or whether he remains content with just this stage and decides to enter one of the professions after getting some suitable training in it. It is perhaps interesting that concentration on achieving the above at once serves the objectives of readying the student for the university and for direct work.

For university requirements for those who are to join it do not go beyond the fact that they should be conversant with the culture of the age, trained and able to acquire knowledge and educate themselves, on top of an integration of personal traits. As for the purely academic subjects, these can be studied in depth by establishing specialised institutions of two years at the end of the secondary stage during which subjects may be concentrated for those who prove to have academic ability and interest of enrolment in university. But care should be given, alongside such subjects, to technical and practical aspects.

What is proposed here is as follows: first, the expansion of compulsory education in a way which includes primary stage, the three years of preparatory stage - which is in fact a stage of general education under the present system - in addition to the first form of the present general secondary school, at which the branching off of education to specialised institutions of general and technical education starts.

Second, compulsory education, therefore, consists of two stages: primary stage from age 6 to 12, and secondary stage from age 12 to 16. In its four

years, secondary education becomes a stage of general education and an extension of the compulsory stage of the primary education. In this way, education becomes general and inclusive as from the first form primary until the end of the tenth form secondary. It is worth mentioning that examination at the end of primary education for selecting children for secondary education has no place in this proposed system.<sup>84</sup>

Third, to complete the above picture, after the school leaving age at 16, we can enumerate at least three types of schools in which education varies as of the eleventh form and those are:

- 1) The specialised academic secondary school with its academic type of study of two years, aiming mainly at preparing students for specialised university studies in addition to continuing the provision of an amount of general education and inclusive of practical studies.
- 2) The vocational secondary school which aims mainly at preparing the student for a certain trade or profession at the level of the skilled labourer. The practical studies and technical skills which the student acquires in the previous general secondary stage may justify allotting just two years for the technical preparation of students in this school. Doors should be open for graduates of this school to join higher institutes at the university level under certain conditions.
- 3) Technical institutes of four years which aim at preparing technicians, and teachers' colleges of four years which aim at preparing teachers for primary education - until we can develop the preparation of the teacher of primary school at university level. Doubtless previous studies in the general secondary stage up to the tenth form help in making the period for preparing technicians and primary school teachers in these institutions just four years.

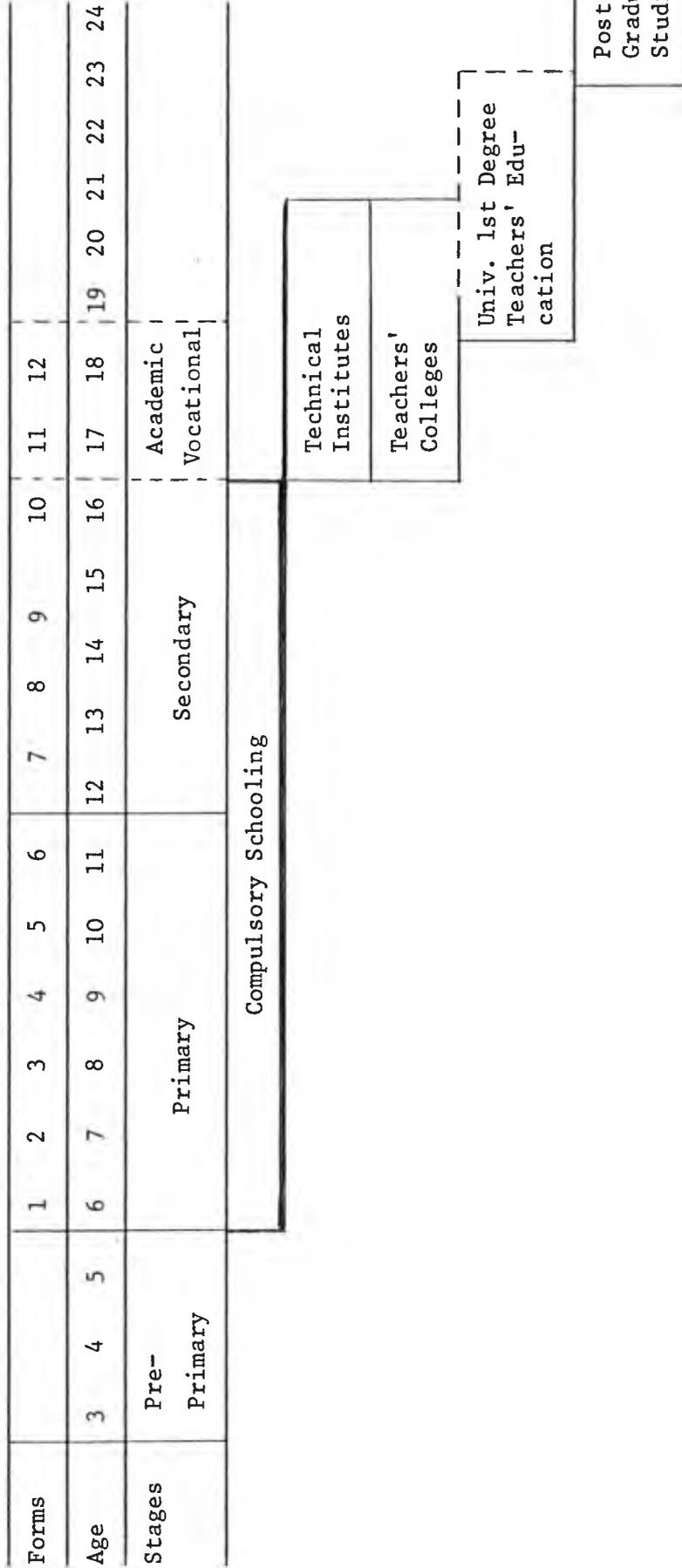
Fourth, the specialised stage (eleventh and twelfth forms, academic and vocational), should be terminal. Admission into it should be limited, see Figure 1.

Students for these directional or specialised institutions should be selected according to their abilities and their academic performance in the general secondary stage (the last four years from age 12 to 16), and in accordance with their wishes and their parents' opinions. In order to meet the socio-economic and technological needs of society and to prepare students for universities and higher institutes, these specialised or directional institutions should be as much diversified as possible.

Fifth, concerning the system of admission to universities and higher education, in the present system where the general secondary school is made up of three branches and its objectives are not clear - for in the view of some it is a general education stage - and in the view of pupils, teachers and parents, it is just a school for preparation for university and higher education. The result of all this is that it has become impossible to impose limits on admission into it, and this has created educational and socio-economic problems because of the pressure of students on general secondary and university education. Political considerations also got into it and students were crowded into classes and amphitheatres and it all resulted in a noticeable lowering of the standard of secondary and university education. The way out of this is perhaps to allow admission to university and higher education from among those graduates of specialised or directional institutions, to be left in the hands of the authorities of universities and higher institutes in accordance with the academic requirements and available places in their universities and higher institutes.

FIGURE 1: PROPOSAL FOR STRUCTURE OF EDUCATIONAL SYSTEM

(1) (2)



- (1) The first public examination
- (2) The second public examination

## VI. A NEW DIRECTION FOR CURRICULUM DEVELOPMENT

In accordance with Egypt's contextual variables, and in accordance with the nature of man, society and culture, their needs and requirements, the general secondary school curriculum should be shifted from the classic or encyclopaedic model to be more linked with pragmatic and polytechnical schools of thought. Thus, the following changes are required:

1. From a curriculum restrictively concerned with intellectual skills and mind training to a curriculum with no lesser goal than the amelioration of the 'whole' child and social needs.
2. From a narrow curriculum designed to educate university-bound students to a broadly conceived one designed to develop all citizens and workers as well, in a democratic society.
3. From emphasis placed upon the academic disciplines only to an equal emphasis upon the cultural and vocational fields as well as the student activities.
4. From the subject-centred curriculum to the core curriculum which should be built around the individual interests and the social needs.
5. And finally, from a system of evaluation depending heavily upon subjective measurements such as oral examinations, paper and pencil examinations, observed impressions and so on, to a system in which, in addition to all these, continuous assessment, standardised tests, achievement tests and other valid and reliable tests should be used widely.

Accepting the notion that changing a curriculum means changing its aims as well as the means by which these aims are to be achieved, all components of the general secondary school curriculum (aims, content, organisation and

methods of teaching, and evaluation), ought to be changed in order to meet the individual, social and academic needs and requirements.

By expanding compulsory education up to the end of tenth form, we will have a primary stage of six forms, from the age of 6 to the age of 12; and a general secondary stage of four forms, from the age of 12 to the age of 16; then a specialised or directional stage which includes the eleventh and twelfth forms, from the age of 16 to the age of 18. Attention will be paid here to the curriculum of the general secondary stage and the curriculum of the academic school in the specialised stage.

#### 1. Aims and Objectives

All above mentioned documents exhibited their tendency to the pragmatic and polytechnical approaches (in principle) to aims, since they emphasised the preparation of students for productive life, democratic participation, the importance of science on human life, and the understanding of scientific methods and rational thinking. Therefore, social, economic and political cohesion, not only intellectual endeavour, should be the new base for curriculum development. This would not contradict the encyclopaedic view that all students need to grow in their ability to think rationally, to express their thoughts clearly, and to read, write and listen with understanding. In short, the pragmatic and polytechnical view that education should be associated with social needs, scholarship should be associated with human welfare, and knowledge should be used, these are all stressed in the revolutionary documents.

Education in the general secondary school of four forms should be general and fundamental. It is becoming apparent from the increasing technology in Egyptian society that the focus of this school must be upon a broad general

education, with an understanding of vocational and occupational demands. So, a balanced curriculum for this stage would include academic, vocational and cultural aspects with both theoretical and practical applications. Practice, therefore, would become one of the principal bases of education with both a scientific significance and a rationale to work and production in society.

Science should be integrated with practice and with everyday life of the environment. The courses of natural sciences should develop the concept that man can have significant influence on his environment through technology and that he is the master of the machine. The programme of instruction in this area should depend on developing sound scientific thinking so that all pupils may become more self-reliant in acquiring experience and knowledge and more able at solving problems that confront them in their present and future life.

The employment demands are for more skilled and semi-skilled workers, technicians, and skilled and imaginative managers. These demands result in greater emphasis on vocational and technical subjects in the secondary school. Pupils at this stage, therefore, should be trained in practical work to acquire manual skills so that they may be able to handle whatever confronts them in their present and future life. This may give them also a respect for and a high estimation of manual labour. But this stage should not intend to prepare the pupil for any specific job. Instead it should provide him with information and competency which would enable him to be more flexible and also enable him to adapt himself to the changing needs of society.

