

THE RELEVANCE OF CURRICULUM TO SOCIO-ECONOMIC NEEDS.  
A CASE STUDY OF INDIA.

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ABSTRACT.

"THE RELEVANCE OF CURRICULUM TO SOCIO-ECONOMIC NEEDS: A CASE STUDY OF INDIA."

This thesis is an analysis of the relevance of curriculum, especially school curriculum to socio-economic needs.

After an Introduction which is Chapter I, Chapter II identifies from the Kothari the Education Commission 1964-1966 an interpretation of the socio-economic needs of India, the role of education, and how curriculum might contribute to development. The thesis argues that the theoretical position adopted by this Commission is understandable within the paradigm of "modernization" theory. The Kothari Commission's position and educational recommendations are analysed within a framework developed by Bill Williamson in his book Education, Social Structure and Development.

In Chapters III and IV the various problems in education and development are analysed through the categories of relevance, equality and balance identified by Williamson which leads to some contrast and comparison with the theory positions adopted by the Kothari Commission.

Chapters Five, Six and Seven continue the analysis by assessing the relationship between socio-economic development and education in historical context (Chapter V); in terms of major curriculum policies (Chapter VI); and in terms of selected curriculum practice (Chapter VII).

The organizing theme running through the analysis relates to whether Indian education might be understood specifically in terms

of 'dependency' as identified by Williamson, and how far India fits within concepts of a 'Dependent Society' pattern.

Overall, the thesis falls into two parts. The first develops the theoretical basis which finally focusses on the significance of curriculum for development. The second part of the thesis concentrates on curriculum content and change in India, with some specification of the balance between national and international influences on education and curriculum.

The thesis concludes with a commentary on the theory positions of Kothari and Williamson, identified in the first part of the thesis in the light of the evidence assembled in the second part of the thesis.

DEDICATION.

TO THE MEMORY OF MY BELOVED FATHER,  
NAGENDRA NATH HAZARIKA, LATE LT. COL., COMMDT.  
IVth. GRENADIERS, INDIA.

AND

TO MY BEAUTIFUL MOTHER,  
NATALIE ISABELLE.

\*\*\*

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## CHAPTER I.

### INTRODUCTION. THE RELEVANCE OF CURRICULUM TO SOCIO\_ECONOMIC NEEDS: A CASE STUDY OF INDIA.

This thesis is an analysis of the relevance of curriculum to socio-economic needs in India with the stress on school curriculum. This analysis includes an assessment of the historically important debates, Education Commissions, and international influences on Indian school curriculum; and an assessment of contemporary curriculum practice; and important recent curriculum innovations.

To proceed with the first issue it is necessary to generate some view of what relevance is, that is, it is necessary to identify a view or views of what the socio-economic needs of India are, what the role of education can be, and how curriculum might contribute to development.

To approach and analyse this question a classical Indian definition of the development problem and education is presented from the Education Commission 1964/1966 popularly known as the Kothari Commission Report (KCR), after the name of its Chairman. The theoretical position adopted by this Commission is 'modernization', towards a socialistic state, though this is not clearly stated. The Kothari Commission offers a relatively simple specification of concrete socio-economic problems and identifies a relatively specific set of educational policies which if followed will lead to development. Thus for the Kothari Commission, the reformative power of education is very high; it is part of the solution to Indian problems of development once the curriculum is changed from a borrowed western traditional model, to one that is



indigenous and relevant to the life needs and aspirations of the people.

This definition of the theory position of socio-economic problems in India and educational policy recommendations from the KCR are analysed within the framework of the 'Dependent Society' pattern based in the theory of economic dependency as offered by Bill Williamson in his Education, Social Structure and Development. [1]. The various problems in education and development are specifically reviewed and analysed in terms of relevance, equality and balance, as discussed by Williamson. This leads on to some contrast and comparison of theory positions adopted by the KCR and by Bill Williamson in his contemporary English interpretation of the development problem and education. The Indian review and analysis also simultaneously investigates whether the Indian educational pattern fits within Williamson's "Dependent Society" pattern or not, and to what degree and extent if it does. Such an investigation in its Conclusion, throws new light or confirms recent views on the 'dependency theory' as related to education in developing countries.

In comparison to the KCR's relatively simple specification of concrete socio-economic problems, Williamson has offered a more theoretically complex analysis of social reproduction, political mobilization, and socialist and capitalist relations of production. His model, offered for comparative study of societies and education is built on the differences between capitalist and socialist thought, and the degree to which these systems influence a society.

The Williamson 'Dependent Society' pattern identified above as the framework for investigation and analysis of the educational and socio-economic scene in India, is one of the four societies named in his model. For both the Kothari Commission and Williamson, western forms of education transplanted into developing societies, are part of the problem of development.

It is against these different theoretical positions and some account of the contemporary socio-economic condition of India that the distribution of education, the content of education at the school level and important curriculum innovations in contemporary India are assessed.

The evidence used in the analysis is documentary and not empirical. The analytic propositions are of three kinds: the Kothari Commission and the writings of Williamson understood as statements of theory; the Kothari Commission and more importantly for the contemporary scene, a range of national and international Reports and secondary literature for a description of the socio-economic condition of India; and a wide range of secondary literature for the educational analysis.

Thus the thesis falls into two parts. In the first part the theoretical basis of the thesis is established especially in terms of contrasting propositions about the relationship of education and development; as this part proceeds the focus of analysis narrows until the final focus is on the significance of curriculum. In the second part of the thesis, the main analysis is of curriculum content and curriculum change in India, especially in terms of the major turning points in the definition of curriculum - knowledge

accepted as important in the schools - under a variety of international and national influences. The range of contemporary experimentation in curriculum draws particular attention toward the end of the thesis. The thesis of course concludes with a commentary on the theory positions, especially Williamson's, identified in the first part of the thesis in the light of the evidence assembled in the second part of the thesis.

#### THEORY BASE OF THE THESIS.

It is now useful to return to the points made earlier in relation to the theory positions adopted by the Kothari Commission and Williamson, on education and socio-economic development, and to expand and clarify these points. Earlier it was noted that the Kothari Commission had identified in relatively simple and concrete terms the socio-economic problems of India. These are 1. self-sufficiency in food; 2. economic growth and full employment; 3. social and national integration and 4. political development.[2]. These issues are discussed at length in relation to educational development and national progress, throughout this thesis.

The Kothari Report has mainly stressed education and its current role for development in the three areas of social, economic and political life in the nation. The main emphasis and the great stress is on curriculum.

(1) A Changed Curriculum Towards Solutions in The Four Problem Areas of Development.

The KCR has again been relatively specific in identifying a set of educational policies, which if followed will lead to development, modernization and a socialistic state.[3]. Thus with

reference to the problem of self-sufficiency in food, this Commission has recommended the inclusion of the study of agriculture at both the school-leaving and graduate level of education. Great emphasis has been laid on science and technology at all levels of education, towards scientific methods in agriculture and toward industrialization in general in the country.[4].

As a solution to the problem of graduate unemployment in the country, work-experience and vocation-oriented subjects are recommended for inclusion in the curriculum at all levels of education.[5]. Further it is suggested that the flow of students into academic courses in higher education, should be controlled, and education at school-leaving level be made terminal.[6]. The issue of technical and vocational education at both school and graduate level, its failure in the past and its current need is discussed.

The KCR has suggested that education could be patterned round manpower needs. This measure, generally speaking would prevent educated unemployment.[7].

With reference to the third and fourth problem areas of national integration and political development several proposals have been offered; 1) the introduction of a Common School system of Public Education; 2) the making of social and national service an integral part of education at all stages; 3) the development of all modern Indian languages and Hindi, as the official language of the Union. 4) The introduction of interstate school and college work

camps and national service schemes in which both students and teachers may participate and mingle together.[8].

So the KCR has offered a variety of concrete proposals to improve the relevance of curriculum.

Educational historians, British, Indian and American have recorded that development in India in all areas - social, economic, and political - was capitalist in nature for a century and a half, from the late eighteenth century to the early twentieth century. Educational policy during this period was dictated by the East India Company and later by the Crown in England, to suit the needs of its imperial power.

It will be argued that the socio-economic pattern in the country, within this period, gave evidence of many features of a dependent system of development. Though highly industrialized in one economic sector now, India knows poverty in her non-industrialized or traditional sector, and it is one of the purposes of this investigation to locate the degree to which India may be included within the 'dependent society' pattern as given by Bill Williamson. With her many features of a dependent society, does the development pattern in India indicate the operation of the 'dependency' theory or not?