The rapidly increasing population, with migration to urban areas, requires more goods and services. The improvement of health services, the longer life spans, the need to improve the cultural activities in Egypt, all these would

stress the need of much attention to be paid to the cultural offerings in secondary school. The cultural area of curriculum in this stage should aim at developing artistic taste and a sense of beauty. It should also develop appreciation, knowledge and skills in one or more media of artistic expression which might carry over to leisure aspects of life. It should provide opportunity for each student to learn co-operation with others and to gain an awareness of his own individual worth and understanding of others.

The pragmatic school of thought emphasises that the broad aim of social science would help individual students to become independent thinkers, able to make appropriate decisions, and to apply scientific techniques to socio-economic and political problems, so that they can deal with the rapidly changing nature of society.

Teaching and learning of this area of knowledge would encourage the intelligent uses of the natural resources for the improvement of living standards, the intelligent acceptance by individual and groups of the responsibility for democratic participation and decision-making. It should also increase the effectiveness of the family as a basic social institution.

Through the social sciences, teachers should teach students at this stage and at the directional or specialised stage what is going on now and imbue each with a desire to make his part of society go right. They must educate them in their public rights and duties. Organised freedom must be explicit in the school. Each student must have the right to share in the making of decisions.

The problem of democracy in Egypt should be related to what is taught in secondary schools. If the public is to participate effectively in political affairs, then perhaps the systematic teaching of political science at secondary and post-secondary levels is necessary. Students, as Holmes points out, should

"be trained in the methods of political analysis and the principles of weighing the possible consequences of alternative political action."<sup>85</sup>

It could be argued that school-age pupils have neither the maturity nor the intellectual competence to study such subjects. One way out is to do this at the specialised or directional secondary education, post-secondary education and in programmes of teachers' education and in all universities and higher institutes. While at the general secondary school level, this might be done through history, general social studies, geography, science, and so on. Through these subjects, the basic principles on which political decisions should be made could be drawn out.

Opportunities through the teaching and learning processes in the general secondary school (forms 7 to 10) should be provided for discovering pupils' talents, attitudes, abilities and interests. In accordance with their academic performances and interests, students at the end of this school should make their choice of the kind of education that would suit their abilities in the next stage or the kind of work to which they will fit after some suitable training.<sup>87</sup>

The aim of education after the tenth form is to concentrate on preparing students for specialisation while continuing to provide a suitable amount of general education even in the vocational schools and the technical institutes. It is assumed that general education throughout the stages leads to the acquisition of an aptitude for self-instruction for the rest of one's life.

Having identified the general aims of both the general secondary school and specialised (academic) secondary school, specific objectives for each subject or area of knowledge should be formulated. For doing this, the following basic principles are important:

First, since the real purpose of planned curriculum is to bring about

certain changes in the students' patterns of behaviour, it is important to recognise that any statement of objectives should be a statement of changes to take place in students, so that the educational experiences can be planned and developed in a way likely to achieve these objectives, that is, to bring about these changes in students. Therefore, as Kerr pointed out, a "pupil must have been or will be involved in a particular kind of behaviour if the objective has been achieved."<sup>88</sup>

Second, clearly formulated objectives, as R.Tyler explained, must have two aspects: the content aspect and the behavioural aspect.<sup>89</sup> Formulations such as "developing critical thinking" are available in each subject. But here two immediate questions arise. The first is, think critically about what? Here the content area must be specified. Critical thinking may differ from subject to subject, therefore unless the content area is specified, organising materials and experiences and choosing methods of instruction become impossible. The second question is, what is meant by critical thinking? Here the behaviour must be further specified.<sup>90</sup> In other words, what evidence will one accept that critical thinking is taking place or has taken place? An objective related to a specific area of content must, therefore, indicate the minimum level of skills, knowledge, and performances as well.<sup>91</sup>

In short, aims and objectives should be valid and consistent. Valid aims and objectives should be consistent with individual needs as human rights, social needs and cultural needs.<sup>92</sup> When formulating curriculum objectives, therefore, curriculum planners should take into account the individual needs, his level of growth, his ability, attitude and interest. Because of the rapid increase of scientific and technological knowledge and its application in industry, agriculture and commerce, it is necessary, therefore, not only that aims and objectives should be relevant to present social needs, but also

to the needs that are likely to arise in the future, taking into account the problems presented by the possibilities of continuous change.<sup>93</sup>

Considering the individual and social needs, it is important that some distinction must be made between the needs which are required by individuals in particular groups and the needs which are common to all. To satisfy both needs, Wheeler points out that,

"the best approach would seem to be for the school to provide the general knowledge and skills that are required to live and earn a living and the specialised knowledge and skills that are fundamental to different vocational ends. In this area, the difference between the needs of the individual and the needs of society merits careful consideration."

94

What should be considered next is the question of how these aims and objectives can be achieved. Essentially learning takes place through the content and learning experiences, their organisation, methods of teaching and the system of evaluation.

## 2. Content and Learning Experiences

To fulfil such aims and objectives, the curriculum in the general secondary stage (forms 7 to 10; from the age of 12 to 16), and the specialised academic secondary stage (forms 11 and 12; from the age of 16 to 18), should, I suggest, consist of two parallel parts: the common core subjects and the individualised or extra-curricular activities. The common core subjects contain a minimum content which it is necessary for everyone to have in order to be able to live a satisfactory life in a modern society. The individualised part contains the rest; some of it may be common to groups who are to follow the same or similar occupations, some of it is the field in which personal interests may develop.

The common core may contain four main areas of knowledge:

- 1) about 25 per cent of the syllabus should be devoted to the national language, a foreign language and mathematics,
- 2) about 25 per cent should be devoted to religious education, national education and social studies, including economic, political and sociological studies,
- 3) about 30 per cent should be devoted to the natural sciences theory and application and technological studies, and finally,
- 4) about 20 per cent should be devoted to technical and recreation studies which include different kinds of arts, and physical education.

In addition to this group of basic studies for all, individual differences of abilities and interests have to be taken into account and individualised or grouped studies have to be provided. This is the individualised curriculum content in which a wide range of occupational and cultural activities should be provided.

By about the age of 14, the special abilities of a child can be diagnosed and his future career foreshadowed. At this stage, namely during the ninth and tenth forms, the time devoted to the core knowledge and skills has to be cut down in order that optional studies and selective activities can be provided at a wider scale for special groups. The optional studies may mean further work in any one or two of the areas already mentioned, for example, a foreign language or an additional science subject. It is clear that this specialisation will increase with the years, especially during the eleventh and twelfth forms and that the common core will decrease, but the latter should never entirely disappear. There are aspects of the basic studies which should be continued throughout the secondary stages: general and academic. These considerations lead to the conception of an elastic curriculum based

upon areas of study rather than upon subjects. They demand a maximum of integration within each area, and scope for a variation of the time allotted to the common core and the individualised curriculum in accordance with the needs and abilities of individual pupils. In short, the curriculum has to be fitted to the pupils and not the pupils to the curriculum.

Within this framework, it could be taught from pragmatism that creative activity and the development of students' interests could be relied upon to produce a better and more balanced programme of study. Due attention should be directed, therefore, to the most neglected elements of present curriculum content in the general secondary school of Egypt, namely, the socio-economic and political aspects, the whole cultural and occupational areas of knowledge. The pragmatic notion that student activities have educative value and should be a direct concern of curriculum planners has not gained any ground in the secondary school in Egypt so far.

When the extra-curricular activities in cultural, vocational and practical aspects are neglected, the whole teaching and learning process looks very much like a deliberate sacrifice of the needs of the less intellectual students to the interests of potential university candidates. Consequently, a significant proportion of the less intellectual students fail to progress sufficiently in their secondary education to fit themselves for university and higher institutes of learning and, in turn, they land in unneeded clerical jobs.

From the application of essentialist curriculum theory in England, the general secondary school in Egypt could learn from both its positive and negative aspects. It could learn to avoid early specialisation, neglecting cultural, vocational and practical areas of knowledge. It could also learn not to neglect important aspects of social science such as sociology, economics

and politics. If a student has to know his society well, he should learn about these areas of knowledge in a more direct fashion. There is a body of knowledge which is relevant to intellectual understanding of society. For example, a course entitled 'Egyptian Problems' in which the social, economic and political problems should be discussed and solutions should be reached at schools.

In the occupational field, attention should be given to agriculture, business education, home economics, and industrial arts. The latter might include industrial and technical aspects of economy, as well as woodworking, metalworking, electricity, painting and graphic arts. Book-keeping, typing and shorthand should also be offered among electives. These courses should not be intended for actual technical training in specific jobs, but would constitute elective courses based upon students' interests and abilities. However, these courses could provide students for opportunities to use of simple tools, basic material and machinery. They could also provide them with basic information which would enable them to perform their citizenship rights and duties more effectively. To qualify them with social competencies and with the basic skills in communications. To develop their basic abilities for the occupation of homemaking. To provide opportunity for creative expression and discovery of talents.

The cultural area which includes art, music, drama, physical education and health education, should be considered an important part of school curriculum. Following the pragmatic view, this area of knowledge includes objectives for both the individual and society. For the individual, it makes an important contribution to the development of creative thinking. It includes self-expression, participation, appreciation, and discovering special talent. It also includes efforts related to social needs.

For all the above mentioned considerations, a common core curriculum as a basic level for all and an individualised curriculum in terms of extra-curricular activities to suit different attitudes, abilities and interests, should be established side by side.

Finally, it is important that content and learning experiences as well as aims should be checked against some criteria. It is necessary that the content of curriculum should be valid. But the term 'validity' can be used in more than one sense. In a technical sense, the term requires a close connection between the content and the formulated aims and objectives, which it is assumed to achieve.<sup>95</sup> This means, as Wheeler pointed out, "that all the objectives which are enunciated in a statement about curriculum should have corresponding experiences."<sup>96</sup> That is to say, if one of the aims is to develop skill in problem solving, this cannot be attained unless the learning experiences give students ample opportunity to solve problems.<sup>97</sup> For example, if the objective includes the ability to solve health problems, it is necessary that learning experiences should give students the opportunity to solve health problems.<sup>98</sup>

Learning experiences should be varied to assure that the desired objectives are achieved as well as the total development of the learner.<sup>99</sup> They should also be suitable both to the general level of development of the group and to the general and particular levels of development of the individual student.<sup>100</sup>

### 3. Organisation and Methods

Curriculum development on the lines mentioned above will have profound effects on the organisation of content and learning experiences and methods of teaching. Concerning these two aspects, the following are the most needed

changes:

According to the pragmatic school of thought, the teaching and learning process if it is to be significant must be meaningful, and meaningful teaching and learning must, in turn, follow the pragmatic maxims. Curriculum, therefore, should be organised in such a way as to solve problems of young people, society, and culture.