This research into curriculum innovation and implementation, within the currently existing socio-economic pattern in India will indicate whether education is relevant or not to the developmental needs of the nation. The relationship between curriculum and the socio-economic realities in the country is both vital and close, as is indicated in the KCR which has first outlined the socio-

economic-political problems of the country and then recommended specific educational policies to overcome them. The research work into socio-economic needs and implementation of curriculum changes carried out by the National Council of Educational Research and Training (NCERT) and the Planning Commission in India, are further indication of this vital link between educational curriculum and socio-economic and political needs in a nation.

Finally the Kothari Commission's recommendations for a changed curriculum are also analysed in terms of Williamson's three issues of relevance-irrelevance, equality-inequality, and balance-imbalance in education and society. The analysis, in the four socio-economic problem areas identified by the Commission, is carried through, in this thesis, in the light of these three themes, relevance, equality, balance, in relation to curriculum in Indian schools.

#### (ii) Williamson's Theoretical Position.

Williamson has offered a theoretically complex analysis of social reproduction, political mobilization and socialist and capitalist relations of production as related to educational development. Hence as in the case of the KCR and its theoretical position, here also Williamson's theory statements are repeated with the purpose of expansion and clarification of points mentioned above.

In regard to models of development Williamson has commented upon his own approach and claims to be in close sympathy with the sociologist Max Weber, for whom social reality can be studied

scientifically only within the framework of the ideal typical type.[9].

Williamson's model of development begins in social reproduction or transmission of values dominant in a society. [10]. He has explained that a model of development signifies the direction and manner of change in a society and that it establishes broad social values. It also responds to historical conditions in society.

Further, societies reflect varying degrees of ideologies, e.g. Williamson's simple initial classification of society into broadly socialist and broadly capitalist, does in fact vary in degree of institutionalization as weak or strong capitalist or socialist society.

Thus it is that Williamson has offered a model of the taxonomy of societies for the purpose of comparative societies. He has described four broad patterns termed by him as 'capitalist' 'developed socialist', 'dependent' and 'under-developed socialist.' [11]. These four classified groups in fact include countries and societies which are very different from one another. Analysis of any one of them presupposes a theory according to which a society functions and develops.

The case study of Indian society is discussed within the structure of the 'Dependent' society pattern which Williamson has related to the theory of economic dependency.

As given in the initial statement he tends toward a position which implies that educational dependency will follow economic dependency, and borrowed western forms of education are part of the development problem in developing countries.

Williamson has explained 'dependent society' in his Education Social Structure and Development as

*the complex interdependence of poverty, low income, low productivity, high mortality rates, urban squalor, economic dependence, political corruption and illiteracy which to different degrees typify the life experience of nearly two-thirds of the worlds population. (See Myrdal 1968: Dalton 1974.)* [12].

He has explained the Dependency theory as,

*economic backwardness is an historically based phenomena, the outcome of poor societies having had their economies and social systems distorted and conditioned by the over-seas expansion of capitalist enterprise. (See Dos Santos 1973). The dependent economy has evolved to meet the interests of expatriate economic interests with whom indigenous entrepreneurs cannot properly compete." (See G. Williams 1970).* [13].

The operation of the 'dependency' theory in Indian society both in the past historic earlier period of the eighteenth, nineteenth and early twentieth century, and in the current mid and later twentieth century is reviewed and investigated. The extent to which the Indian educational system is 'dependent' is investigated in terms of the three issues of relevance-irrelevance, equality-inequality and rural-urban imbalance in education as given by Williamson.

Finally, Williamson's taxonomy of societies as a model, for comparison and case study is evaluated. The question is whether this taxonomy can contain all or most existing societies, and to



what extent India fits into the Dependent Society pattern, if at all. His theory statements are critiqued in the light of socio-economic and educational development in India, and are compared and contrasted with the theory position adopted by that classical document - the Kothari Commission.

(iii) Main Sources of Information in Education and Socio-Economic Development.

The evidence used in this analysis is documentary and not empirical. The Kothari Commission and the comments of Williamson in Education Social Structure and Development form the theory statements in terms of which socio-economic development and education are analysed.

The Kothari Commission which is correctly the Education Commission Report 1964/1966 forms the classical Indian definition for education in relation to the development problem in India. So in simple terms it has specified the main socio-economic and political problems which currently exist in the country. Next towards the solution of these problems, it has specified changes in the curriculum and pattern of education. In the event of these changes and transformation in education being successfully implemented, the Education Commission firmly believes that India would be on the path to modernization and a socialistic state.

These issues are investigated in this thesis via a range of national and international documents and secondary literature which are of main concern to the contemporary scene. These national and international documents have based their investigations into education and socio-economic development on the findings reported

in the Kothari Commission. Much of the secondary literature used also refers back to the recommendations of the Kothari Commission.

Thus the five-year Plans in their education sections base their targets on the educational recommendations of the Kothari Commission. The fifth Five-Year Plan 1974-1979 and comments on it by economists and educationists form an important source of information in this thesis for educational and curriculum changes.

With reference to the educated nonemployment problem an important source of information, which strongly supports many of the Kothari Commission findings, besides providing original solutions of its own, is the Asian Regional Team for Employment Promotion (ARTEP) Mission Report "Generating Employment for the Educated in India." 1975. This is a Report of the International Labour Office in Geneva.

Further in the context of international literature, the UNESCO periodical papers on curriculum innovation and implementation, and papers on case studies undertaken in different aspects of education, refer back to recommendations offered by the Kothari Commission.

Literature on the current foreign influences on education, mainly from the USA and USSR are recorded and analysed as an important source of information on curriculum development.

The National Council of Education Research and Training (NCERT) is a special educational organization at the Centre in New Delhi, with American collaboration to research into issues in education as related to socio-economic needs in the country, as well as to implement reforms. Research and innovation in education is again

based in recommendations in the Kothari Commission. These NCERT Projects and their Reports on innovation form another major source of information on curriculum development, both in the formal and non-formal areas.

Major national Commission Reports on education significantly used in this study are the Wardha Commission of 1937 [14] together with the assessment of the Committee on Basic Education and its concept, in 1956; a reference to the important Abbott-Wood Report of the same period 1936/1937 [15] is also made. Two other major Reports drawn upon are the Sargeant Commission Report or Report of the Central Advisory Board of Education (CABE) 1944, [16] and the Mudalier or Secondary Education Commission Report [17] of the next decade 1952/1953.

#### ORGANIZATION OF THE THESIS.

A brief introduction to each of the following seven chapters is now given.

Chapter II has discussed the development problem and models of development as well. Williamson's views and comments on the subject are noted and followed by his model for comparison, i.e., taxonomy of societies. Special emphasis is given to the 'dependent' pattern of society based in the 'dependency' theory. Within the structure of this social pattern the investigation into the socio-economic situation in India is made. Next to be noted is the model of development in the Kothari Commission 1964/1966 and socio-economic development problems as identified therein. The model of development tends towards the modernization theory for a 'socialistic' pattern of society, i.e. within the Indian context.

Documents such as the international ARTEP Mission Report and the national Approach to The Fifth Five Year Plan, discuss the socio-economic and educational problems in the country. Educational solutions offered are mainly in support of the recommendations from the KCR.

Chapter III has focussed on the role of education in general, in relation to socio-economic development in a society according to the views given by Williamson in Education, Social Structure and Development and the comments and recommendations of the KCR for education and society in India. Williamson has begun his analysis with the role of social reproduction in education. Then the issues of education for economic growth and education, and manpower resource in particular, are discussed. His view is that the developing countries offer the arena, in which the controversy on this topic may be tested.

The KCR has stressed the positive role of education for national reorganization in the social and economic spheres. It has emphasized education for productivity, and therefore science-based technology, work experience, etc., while in the area of social development the needs pointed out are social and national integration, and political development.

It is of note that while the approach to education and development, in the KCR, is a positive one, some ambivalence exists in the attitude adopted by Williamson, on the issue.

Chapter IV has focussed on the irrelevance of curriculum as seen in developing societies firstly by Williamson who has offered his views mainly through quotation from leading writers in education.

The three issues of relevance in the curriculum, rural-urban imbalance, and equality-inequality in education, noted by him and used in this thesis as issues for the analysis of the socio-economic-educational scene in India are discussed at considerable length here. The focus is on education and socio-economic development in India according to the Kothari Commission Report (KCR) and the ARTEP Mission Report. Significant issues deliberated are misalignment in supply and demand of manpower and lack of educational planning toward rural-urban balance. Manpower needs and curriculum in education as related to the socio-economic scene in India leads on to a discussion on vocationalization of the curriculum and inclusion of agriculture, work experience and vocational guidance in the system of education. Some issues toward equality are, recommendations on girl's and women's education, on the physically handicapped, and on regional imbalances.