Organised content and learning experiences should indicate clearly the bases and provisions for the scope and continuity of learning. The continuity of learning should have two aspects: a) that of a vertical progress from one level to another, and b) that of relationship between the learnings in different areas of knowledge or disciplines which take place at the same time. The first of these two aspects is associated with the 'sequence' of learning and the second is associated with the 'integration' of learning.<sup>101</sup>

Sequence not only emphasises the importance of having each successive experience build upon the preceding one, but goes more broadly and deeply into the matters involved. It is, therefore, the ordering of content and the ordering of the learner's competencies and skills.<sup>102</sup> Integration is the horizontal relationship among disciplines and subjects. In other words, the teaching and learning process in the various areas of curriculum, which take place at the same time, should be integrated so that different kinds of knowledge and different kinds of problems may be related.<sup>103</sup>

In Egypt, educating for adaptability to changes in social requirements is thought to be vital. Educating for providing students with knowledge and skills needed in the making of democratic decisions and for predicting all consequences of a decision is very important. If that is so, learning experiences should be organised in such a way as to help the student to unify his view and his behaviour in relation to the elements dealt with.<sup>104</sup>

For example, in developing concepts in the social studies it is important to see how these concepts and areas can be related to work going on in other areas of knowledge or fields so that increasingly there is unity in the student's outlook, skills, attitudes, and so on.

In doing this, the pragmatic approach will be useful and thus team teaching should be introduced and encouraged. It involves two or more teachers, co-operatively planning, instructing, and evaluating one or more groups of students in order to take advantage of the special competencies of the team members. Teams would operate in much the same manner whether their members come from one subject area or cut across two or more subjects.

Emphasis on memorisation should be abandoned because it contributes little to understanding. The principle of learning through experience should be encouraged, and the concern with the development of the student's personality should be considered through the teaching and learning process. Teachers, at least within each area of knowledge should be assigned to work co-operatively from time to time, to facilitate cutting across subject matter lines. To facilitate the application of the core curriculum and the cutting across of subject matter barriers, audio-visual aids should be developed and provided for instruction.

The separate courses of mathematics such as algebra, geometry, trigonometry and so on, should be replaced by a unified approach built on basic principles or concepts. Various aspects of the mathematics areas should be integrated into mutually reinforcing mathematical segments. The same can be done with the separate courses of language.

Methods of teaching science should shift their emphasis on factual information, to that of understanding, enquiry and discovery. They should seek to develop better understanding of the structure of science and stress

science as a method of enquiry rather than as a body of knowledge. Team teaching, field trips, to explore aspects of biology, and television may also play important roles in the teaching of science.

Methods of teaching and learning in the cultural as well as in the occupational areas, can be characterised, according to the pragmatic and polytechnical principles, by such terms as problem solving, work experience, work study, job analysis, learning through working, and so on.

There is no doubt that the task of determining the objectives of instruction must rest largely with the teachers. The teachers, at the beginning of each year and each class, should make explicit to themselves as well as to their students the changes and outcomes which are expected to take place in them as a result of the programme of instruction. Having these determined objectives in mind, the teachers should find ways of working with students, individuals and groups in order to fulfil these desired objectives. It is also generally believed that the student should be involved in the process of making decisions about curriculum aims and objectives. "At the very least, he must accept and to some degree understand the goals if he is to exert the appropriate learning effort."<sup>105</sup>

The period of study should be sufficiently extended (to at least 36 weeks of the school year) so that enough time may be available to acquire the practical experiences and to promote the desired changes and outcomes. However, the school day should not be crowded with class periods in order that students may be able to pursue the accompanying activities.

All these suggestions for curriculum development, based on the treble principles of satisfying the individual, social and cultural needs, are dependent for their successful application on the teachers. Without a real change in their attitudes there can be little hope of progress. Therefore,

the professional preparation of a teacher should be considered as important as his academic preparation, and thus, a graduate should not be allowed to teach unless he has completed his professional preparation. In-service training, which has been neglected, should be reorganised and operated regularly in order to provide teachers for up-to-date knowledge and skills and to adapt themselves and their approaches to the changing needs of their pupils and their society.

#### 4. Examinations

Radical changes in the curriculum process on the lines mentioned so far will also have a profound effect on the examination system. The first public examination should be established at 16+ for all pupils. This examination, I suggest, will have to provide on a certificate of two sections: the first for the general subjects or the core subjects taken by all pupils and the second for the specialist or the individualised subjects chosen by the pupils in the last one or two years.

Graduates of this stage may go to work or continue their education in the specialised stage. It should be remembered that the specialised stage should be terminal. Those who would like to continue should be distributed into academic, vocational schools and technical institutes in accordance with their academic and technical performances in the former stage, and with students' interests and parents' opinions being considered. At the end of the academic and vocational school a second and final public examination should be established and a certificate should be issued on the same lines as mentioned above.

Admission to universities and higher institutes from among those graduates of academic and vocational schools should be limited in accordance with

students' performances in these schools, the academic requirements, the social and economic demands, and the available places in universities.

Education is a process which seeks to change the behaviour of students by providing them with the knowledge and skills needed at each level of development. These changes, therefore, are the aims and objectives of education. While these changes include mastery of content 'knowing that', and while this mastery is achieved in connection with the study of some subjects, they also include the reactions of students to these subjects, such as the way of thinking or the skills in 'knowing how'.<sup>106</sup>

The evidence, from the application of both pragmatism and essentialism, suggests that if curriculum aims and objectives are not clearly stated, it is difficult to review and revise examinations effectively. Moreover, the more specific and detailed the examining procedures to be followed, the more reliable and valid the examinations tend to be.

In addition to the mastery of knowledge and skills, the school should be concerned with the evaluation of student growth in social relationships, critical thinking, creative activities, interests and attitudes. From pragmatism, it could be taught that evaluation should be seen less as a final measurement device for the assignment of grades or forms and more as a means of securing needed information for planning curriculum, guiding instruction, getting evidence on changes in the students, and the degree to which students attain the defined objectives. The most central function of evaluation, therefore, is to

"validate the hypotheses upon which the curriculum is based. In a sense all curriculum plans and approaches to instruction are only hypotheses whose efficacy needs to be tested."

For achieving this purpose, evaluation should be consistent, comprehensive, and a continuous feed-back. Evaluation must be consistent with the aims and objectives of the curriculum.<sup>108</sup> If concepts, for example, are considered to be more important than facts, then the greater stress should be laid upon the assessment of concept development than upon the recall of facts and information. Evaluation instruments should be as comprehensive in scope as are the aims and objectives of the curriculum. There is a necessary parallel between explicit aims and objectives and their evaluation instruments, and it is necessary to accept the proposition that all the objectives of the curriculum must be assessed in some way.<sup>109</sup> Evaluation should be considered as a continuous feed-back process and an integral part of curriculum development and of instruction. It should provide information on the weaknesses and strengths of the programme by diagnosing these weaknesses and strengths in the achievement of the students. Evaluation should be considered as a process of quality control in which

"it may be determined at each step in the teaching-learning process whether the process is effective or not, and if not, what changes must be made to ensure its effectiveness before it is too late."  
110

It is important that in the construction of an evaluation instrument to determine how far this instrument is objective, reliable, and valid. It may safely be said that assessment is more objective, reliable and valid in the objective tests than in the other tests and in the cognitive domain than in the affective domain. For a centralised system like the one in Egypt, therefore, objective tests should be introduced and used widely, because they provide a broad basis of comparison. A standardised test, for example, contains uniform content and requires that uniform procedures be carried out when administering the test.

So, in addition to the oral and essay types of examination and the teacher's observed impressions, multiple-choice tests, mental ability tests, and achievement tests should be introduced to make it possible to rule out the basis of the individual scoring and to make comparison on a valid basis. The results of examinations should be analysed and used as feed-back.

Depending upon these bases, it is hoped that secondary school in Egypt would have an increasingly more effective educational programme rather than depending so much upon hit and miss judgment as a basis for curriculum development.

#### VII. CONCLUDING COMMENT

This proposed solution is recommended for implementation. Whether it will be adopted and implemented or not is not my decision. It is, however, my personal judgment that the solution takes into account the major social conditions of Egypt and the higher valuations of the nature of man, society and knowledge. In this sense the proposed solution provides adequate bases for curriculum development. It provides flexibility on the part of secondary school curriculum; in the formulation of aims and objectives, in selecting the content and learning experiences, in teaching methods and evaluation. It is specifically structured to meet the contemporary situation. It is also designed to meet Egypt's publicly expressed aspirations for the future.

NOTES

1. Taba, H., Curriculum Development: Theory and Practice, New York, Harcourt, Brace and World, 1962, p.7
2. Ibid., p.10
3. The National Charter, Cairo, Ministry of National Guidance, 1962, p.18
4. Ibid., p.93
5. Ibid., pp.93-4
6. The Quran, Sura XLX, verses 22.
7. Ibid., Sura, X, verse 44.
8. Ibid., Sura, XCIX, verses 6-8.
9. Ibid., Sura, XLII, verse 30.
10. The National Charter, op.cit., p.94
11. The Constitution of Arab Republic of Egypt, Cairo, Ministry of Information, 1971, Article 47, p.15 (in Arabic).
12. The National Charter, op.cit., p.57
13. Ibid., p.94
14. Ibid., p.62
15. Ibid., p.94
16. El-Sadat, M.A., The October Working Paper, Cairo, Ministry of Information, 1974, p.71 (in Arabic).
17. The Constitution, op.cit., Article 11, p.6
18. The National Charter, op.cit., p.47
19. Ibid., p.92
20. Ibid.
21. Ibid.
22. Ibid., pp.92-3

23. Ibn Khaldun, Al-Muqaddima (The Prolegomena), Beirut, 1900, p.429
24. The National Charter, op.cit., p.18
25. Ibid., p.86
26. The October Working Paper, op.cit., p.63
27. The National Charter, op.cit., p.84
28. Ibid., p.79
29. El-Sadat, M.A., op.cit., p.63
30. The National Charter, op.cit., p.92
31. El-Sadat, M.A., op.cit., p.62
32. Ibid.
33. The National Charter, op.cit., p.9
34. The Constitution, op.cit., Article 1, p.3
35. The Quran, Sura, XLII, verse 38.
36. The National Charter, op.cit., p.59
37. Ibid.
38. El-Sadat, M.A., op.cit., p.37
39. The National Charter, op.cit., p.66
40. The Constitution, op.cit., Article IV, pp.3-4
41. The National Charter, op.cit., p.48
42. Ibid., p.67
43. Ibid., p.68
44. Ibid., p.80
45. Ibid., pp.65-80
46. Ibid., p.84
47. El-Sadat, M.A., op.cit., p.60
48. The National Charter, op.cit., p.86

49. Ibid., p.83
50. Ibid., p.109
51. Ibid.
52. El-Sadat, M.A., op.cit., p.78
53. Ibid., p.81
54. The National Charter, op.cit., p.101
55. Ibid.
56. El-Sadat, M.A., op.cit., p.9
57. The Constitution, op.cit., Article 1, p.3
58. The National Charter, op.cit., p.129
59. Ibid., p.128
60. Ibid., p.109
61. Ibid.
62. Ibid., p.79
63. Ibid., p.80
64. Ibid., p.104
65. Ibid., p.108
66. Ibid., p.103
67. Ibid., p.109
68. Ibid., p.92
69. El-Sadat, M.A., op.cit., pp.64-5
70. The National Charter, op.cit., p.61
71. Abdel Meguid, A.A., 'Islam,' in The Yearbook of Education 1951, London, Evans Brothers, 1951, p.223
72. Saliba, D. and Tomeh, G.J., 'Islam,' in The Yearbook of Education 1957, London, Evans Brothers, 1957.
73. See Al-Ghazali, Ihya, Cairo, Halabi Press, 1334 A.H., Vol.I. See also his essay 'Ayyuha Walad' addressed to one of his former disciples.

74. Saliba, D. et al., op.cit., pp.75-6.  
Toynbee, A.J., A Study of History, Vol.III, p.322, says of Ibn Khaldun: "He has conceived and formulated a philosophy of history which is undoubtedly the greatest work of its kind that has ever yet been created by any mind in any time or place."
75. See Ibn Khaldun, op.cit.
76. Tibawi, A.L., 'Philosophy of Muslim Education,' in The Yearbook of Education 1957, op.cit., p.89
77. Saliba, D. et al., op.cit., p.77
78. El-Sadat, M.A., op.cit., pp.64-5
79. Ibid., p.65
80. Ibid., pp.65-6
81. Ibid., p.66
82. The National Charter, op.cit., p.104
83. Ibid., pp.66-7
84. Tendency towards reorganising secondary education on the same lines proposed here could be found in recent publications of the National Council for Education, Scientific Research and Technology; Ministry of Education; and also see Al-Gomhorya Newspaper, 1976, 9-8, p.3
85. Holmes, B., Problems in Education: a Comparative Approach, London, Routledge & Kegan Paul, 1965, p.116
86. Ibid.
87. See A.R. Egypt, Presidency of the Republic, The Specialised National Council's Magazine, No.2, Cairo, Sept.1976.
88. Kerr, J.F., Curriculum Change, London, University of London Press, 1968, p.21
89. Tyler, R.W., Basic Principles of Curriculum and Instruction, Chicago, The University of Chicago Press, 1949, p.46
90. Bloom, B.S., Hastings, J.T., Madaus, G.F., Handbook on Formative and Summative Evaluation of Student Learning, New York, McGraw-Hill, 1971, p.23
91. Abd-El-Mamgood, M.E., 'The Scientific Bases for Formulating the Educational Objectives,' in Science and Instruction Magazine, No.3, Tunisia, 1975, p.20

92. Wheeler, D.K., Curriculum Process, London, University of London Press, 1967, pp.85-7
93. Ibid., p.88
94. Ibid., p.92
95. Ibid., p.218
96. Ibid., p.149
97. Tyler, op.cit., p.65
98. Ibid., pp.65-6
99. Ibid., p.67 and Wheeler, op.cit., pp.151-2
100. Ibid., p.66 and Wheeler, op.cit., p.154
101. Taba, op.cit., pp.428-9
102. Ibid., p.429
103. Bloom, B.S., 'Ideas, Problems and Methods of Inquiry,' in The Integration of Educational Experiences, Fifty-Seventh Yearbook, Par.3, of the National Society for Study of Education, Chicago, Chicago University Press, 1958, pp.84-104
104. Tyler, op.cit., pp.85-6
105. Bloom, et al., op.cit., pp.8-9
106. Ryle, G., 'The Concept of Mind,' referred to by Taba, op.cit., p.312
107. Taba, ibid., p.314
108. Ibid., p.316
109. Wheeler, op.cit., p.271
110. Bloom, et al., op.cit., p.8

BIBLIOGRAPHY

- AARONOVITCH, S. and SAWYER, M.C., The Concentration of British Manufacturing, London, Lloyds Bank Review, October, 1974.
- ABDEL-MEGUID, A.A., 'Islam,' in The Year Book of Education 1951, London, Evans Brothers, 1951.
- ABERNETHY, D.B., The Political Dilemma of Popular Education, Stanford, Stanford University Press, 1969.
- ABRAHAMSON, S., 'The Influence of Social Structure on Curriculum U.S.A.,' in The Year Book of Education 1958, London, Evans Brothers, 1958.
- ADREN HOUSE CONFERENCE DISCUSSION, 'Secondary Education and the Development of Skills,' in David, H. (ed.), Education and Manpower, New York, Columbia University Press, 1960.
- ALBERTY, H., Reorganization of the High School Curriculum, New York, Macmillan, 1953.
- ALEXANDER, W.M., 'Who Decides Upon the Content of the Curriculum in the U.S.A.,' in The Year Book of Education 1958, London, Evans Brothers, 1958.
- AL-GHAZALI, Ihya, Cairo, Halabi Press, 1334 (in Arabic).
- ALMOND, G.A. and VERBA, S., The Civic Culture, Princeton, Princeton University Press, 1963.
- AL-RAFII, A.R., History of the Nationalist Movement in Egypt, Part III, Cairo, 1940 (in Arabic).
- AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, Testing, Testing, Testing, Washington, D.C., 1962.
- ANDERSON, R.H., 'Team Teaching,' in DROPKIN, S. et al., (ed.), Contemporary American Education, New York, The Macmillan Company, 1965.
- APTER, D.E., The Politics of Modernization, Chicago, The University of Chicago Press, 1965.
- ARAB LEAGUE, General Culture Department, Conference on Free and Compulsory Education in the Arab States, Cairo, 1954 (in Arabic).
- ARAB REPUBLIC OF EGYPT, Facts and Figures, Cairo, 1972.
- ARAB REPUBLIC OF EGYPT, Facts and Figures, Cairo, 1974.
- ARAB REPUBLIC OF EGYPT, Presidency of the Republic, The Specialised National Council's Magazine, No.2, Cairo, September 1976.
- BAKER, W.O., 'The Dynamism of Science and Technology,' in Ginzberg, E. (ed.), Technology and Social Change, New York, Columbia University Press, 1964.

- BANTOCK, G.H., 'Towards a Theory of Popular Education,' in HOOPER, R. (ed.), *The Curriculum: Context, Design and Development*, Edinburgh, Oliver & Boyd, 1971.
- BARLOW, M.L., *History of Industrial Education in the United States*, Peoria, Ill., Charles A. Bennett Co. Inc., 1967.
- BELL, D., (ed.), 'The Post-Industrial Society,' in Ginzberg, E. (ed.), *Technology and Social Change*, New York, Columbia University Press, 1964.
- BENDER, L. and JOHN, E., *Teaching and Learning, Philosophical, Psychological, Curriculum Applications*, New York, Macmillan Publishing Co. Inc., 1975.
- BENE, E., 'Some Differences Between Middle-Class and Working-class Boys in their Attitudes towards Education,' *British Journal of Sociology*, X, 1958-1959.
- BENN, C. and SIMON, B., *Half Way There*, New York, McGraw-Hill, 1970.
- BENT, R.K. and KRONENBERG, H.H., *Principles of Secondary Education*, New York, McGraw-Hill Book Co., 1961.
- BENT, R.K. and UNRUH, A., *Secondary School Curriculum*, Lexington, Mass., D.C. Heath & Co., 1969.
- BEREDAY, G.Z.F., *Comparative Method in Education*, New York, Holt, Rinehart & Winston, Inc., 1964.
- BERGER, E.G., 'Spin-off from,' *Industrial Arts and Vocational Education/ Technical Education*, Vol. 58, September 1969.
- BERNSTEIN, B., 'A Public Language: Some Sociological Implications of a Linguistic Form,' *British Journal of Sociology*, X, 1958-1959.
- BERNSTEIN, B., 'Some Sociological Determinants of Perception,' *British Journal of Sociology*, IX, 1958-1959.
- BERNSTEIN, B., 'On the Classification and Framing of Educational Knowledge,' in YOUNG, M.F.D. (ed.), *Knowledge and Control*, London, Cassell & Collier Macmillan Publishers, Ltd., 1971.
- BERNSTEIN, B., 'Open Schools, Open Society?', *New Society*, September 14, 1967.
- BLOOM, B.S. (ed.), *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook 1, Cognitive Domain*, New York, McKay, 1956.
- BLOOM, B.S., 'Ideas, Problems and Methods of Inquiry,' in the *Integration of Educational Experiences, Fifty-Seventh Yearbook, Par. 3*, of the National Society for Study of Education, Chicago University Press, 1958.