In summary therefore Chapters II, III, and IV introduce and clarify, as far as possible, the position of Williamson on education and socio-economic development as given in Education, Social Structure and Development. His discussion of the 'dependency' theory is noted, as are the three issues of relevance, equality, and balance - concepts against which current socio-economic and educational development in India is investigated.

The outline of the underlying theory in this study is followed by summaries of the basic national and international documents used, in order to clarify the direction of socio-economic development recommended by them, for the country. Therefore socio-economic and educational problems as identified by the KCR and

recommended solutions for development as given therein, are next noted and described. The international ARTEP Report has been noted where relevant, in the same manner.

In these three chapters the stress, firstly, is on the approach and theory base to education in this thesis and secondly, on the socio-economic scene in India by the KCR and the ARTEP Mission Report particularly.

The next three chapters V, VI, and VII, have concentrated on socio-economic and educational development realities in India both in the historic past (Chapter V), and in the current period (Chapters VI and VII). The Williamson themes again, are repeated in brief in each of them in order to make clear the relation between the theory and development in practice. Each of these chapters mainly describe the scene of Indian educational and socio-economic development past and present.

It is further emphasized that there are two purposes of investigation in this study; firstly to note the relevance of education to the socio-economic needs in India and perhaps suggest further solutions, and secondly, to test Williamson's 'theories' on education and development along with the relevance of the 'dependent society' pattern for India.

To introduce each of the three chapters at more length, Chapter V has given an historical account of the earlier period of curriculum development in India. The shaping influence is noted to be imperialism, from the end of the eighteenth century to the third decade of the of the twentieth century. In 1937 a change of educational thought is evidenced in the Report of the Wardha

Commission on Education. The changed theme in education noted therein continued on to the period of the KCR 1964/1966. The issues focussed upon in the Reports illuminate the fact that educationists had now begun to identify and stress national needs and in fact the three issues focussed upon in this study. Educational reforms in this country are reviewed in the light of these three themes, relevance, equality and balance in education; firstly, in the earlier period of curriculum development up to 1937, and then in the period on to 1966, that is, the year of the KCR.

There is a description of education for the early missionary era, the Anglicist phase and finally the Orientalist -Anglicist controversy. A western model of education for India was the result. However, there emerged a reaction to the western 'dependent' model of education by 1937. As noted above, a national education commission, the Wardha Commission, recommended a totally indigenous model of education. At the same time the ruling government also produced an Education Report - the Abbott-Wood Report of the same period, which did give evidence of more enlightened thought and policy. It noted the need of technical, besides general education for India.

Later in 1944 the Sargeant Commission Report was the result of the first effort of the British Government in India to investigate Indian education at all levels in an enlightened spirit, focussing on the issues of equality and relevance and even rural-urban balance in education.

It also commented on the concept of Basic Education which had been suggested by the national Wardha Commission Report and

accepted the concept therein, which is indigenous in character seeking to transform the model of education to suit the needs of the general population. In the next decade, the Mudalier Education Commission of 1952/1953 is the comment on education by the Indian National Government. This Commission is well known for its nationalist spirit, and it too, has stressed the concept of Basic Education. Further since 1947, when India became an independent nation Indian educationists, contacted many countries in the spirit of research, with the result that the USA and USSR came to bear a big influence in educational innovations in all its aspects.

Chapter VI looks at relevance in curriculum in the area of current policies and in the light of Williamson's theories, which are as previously noted, outlined in brief. Hence firstly, the current educational scene is described with statistics, which give evidence of the changes in operation, e.g. in the literacy/ illiteracy situation in different States, and among minority groups, and the two sexes, in rural and urban areas; also in the position of the unemployed.

Next, four problems in education are identified and defined; and these are based on investigations and conclusions as given in the fifth Five Year Plan. The problems identified are in the areas of equality of educational opportunity; a closer link between education, development and the employment market; improvement in quality of education; involvement of the academic community in social and economic development. Policy solutions are accordingly offered, in the form of eight relevant programmes to be conducted on a national level. These are based in the recommendations of the



KCR. Finally current educational changes in the light of the two main foreign influences from USA and the USSR are recorded.