- BLOOM, B.S. et al., Handbook on Formative and Summative Evaluation of Student Learning, New York, McGraw-Hill, 1971.
- BOARD OF EDUCATION, Report of the Consultative Committee on Secondary Education, with Special Reference to Grammar Schools and Technical High Schools, London, HMSO, 1938.
- BOKTOR, A., School and Society in the Valley of the Nile, Cairo, Elias Modern Press, 1936.
- BOKTOR, A., The Development and Expansion of Education in the United Arab Republic, Cairo, The American University of Cairo Press, 1963.
- BOWEN, I., Population (Cambridge Economic Handbooks), Nesbit & Co.Ltd., 1954.
- BRAMELD, T., Philosophies of Education in Cultural Perspective, New York, Holt, Rinehart & Winston, Inc., 1955.
- BRAUNER, C.J., American Educational Theory, New York, Prentice-Hall, Inc., 1964.
- BRICKMAN, W.W., Educational System in the United States, New York, The Center for Applied Research in Education, Inc., 1964.
- BRIGHT, G.E., 'Timetabling: a Comparative Venture,' in WALTON, J. (ed.), The Secondary School Timetable, London, Ward Lock Educational, 1972.
- BROWN, K.E. and ABELL, T., 'Research in the Teaching of High School Mathematics,' Mathematics Teacher, Vol.59, January 1966.
- BRUBACHER, J.S., A History of the Problems of Education, New York, McGraw-Hill Co., 1947.
- BRUNER, J.S., The Process of Education, Cambridge, Mass., Harvard University Press, 1961.
- BRUNER, J.S., Toward a Theory of Instruction, Cambridge, Mass., Harvard University Press, 1966.
- CAPKOVA, D., 'The Recommendations of Comenius Regarding the Education of Young Children,' in Dobinson, C.H. (ed.), Comenius and Contemporary Education, Hamburg, UNESCO Institute of Education, 1970.
- C.A.P.M.S., Statistical Handbook, A.R.E., Cairo, 1972.
- C.A.P.M.S., Population and Development: A Study on the population increase and its challenge to development in Egypt, Cairo, 1973.
- C.A.P.M.S., Statistical Abstract of Arab Republic of Egypt, 1951/2-1971/2, Cairo, 1973.

- C.A.P.M.S., Economic Indicators, 1961-1971, Cairo, 1972.
- C.A.P.M.S., Statistics on Employment, Wages, and Hours of Work, various issues (in Arabic).
- C.A.P.M.S., The Fundamental Statistics, Arab Republic of Egypt, 1952-1973, Cairo, 1974.
- CAUTER, T. and DOWNHAM, J.S., The Communication of Ideas, London, Chatto & Windus, 1954.
- CAVES, R. et al., (ed.), Britain's Economic Prospects (Brooking Report), USA Brookings Institution, 1968.
- CENTERS, R., The Psychology of Social Class, Princeton, Princeton University Press, 1949.
- CENTRAL ADVISORY COUNCIL FOR EDUCATION (ENGLAND), Early Leaving, London, HMSO, 1954.
- CHAPMAN, B., The Prefects and the Provincial France, London, G.Allen, 1955.
- CHAUNCEY, H. and DOBBIN, J.E., Testing: its Place in Education Today, New York, Harper & Row, Publishers, 1963.
- CHILDS, J.L., American Pragmatism and Education, New York, Henry Holt & Co., 1956.
- CHINOY, E., Automobile Workers and the American Dream, New York, Garden City, Doubleday, 1955.
- CLELAND, W., The Population Problem in Egypt: A Study of Population Trends and Conditions in Modern Egypt, USA, Pennsylvania, Science Press Printing Co., 1936.
- COE, B.D., 'Vocational Education in the High School,' Theory into Practice, Vol.3, December 1964.
- COFFEY, H.S. and GOLDEN, W.P., 'Psychology of Change Within Institutions,' in National Society for the Study of Education, Fifty-Sixth Yearbook, P.1., University of Chicago Press, 1957.
- COLE, G.D.H., Studies in Class Structure, London, Routledge & Kegan Paul, 1964.
- COLLEGE ENTRANCE EXAMINATION BOARD, Freedom and Discipline in English: Report of the Commission on English, New York, 1965.
- COMMUNITY ECONOMIC DEVELOPMENT EFFORTS: Five Case Studies, prepared for the Committee for Economic Development, New York, Frederick A.Praeger, Inc., Publishers, 1966.

- CONANT, J.B., *The American High School Today*, New York, McGraw-Hill Co., 1959.
- CONANT, J.B., *Education in the Junior High School Years*, Princeton, N.J., Educational Testing Service, 1960.
- CONNAUGHTON, I.M., 'The Validity of Examinations at 16 Plus,' in *Educational Research*, No.11, 1969.
- COPEMAN, G.H., *Leaders of British Industry*, London, Cree, 1955.
- COUNTS, G.S., *The Challenge of Soviet Education*, New York, McGraw-Hill Book Co.Inc., 1957.
- COWEN, R., 'Current Trends in American Education,' in *Trends in Education*, September 1976, London, HMSO, 1976.
- CREMIN, L.A., 'The Revolution in American Secondary Education 1893-1918,' in PROBKIN, S. et al., (ed.), *Contemporary American Education*, New York, The Macmillan Co., 1965.
- CROWTHER REPORT, *A Report of the Central Advisory Council for Education*, London, HMSO, 1959.
- CRUMBLY, M., *Business Education in Transition - Tomorrow*, 'Business Education Form, Vol.24, February 1970.
- CUBBERLEY, E.P., *The History of Education*, Boston, Houghton Mifflin Co., 1920.
- CURTIS, S.J. and BOULTWOOD, M.E.A., *A Short History of Educational Ideas*, London, University Tutorial Press, 4th edn, 1965.
- DAVID, H. (ed.), *Education and Manpower*, New York, Columbia University Press, 1960.
- DAVIES, H., *The Boys' Grammar School Today and Tomorrow*, London, Methuen & Co.Ltd., 1945.
- DAVIS, A., 'The Motivation of the Underprivileged Worker,' in WHYTE, W.F., (ed.), *Industry and Society*, New York, McGraw-Hill, 1946.
- DeCARLO, C.R., 'Perspective on Technology,' in Ginzberg, E. (ed.), *Technology and Social Change*, New York, Columbia University Press, 1964.
- DeFRANCESCO, I., *Art Education: its means and ends*, New York, Harper & Brose, 1958.
- DENT, H.C., *The Educational System of England and Wales*, London, University of London Press Ltd., 1971.

- DEPARTMENT OF ENQUIRY, The Annual Book U.A.R., Cairo, 1961 (in Arabic).
- DEWEY, J., Democracy and Education, New York, The Macmillan Co., 1916.
- DEWEY, J., Experience and Education, New York, Macmillan Publishing Co. Inc., 1938.
- DEWEY, J., Art as Experience, New York, Minton, Black & Co., 1934.
- DEWEY, J., The Child and the Curriculum & the School and Society, Chicago, University of Chicago Press, 12th impression, 1974.
- DONALDSON, P., Guide to the British Economy, 4th edn, Great Britain, Penguin Books, 1976.
- DOUGLASS, H.R., The High School Curriculum, New York, Ronald Press Co., 1964.
- DOUGLASS, H.R., Education for Life Adjustment, New York, Ronald Press Co., 1950.
- DROPKIN, S., FULL, H., and SCHWARZ, E., Contemporary American Education, New York, Macmillan Co., 1965.
- Editor's Introduction to The Year Book of Education 1958, London, Evans Brothers, 1958.
- EDUCATIONAL POLICIES COMMISSION OF THE NATIONAL EDUCATION ASSOCIATION, Education for all American Youth, Washington, D.C., N.E.A., 1944.
- EDUCATIONAL POLICIES COMMISSION OF THE NATIONAL EDUCATION ASSOCIATION, Education for all American Children, Washington, D.C., N.E.A., 1948.
- EDUCATIONAL POLICIES COMMISSION OF THE NATIONAL EDUCATION ASSOCIATION, Education for all American Youth: A Further Look, Washington, D.C., National Education Association, 1952.
- EDWARDS, N. and RICHEY, H.G., The School in the American Social Order, 2nd edn., Boston, Houghton Mifflin Co., 1963.
- EFRAT, M., 'Educational Progress in the U.A.R.,' in New Outlook, Vol.XI, No.8, October 1968.
- EGYPTIAN ASSOCIATION FOR SOCIAL STUDIES, Report, Cairo, 1941.
- EISNER, E.W., 'Instructional and Expressive Educational Objectives: Their Formulation and Use in Curriculum,' in Popham, W.J., Objectives and Instruction, Chicago, Rand McNally, 1969.
- EL-BADRY, M.A., Trends in the Components of Population Growth in the Arab Countries of the Middle East: A Survey of present information, Demography, No.2, 1965.

- EL-GHAREEB, R., School Examinations: its Advantages and Disadvantages, Document No.3B, Experts' Conference in Kuwait, 1974 (in Arabic).
- EL-KAMMASH, M.M., Economic Development and Planning in Egypt, New York, Frederick A.Praeger, Publishers, 1968.
- EL-MAMGOOD, M.E., The Educational Evaluation and its Role in Directing the Educational Process, Document No.3A, Experts' Conference in Kuwait, 1974 (in Arabic).
- EL-MAMGOOD, M.E., 'The Scientific Bases for Formulating the Educational Objectives,' in Science and Instruction Magazine, No.3, Tunisia, 1975 (in Arabic).
- EL-SADAT, M.A., The October Working Paper, Cairo, Ministry of Information, 1974.
- EL-SAID, E.M., The Expansion of Higher Education in the United Arab Republic, Cairo, Cairo University Press, 1960.
- EL-SAID, F.E., Developing the Evaluation in the Arab States, Document No.4D, Experts' Conference in Kuwait, 1974.
- ENGLE, S.H., 'Objectives of Social Studies,' in MASSIALAS, B. and SMITH, F.R. (eds), New Challenges in the Social Studies, Belmont, Cal., Wadsworth Publishing Co., 1965.
- FABRICAN, S., 'Productivity and Economic Growth,' in Ginzberg, E. (ed.), Technology and Social Change, New York, Columbia University Press, 1964.
- FIELD, F., Unequal Britain, London, Arrow Books, 1974.
- FINNEY, R.L., Brief History of the American Public School, New York, The Macmillan Co., 1924.
- FIRST SECRETARY OF STATE and SECRETARY OF STATE FOR ECONOMIC AFFAIRS, The National Plan, London, HMSO, September 1965.
- FIRTH, G.R. and KIMPSTON, R.D., The Curricular Continuum in Perspective, Itasca, Ill., F.E.Peacock Publishers, Inc., 1973.
- FISHER, N., 'Expediency' (The Problems of Implementing a Policy), The Year Book of Education 1957, London, Evans Brothers, 1957.
- FITZGERALD, S.F., 'The Rich Boy,' in DUFFEY, B.J. (ed.), Modern American Literature, New York, Rinehart Co., 1951.
- FLECK, H., Toward Better Teaching of Home Economics, New York, The Macmillan Co., 1968.

- FLOUD, J.E., (ed.), *Social Class and Educational Opportunity*, London, Wm.Heinemann Ltd., 1956.
- FORD, J., *Social Class and the Comprehensive School*, London, Routledge & Kegan Paul, 1969.
- FRASER, D.M., and McCUTCHEN, S.P., *Social Studies in Transition: Guidelines for Change*, Washington, D.C., National Council for Social Studies, 1965.
- FREDERICK, R.W., *The Third Curriculum: Student Activities in American Education*, New York, Appleton Century-Crofts, Inc., 1959.
- GENERAL HOUSEHOLD SURVEY, London, HMSO, 1973.
- GINZBERG, E., 'Confrontations and Directions,' in GINZBERG, E. (ed.), *Technology and Social Change*, New York, Columbia University Press, 1964.
- GLASS, D.V. (ed.), *Social Mobility in Britain*, London, Routledge & Kegan Paul, 1954.
- GOLDTHORPE, H. et al., *The Affluent Workers in the Class Structure, Great Britain*, Cambridge University Press, 1969.
- GOODARD, J.I., *The Changing School Curriculum*, New York, The Fund for the Advance of Education, 1966.
- GOODMAN, L.H., *Economic Progress and Social Welfare*, New York, Columbia University Press, 1966.
- GRESSMAN, G.R. and BENDA, H.W., *Public Education in America*, 2nd edn, New York, Appleton-Century-Crofts Inc., 1961.
- GROSS, R.C. and ALLEN, D., 'Problems and Practices in Social Studies Evaluation,' in *Social Education*, Vol.31, March 1967.
- HAGENBUCH, W., *Social Economics*, Cambridge, Nesbit & Co.Ltd., 1965.
- HALDANCE, E.S. and ROSS, G.R.T., *The Philosophical Works of Descartes*, England, Cambridge University Press, 1912.
- HALL, J. and JONES, D.C., 'Social Grading of Occupations,' in the *British Journal of Sociology*, Vol.1, 1950.
- HALSEY, A.H. and GARDNER, L., 'Selection for Secondary Education and Achievement in Four Grammar Schools,' *British Journal of Sociology*, iv, 1960.
- HALSEY, A.H., *Education and Social Mobility with Special Reference to the Grammar School since 1944*, unpublished Ph.D. thesis, University of London, 1954.

- HANNA, P.R., and NASLUND, R.A., 'The Community School Defined,' in National Society for the Study of Education, the Fifty-Second Year Book, Part II, 1953.
- HANSEN, B. and MARZOUK, G., Development and Economic Policy in U.A.R. Egypt, Amsterdam, 1965.
- HANS, N., 'The Philosophy of Enlightenment and Basedow's Philanthropian,' in the Year Book of Education, London, Evans Brothers, 1957.
- HANS, N., The Russian Tradition in Education, London, Routledge & Kegan Paul, 1963.
- HARBISON, F. and MYERS, C.A., Education, Manpower and Economic Growth, New York, McGraw-Hill, 1965.
- HARBISON, F. and IBRAHIM, A., Human Resources for Egyptian Enterprise, New York, 1958.
- HARBISON, F., 'Human Resources Development Planning in Modernising Economies,' in the International Labour Review, Vol.IXXXV, No.5, 1962.
- HARBURY, C.D., Descriptive Economics, London, Pitman, 1962.
- HARBY, M.K. et al., Education in Egypt (U.A.R.) in the 20th Century, Cairo, Ministry of Education, 1960.
- HAVIGHURST, R.J. and NEUGARTEN, B.C., Society and Education, Boston, Allyn and Bacon, 1957.
- HEADY, J.A. and HEASMAN, M.A., Social and Biological Factors in Infant Mortality, London, HMSO, 1959.
- HELLER, C.S. (ed.), Structural Social Inequality, New York, Collier-Macmillan, 1969.
- HELMI, M.K., The Educational Movement in Egypt between the Past, Present and Future, and Some Principles and Attitudes of the Reform, (unpublished book), Cairo, Ministry of Education, 1974 (in Arabic).
- HICKS, G., Design Studies in Education, unpublished M.Phil. thesis, University of London, 1976.
- HILL, A., 'Home Economics Education,' in American Vocational Journal, Vol.42, March 1967.
- HIRST, P.H., Knowledge and the Curriculum, London, Routledge & Kegan Paul, 1974.
- HITCHMAN, P.J., 'The Validity and Reliability of Tests of Spoken English,' British Journal of Educational Psychology, 36, 1966.

- HOLLINGSHEAD, A.B., *Elmtown's Youth*, New York, Wiley, 1949.
- HOLLY, D., *Society, Schools and Humanity*, London, MacGibbon and Kee, 1971.
- HOLMES, B., *Problems in Education: A Comparative Approach*, London, Routledge & Kegan Paul, 1965.
- HOLMES, B., *Curriculum Innovations at the Second Level of Education*, Paris, UNESCO, IBE Bulletin, No.190, 1974.
- HOLMES, B., 'Social Change and the Curriculum,' in the *Year Book of Education 1958*, London, Evans Brothers, 1958.
- HOLMES, B., 'American and English Education Compared,' in *Trends in Education*, London, HMSO, Department of Education and Science, September 1976.
- HOYT, E. et al., *American Income and its Use*, New York, Harper, 1954.
- HURWITZ, A., 'The Motion Picture: A Major Art Form,' *School Arts*, Vol.67, October 1967.
- HUSRI, S., *Arab Cultural Manual*, 4, Cairo, Cultural Department of the Arab League, 1954, (in Arabic).
- IBN-KHALDUN, *Al-Mugaddima (The Prolegomenon)*, Beirut, 1900 (In Arabic).
- INSTITUTE OF NATIONAL PLANNING AND INTERNATIONAL LABOUR ORGANIZATION, *Research Report on Employment Problems in Rural Areas U.A.R.*, Cairo, 1965-1968.
- ISSAWI, C., *Egypt: an Economic and Social Analysis*, London, O.U.P., 1949.
- ISSAWI, C., *Egypt in Revolution*, Oxford, O.U.P., 1963.
- JAYASURIYA, D.L., *A Study of Adolescent Ambition*, Ph.D.thesis, London University, 1960.
- JESSEN, C.A., HERLIHY, L.B., *Offerings and Registration in High School Studies*, Bulletin No.6.1938, Washington, D.C., Government Printing Office, 1938.
- JOHNSON, E.D., 'The Aerospace Industry,' in GINZBERG, E. (ed.), *Technology and Social Change*, New York, Columbia University Press, 1964.
- JOHNSON, J.A., COLLINS, H.W., DUPUIS, V.L. and JOHANSON, J.H., *Introduction to the Foundations of American Education*, Boston, Allyn and Bacon, Inc., 1969.

- JOINT MATRICULATION BOARD (J.M.B.), General Certificate of Education: Regulation and Syllabuses 1976, Manchester, 1976.
- JONES, E., 'Social Studies Requirements in an Age of Science and Mathematics,' Social Education, Vol.27, January 1963.
- JOURNAL OF THE EGYPTIAN MEDICAL ASSOCIATION, Cairo, 1939.
- KAHL, J., The American Class Structure, New York, Rinehart & Co.Inc., 1957.
- KAHL, J.A., 'Educational and Occupational Aspirations of "Common Man" Boys,' Harvard Educational Review, XXIII, 1953.
- KELLY, A.V., The Curriculum Theory and Practice, London, Harper & Row, Publishers, 1977.
- KELSALL, R.K., Stratification: An Essay on Class and Inequality, London, Longman, 1974.
- KELSALL, R.K. and KELSALL, H.M., Social Disadvantages and Educational Opportunity, London, Holt, Rinehart & Winston, 1971.
- KENNY, A., Descartes: A Study of his Philosophy of Education, New York, Random House, Inc., 1968.
- KERR, J.F. (ed.), Changing the Curriculum, London, University of London Press, 1968.
- KIHLER, R.J., BARKER, L.L. and MILLER, D.T., Behavioural Objectives and Instruction, Boston, Allyn & Bacon, 1970.
- KINDER, J.S., Audio-Visual Materials and Techniques, 2nd edn, New York, American Book Co., 1959.
- KING, E.J., Other Schools and Ours, London, Holt, Rinehart & Winston, 4th edn, 1973.
- KNELLER, G.F., Introduction to the Philosophy of Education, New York, John Wiley & Sons, 1965.
- KOUTAISSOFF, E., The Soviet Union, London, Ernest Benn Ltd., 1971.
- KRATHWOHL, D.R., BLOOM, B.S. and MASIA, B.B., Taxonomy of Educational Objectives: the Classification of Educational Goals, Handbook 2, Affective Domain, New York, McKay, 1964.
- KRUG, E.A., The Secondary School Curriculum, New York, Harper & Row, 1960.

- LANE, D., Politics and Society in the U.S.S.R., London, Weidenfeld & Nicolson, 1970.
- LAWTON, D., Social Change, Educational Theory and Curriculum Planning, London, University of London Press, 1973.
- LAWTON, D., Class Structure and the Curriculum, London, Routledge & Kegan Paul, 1975.
- LEIGHBODY, G.B., 'Vocational Education,' in UNRUH, G.G.(ed.), New Curriculum Developments, Washington, D.C., Association for Supervision and Curriculum Development, 1965.
- LENIN, V.I., Selected Works, New York, 1943.
- LERNER, D., and PYE, L., Communication and Political Development, Princeton, Princeton University Press, 1963.
- LEWIS, D.G., 'Objectives in the Teaching of Science,' Educational Research, No.7, 1965.
- LIEBERMAN, M., 'Teacher Education and the Secondary School Curriculum - U.S.A.,' in The Year Book of Education, 1958, London, Evans Brothers, 1958.
- LIPSET, S.M. and BENDIX, R., Social Mobility in Industrial Society, Berkeley and Los Angeles, University of Columbia Press, 1959.
- LOCKARD, J.D., 'The Secondary School Curriculum Projects,' Science Teacher, Vol.32, May 1965.
- LOCKE, R.W., 'Secondary School Programs,' in PRICE, R.G. (ed.), The Emerging Content and Structure of Business Education, 8th Yearbook of the National Business Education Association, Washington, D.C., 1970.
- LOGAN, W.P.D., Morbidity Statistics from General Practice, London, HMSO, 1960.
- LOOMS, A.K., LIDE, E.S. and JOHNSON, B.L., The Program of Studies, National Survey of Secondary Education, Monograph No.19, US Office of Education Bulletin No.17, Washington, D.C., US Government Printing Office, 1933.
- LUKELL, S., 'The Future of American Politics,' in LARRABEE, E. (ed.), American Panorama, USA, New York, New York University Press, 1957.
- LUNDBERG, F., America's 60 Families, New York, Vanguard, 1937.
- LUNDY, L.L., 'Programmed Instruction and its Application to Teaching Industrial Arts,' Industrial Arts and Vocational Education/ Technical Education, Vol.58, June 1969.

- MABBOTT, J.D., John Locke, Great Britain, The Bowering Press, 1973.
- MABRO, R., The Egyptian Economy 1952-1972, Oxford, Clarendon Press, 1974.
- MACKENZIE, M.M., Toward a New Curriculum in Physical Education, New York, McGraw-Hill Book Co., 1969.
- MAGER, R.F., Preparing Instructional Objectives, California, Fearon Publishers, 1962.
- MANSFIELD, P., Nasser's Egypt, Great Britain, Nicholls & Co.Ltd., 1965.
- MARDER, K.B., and ALDERSON, L.P., Economic Society, London, OUP, 1975.
- MARX, L., Capital, New York, 1929.
- MARX, K. and ENGELS, F., Selected Works, Vol.1, Moscow, 1958.
- MARSH, D.C., The Changing Social Structure in England and Wales 1871-1951, London, Routledge & Kegan Paul, 1958.
- MAYNES, F.B., 'The Accounting Classroom: People, Activities, Content,' Business Education Form, Vol.24, December 1969.
- McCLELLAND, D.C. et al., The Achievement Motive, New York, Appleton-Century-Crofts, 1953.
- McNALLY, H.J. and PASSOW, A.H., Improving the Quality of Public School Programs, New York, Columbia University Press, 1960.
- MEDELSKY, L., Science Teaching and Testing, New York, Harcourt, Brace & World, 1965.
- MEHL, B., 'Political and Social Cohesion in Secondary Education in the United States,' in The Year Book of Education 1958, London, Evans Brothers, 1958.
- MERTON, R.K., Social Theory and Social Structure, New York, Free Press, 1957.
- MILLER, F.A., MOYER, J.H. and PATRICK, R.B., Planning Student Activities, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1959.
- MILLER, J.E., Literature in the Revitalized Curriculum, Bulletin of the National Association of Secondary School Principals, Vol.51, April 1967.
- MILLS, C.W., White Collar, New York, Oxford University Press, 1951.
- MINISTRY OF AGRICULTURE, Agricultural Censuses and Agricultural Economy, various issues, (in Arabic).

- MINISTERIAL COMMITTEE FOR MANPOWER, U.A.R., Report on the Educational Policy in Egypt, Cairo, 1967.
- MINISTRY OF EDUCATION, The New Secondary Education, Pamphlet No.9, London, HMSO, 1947.
- MINISTRY OF EDUCATION, Secondary School Examinations Other than the GCE (Beloe Report 1958), London, HMSO, 1960.
- MINISTRY OF EDUCATION, Follow-up Reports, various issues.
- MINISTRY OF EDUCATION, Education and Training in Egypt, Cairo, Ministry Press, February 1976.
- MINISTRY OF EDUCATION, A.R.E., The National Centre for Educational Research, Report on the Development of Education in Egypt during the period 1971-1973, Cairo, Ministry Press, 1973.
- MINISTRY OF EDUCATION, A.R.E., an Inquiry of the International Bureau of Education (UNESCO), Major Trends in Educational Development in A.R.E., during the period 1971/72-1972/73, Cairo, 1973.
- MINISTRY OF EDUCATION, Law No.213 of 1956, Cairo, Ministry of Education, April 14, 1956 (in Arabic).
- MINISTRY OF EDUCATION, U.A.R., Education Documentation Centre, Report on the Development of Education in the United Arab Republic during the year 1959-1960, Cairo, Ministry of Education Press, 1960.
- MINISTRY OF EDUCATION, A Guide for Educational Statistics, Cairo, Ministry of Education Press, various issues cover the period 1951/52-1959/60.
- MINISTRY OF EDUCATION, U.A.R., Documentation and Research Centre for Education, Report on the Development of Education in U.A.R., in the academic year 1970/71, Cairo, Ministry of Education Press, 1973.
- MINISTRY OF EDUCATION, A.R.E., The National Centre for Educational Research, Report on the Development of Education in A.R.E. in the years 1971-1973, Cairo, Ministry of Education Press, 1973.
- MINISTRY OF EDUCATION, A.R.E., The National Centre for Educational Research, Report on the Development of Education in A.R.E., during the period 1973/74-1974/75, Cairo, Documentation Centre of Education, 1975.
- MINISTRY OF EDUCATION, The Modified Curricula for General Secondary Education, Cairo, Ministry of Education, 1970.
- MINISTRY OF EDUCATION, A.R.E., The National Centre for Educational Research, The Developmental Curricula for Natural Sciences in the General Education, Cairo, Ministry of Education, 1975, (unpublished syllabuses in Arabic).

- MINISTRY OF EDUCATION, A.R.E., The National Centre for Educational Research, The Developmental Curricula for Art Education in the General Education, Cairo, Ministry of Education, 1976 (unpublished syllabuses in Arabic).
- MINISTRY OF EDUCATION, A.R.E., Developmental Curricula for Mathematics in the General Education, Cairo, Ministry of Education Press, 1975.
- MINISTRY OF EDUCATION, U.A.R., Report on the Progress of Education during the school year 1957/1958, Cairo, Ministry of Education Press, 1958.
- MINISTRY OF EDUCATION, Report on the Development of Education in U.A.R. during the school year 1960-1961, Cairo, Ministry of Education Press, 1963.
- MINISTRY OF EDUCATION, U.A.R., Report on Development of Education during the school year 1962-1963, Cairo, Ministry of Education Press, 1963.
- MINISTRY OF EDUCATION, U.A.R., Report on the Development of Education in U.A.R. in the academic year 1965/66, Cairo, M.E.P., 1966.
- MINISTRY OF EDUCATION, U.A.R., Report on the Development of Education in U.A.R., in the school year 1966/67, Cairo, M.E.P., 1967.
- MINISTRY OF EDUCATION, A.R.E., The Ministerial Decree No.167 of 26/8/1976, concerning the Plan of Study for the third form of general Secondary School, Cairo, M.E.P., 1976 (in Arabic).
- MINISTRY OF EDUCATION, U.A.R., Report on the Development of Education in U.A.R., during the academic year 1967-1968, Cairo, Ministry of Education Press, 1968.
- MINISTRY OF EDUCATION, A Project for Urgent Plan for Developing Education Curricula; Aims, Cairo, Ministry of Education, January 1974 (in Arabic).
- MINISTRY OF TREASURE, Budgets and Budget Reports, various issues (in Arabic).
- MONROE, P., Founding of the American Public School System, New York, Macmillan, 1940.
- MORELAND, W.D., 'Curriculum Trends in the Social Studies,' Social Education, Vol.26, February 1962.
- MORSI, M.M., Administration and Organisation of the General Education, Cairo, The World of Books, 1974 (in Arabic).

- MORSI, M.M., Education in the Arab States, Cairo, World of Books, 1974 (in Arabic).
- MORSI, M.M., 'Education in Egypt: Retrospect and Prospect,' in SULLIVAN, J. (ed.), Egypt in Perspective, Cairo, The American University of Cairo Press, 1975.
- MULLER, H.J., The Use of English: Guidelines for the Teaching of English from the Anglo-American Conference at Dartmouth College, New York, Holt-Rinehart & Winston, 1967.
- NASSER, G.A., Philosophy of the Revolution, Cairo, 1952 (in Arabic).
- NATIONAL COMMISSION ON THE REORGANIZATION OF SECONDARY EDUCATION, Cardinal Principles of Secondary Education, Bulletin No.35, Washington, Government Printing Office, 1918.
- NATIONAL EDUCATION ASSOCIATION, What Shall the High School Teach?, Year Book of 1956, Washington, D.C., N.E.A., 1956.
- NATIONAL RESOURCES COMMITTEE, 'The Structure of Controls,' in BENDIX, L., Class, Status and Power, New York, 1954.
- NEAGLEY, R.L. and EVANS, N.D., Handbook for Effective Curriculum Development, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1967.
- NELSON, O.W., The American Industry Project, Menominee, Wis., Stout State University Press, 1967.
- NEWSOM REPORT, Half Our Future: A Report of the Central Advisory Council for Education, London, HMSO, 1963.
- NEW YORK STATE EDUCATION DEPARTMENT, French for Secondary Schools, Albany, N.Y., Bureau of Secondary Curriculum Development, 1960.
- NISBET, J., Family Environment, London, Eugenics Society, 1953.
- NORWOOD REPORT, Curriculum and Examination in Secondary Schools, London, HMSO, 1943.
- NUTTALL, D.L., and WILLMOTT, A.S., British Examinations: Techniques of Analysis, London, NFER, 1972.
- O'CONNOR, D.J., John Locke, New York, Dover Publications, Inc., 1967.
- O.E.C.D., Manpower Policy and Programmes in the United States, Paris, 1964.
- O.E.C.D., Economic Survey 'United States,' Paris, April 1972.
- O.E.C.D., The Growth of Output 1960-1980, Paris, December 1970.

- OFFICE OF EDUCATION, Distributive Education in the High School, Washington, D.C., Government Printing Office, 1969.
- OWEN, C., Social Stratification, London, Routledge & Kegan Paul, 1968.
- OWEN, R. and BLUNSUM, T., United Arab Republic, Egypt, The Country and its People, London, Queen Anne Press, Ltd., 1966.
- PARETO, V., The Mind of Society, London, Cape, Vol.4, 1935.
- PARKINSON, M., The Labour Party and the Organisation of Secondary Education 1918-1965, London, Routledge & Kegan Paul, 1970.
- PARSONS, T., The Social System, London, Routledge & Kegan Paul, 1951.
- PELLA, M.O., 'Development of Concepts of Elementary Science,' Science Education, Vol.33, No.4, October 1949.
- PELUSO, J.L., A Survey of the Status of Theatre in United States High Schools, Washington, D.C., Office of Education, US Department of Health, Education and Welfare, 1970.
- PERCY REPORT, Higher Technological Education, Report of Special Committee, April 1944, July 1945, London, HMSO, 1945.
- PETERSON, A.D.C., Arts and Science Sides of the Sixth Form, Oxford, OUP, 1960.
- PHENIX, P.H., Realms of Meaning, New York, McGraw-Hill, Inc., 1964.
- PILLINER, A.E.G., 'Examinations,' in BUTCHER, H.J. (ed.), Educational Research in Britain, London, University of London Press, 1968.
- POPHAM, W.J. and PAKER, E.L., Systematic Instruction, Englewood Cliffs, N.J., Prentice-Hall, 1970.
- PORTER, L., Movement Education for Children, Washington, D.C., American Association of Elementary-Kindergarten-Nursery Education, 1969.
- PROZOROV, G.S., 'Heredity and Upbringing,' in REDL, H.B. (ed.), Soviet Educators on Soviet Education, London, The Free Press of Glencoe, 1964.
- RAVAGE, M., An American in the Making, New York, Harper & Brothers, 1917.
- RESEARCH PROJECT ON EMPLOYMENT AND UNEMPLOYMENT, U.A.R., Cairo, 1963.
- RICHMOND, W.K., The School Curriculum, London, Methuen & Co.Ltd., 1971.
- RIESMAN, D. et al., The Lonely Ground, New Haven, Yale University Press, 1950.

- RIZK, H., Fertility Patterns in Selected Areas in Egypt, unpublished Ph.D. thesis, Princeton University, 1959.
- ROBERTS, K., 'The Organisation of Education and the Ambitions of School-leavers: A Comparative Review,' in Comparative Education, Vol.4, No.2, March 1968.
- ROBERTS, K., 'Economy and Education: Foundations of a General Theory,' Comparative Education, Vol.7, No.1, 1971.
- RUBEL, M., Karl Marx: Selected Writing in Sociology and Social Philosophy, 1963.
- SADLER, J.E., 'Comenius as a Man', in DOBINSON, C.H. (ed.), Comenius and Contemporary Education, Hamburg, UNESCO Institute of Education, 1970.
- SALIBA, D. and TOMEH, G.J., 'Islam,' in The Year Book of Education 1957, London, Evans Brothers, 1957.
- SORHAN, E.A., New Trends in Evaluation, A Paper Presented to the Experts' Conference in Kuwait in 1974, Document No.2 (in Arabic).
- SCHMAH, J.J., Biology Teachers' Handbook - BSCS, New York, John Wiley & Sons Inc., 1963.
- SCHOOLS COUNCIL, A Common System of Examining at 16+, Examination Bulletin 23, London, HMSO, 1971.
- SCHOOLS COUNCIL, Development of Modern Language Teaching in Secondary Schools, Working Paper No.19, London, HMSO, 1969.
- SCHOOLS COUNCIL, Enquiry No.1, London, HMSO, 1968.
- SCHOOLS COUNCIL, Raising the School Leaving Age: A Co-operative Programme of Research and Development, Working Paper No.2, London, HMSO, 1965.
- SCHOOLS COUNCIL, The First Three Years: 1964/7, London, HMSO, 1968.
- SMITH, E.C. (ed.), The Constitution of the United States, New York, Barnes and Noble Books, 1972.
- SMITH, N.K., New Studies in the Philosophy of Descartes, London, Macmillan & Co.Ltd., 1952.
- SPEARS, H., The High School for Today, New York, American Book Co., 1950.
- SPENCER, H., Education: Intellectual, Moral and Physical, London, Williams & Norgate, 1861.

- STACK, H.J. and ELKOW, J.D., Education for Safe Living, 4th edn, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1966.
- STENHOUSE, L., An Introduction to Curriculum Research and Development, London, Heinemann, 1975.
- SUCHODOLSKI, B., 'Comenius and Teaching Methods,' in DOBINSON, C.H. (ed.), Comenius and Contemporary Education, Hamburg, UNESCO Institute of Education, 1970.
- SUR, W. and SCHULLER, C.F., Music Education for Teenagers, New York, Harper & Row, 1966.
- TABA, H., Curriculum Development: Theory and Practice, New York, Harcourt, Brace & World, 1962.
- TABA, H., BRADY, E. and ROBINSON, J., Curriculum in Intergroup Relation: Secondary School, Washington, D.C., American Council on Education, 1949.
- TABA, H., BRADY, E. and ROBINSON, J., Intergroup Education in Public Schools, Washington, D.C., American Council on Education, 1952.
- TANNER, D., Secondary Curriculum: Theory and Development, New York, The Macmillan Co., 1969.
- THE CENTRAL COMMITTEE OF THE C.P.S.U., History of the Communist Party of the Soviet Union, New York, 1939.
- THE CONSTITUTION OF UNITED ARAB REPUBLIC, 1956.
- THE CONSTITUTION OF ARAB REPUBLIC OF EGYPT, 1971.
- THE COUNCIL FOR CURRICULUM REFORM, The Content of Education, London, University of London Press, 1945.
- THE ECONOMIST, Trade in Egypt, Cairo, October 14, 1933.
- THELEN, H., 'The Evaluation of Group Instruction,' in Educational Evaluation: New Roles, New Means, 6th Yearbook of the National Society of the Study of Education, Par.II, Chicago, University of Chicago Press, 1969.
- THE MINISTERIAL COMMITTEE FOR MANPOWER, Report about the Educational Policy in Egypt, Cairo, 1967.
- THE NATIONAL CENTRE FOR EDUCATIONAL RESEARCH, A.R.E., Report on the Development of Education during 1974/1975-1975/1976, Cairo, 1977.
- THE NATIONAL CHARTER, Cairo, Ministry of National Guidance, 1962.

- THE NATIONAL COUNCIL FOR EDUCATION SCIENTIFIC RESEARCH AND TECHNOLOGY, Report, June 1974, Cairo, 1974.
- THE NATIONAL MANPOWER COUNCIL, 'Secondary Education and Preparation for Work,' in DAVID, H. (ed.), Education and Manpower, New York, Columbia University Press, 1960.
- THE SECRETARY OF STATE FOR EDUCATION AND SCIENCE, Education in Schools: A Consultative Document (The Green Paper), London, HMSO, 1977.
- THE STATE SCIENTIFIC COUNCIL, Novyie Programmy Edinoi Trudovoe Shkoly Perno Stupeni, Moscow, 1924.
- THE USA CENSUS OF POPULATION, 1950, vol.11, Part I, Washington, Government Printing Office, 1953.
- THE YEAR BOOK OF EDUCATION 1951, London, Evans Brothers, 1951.
- THE YEAR BOOK OF EDUCATION 1957, London, Evans Brothers, 1957.
- THE YEAR BOOK OF EDUCATION 1958, London, Evans Brothers, 1958.
- THE 1947 CENSUS IN EGYPT, Cairo, 1947.
- TIBAWI, A.L., 'Philosophy of Muslim Education,' in The Year Book of Education 1957, London, Evans Brothers, 1957.
- TURNQUIST, C.H., 'The Galaxy Approach to Education for the World of Work,' School Shop, Vol.25, November 1965.
- TYLER, R.W., 'The Function of Measurement in Improving Instruction,' in LINDQUIST, E.F. (ed.), Educational Measurements, Washington, D.C., American Council on Education, 1951.
- UNITED STATES BUREAU OF EDUCATION, Report of the Committee on Secondary School Studies 1892, 'Committee of Ten Report,' Washington, D.C., Government Printing Office, 1893.
- UNIVERSITY OF CAMBRIDGE, Local Examinations Syndicates, General Certificate of Education, 'O' Level, British and European History, to 1688, 2 June, 1975.
- U.S. DEMOGRAPHIC YEAR BOOK 1970.
- U.S. OFFICE OF EDUCATION, Life Adjustment Education for Every Youth, Washington, D.C., Office of Education, 1948.
- VERNON, P.E. (ed.), Secondary School Selection, A British Psychological Society Inquiry, London, Methuen, 1957.

- WALKER, C.R. and GUEST, R.H., *The Man on the Assembly Line*, Cambridge, Mass., Harvard University Press, 1952.
- WALLACE, H., 'Block-Time Approach in Distributive Education,' in PRICE, R.G. (ed.), *The Emerging Content and Structure of Business Education*, 8th Yearbook of the National Business Education Association, Washington, D.C., 1970.
- WALLON, H., 'The Philosophy of Education in France,' in FABER, M. (ed.), *Philosophic Thought in France and the United States*, New York, State University of New York Press, 1968.
- WALTON, J. (ed.), *The Secondary School Timetable*, London, World Lock Educational, 1972.
- WANSON, S.J., 'Secondary School Programs,' in PRICE, R.G. (ed.), *The Emerging Content and Structure of Business Education*, 8th Yearbook of the National Business Education Association, Washington, D.C., 1970.
- WARNER, W.L. et al., *Democracy in Jonesville*, New York, Harper, 1949.
- WEISS, S., 'Innovations and Research in the Teaching of Mathematics to the Terminal Student,' *Mathematics Teacher*, Vol.60, October 1967.
- WHEELER, D.K., *Curriculum Process*, London, University of London Press, 1967.
- WHITEFIELD, R.C., 'Improving Examining at Sixteen Plus,' *Educational Research*, No.10, 1968.
- WILBER, D., *U.A.R. (Egypt): Its People, its Society, its Culture*, New Haven, Harp Press, 1969.
- WILBER, G.O. and PENDERED, N.C., *Industrial Arts in General Education*, Scranton, Pa., International Textbook Co., 1967.
- WILSON, E., 'Off Farm Programs,' *American Vocational Journal*, Vol.41, February 1960.
- WISEMAN, S. and PIDGEON, D., *Curriculum Evaluation*, Slough (England,) N.F.E.R. Publishing Co., 1970.
- WOODY, T., *Educational Views of Benjamin Franklin*, New York, McGraw-Hill Book Co., 1931.
- YOUNG, M. and WILLMOTT, P., 'Social Grading by Manual Workers,' in the *British Journal of Sociology*, Vol.III, No.4, 1956.