Chapter VI therefore has noted important, needed educational changes, both in concept and implementation of policies, in facts and figures, made by the national government.

In Chapter VII current innovations and practices in the field of education in India are surveyed and investigated, in the light of Williamson's theories briefly summarized. Several of these innovations and practices are recorded and initiated by the NCERT, which is the central institution established by the national government, for the specific purpose of educational development and research in the country, and several other important studies given are UNESCO projects.

These case studies and accounts on educational innovation include varied activities in the different states of India, and at different levels of education, in both the non-formal and formal fields. There are accounts of nonformal projects in both rural and urban education for the weaker sections of society, science at every grade, and work-experience at all levels; accounts of national integration activities in the form of inter-state camps and innovations in school curriculum content; innovations in the structure of formal education, and in curriculum content, e.g. the teaching of new subjects like population education through the integrated approach method, Social Studies for the primary classes, new educational technology in maths, science, and language classes.

With reference to the projects noted by the NCERT, they are the result of consultations with the Directors of Education in the

States, Vice Chancellors of the Universities and Heads of a large number of educational institutions and community centres.

Finally, Chapter VIII summarizes again the foregoing chapters, along with comments on the educational scene in India, and the socio-economic pattern in the country. In conclusion, further, the dependency and modernization theories are discussed and commented upon in relation to education.

This overview of the basic materiel, the theory base and the structure and organization of the thesis concludes the Introduction. The following Chapter II will analyse in more detail the theoretical point of departure of the thesis.

Chapter I. Footnotes.

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pp. 1 - 44.
2. D.S. Kothari, Education Commission Report 1964/1966. Education  
And National Development. pp.2-3.
3. Op. cit. pp.4-21.
4. Op. cit. pp. 5,6,9.
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6. Op. cit. p.97.
7. Op. cit. pp.90 - 107.
8. Op. cit. pp.9 - 10.
9. Bill Williamson, Education, Social Structure and Development.  
p.28.
10. Op. cit. pp. 3-4.
11. Op. cit. p.36.
12. Op. cit. p.39.
13. Op. cit. p.40.
14. Zakir Hussain, Basic National Education, Report of the Zakir  
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17. Mudalier, Report of the Secondary Education. (Oct.1952 - June  
1953.)

## CHAPTER 2.

### INTRODUCTION.

This chapter firstly outlines the views of Williamson on social and economic development. His model for comparative study, taxonomy of societies, and the "Dependency" theory as presented by him, are described. It is within these terms that India, as a case study in the field of education, is analysed within this thesis.

Counterpoint to this, theoretical interpretation is offered by the Kothari Commission Report which is socialist in outlook, and based in "modernization" theory. Thus in this analysis, the concept of "modernization" must be discussed and both the "capitalist" framework according to Weber, and the "socialist" framework, according to Marx has been described in some detail. Further "socialism" in the context of India is reviewed and "Sarvodaya" - Gandhian Socialism, or socialism in the Indian tradition, has been described at some length. Descriptions of Indian development are based mainly on the Kothari Commission Report. Further important documents which comment upon and describe developments in India are, the ARTEP Mission Report of the ILO which considers mainly the major problem of nonemployment of the educated in India. In other words, these documents investigate the current socio-economic scene in India and offer solutions, both educational and economic, to the prevailing problems as listed in the Kothari Commission Report, towards the socio-economic development in the country. Finally, the question of how India may be classified within Williamson's Dependent Society pattern is addressed.

THE DEVELOPMENT PROBLEM - MODELS OF DEVELOPMENT.

## SOCIO\_ECONOMIC DEVELOPMENT ACCORDING TO WILLIAMSON.

The socio-economic development within various nations and societies has been discussed by W. Williamson within the framework of four different patterns of society, as given by him in his Education, Social Structure and Development. This study of social, economic and educational development in Indian society is also analysed within the framework of one of these patterns, as described by him.

With reference to development, Williamson has put forward that patterns of social, economic and educational development and under-development

*have to be seen as the outcomes of particular models of development coming to terms with particular structures of internal and external constraints faced by different types of society in the grip of their own unique historical experience.*

[1].

In order to analyse any one social system therefore, or for the purpose of comparative study, Williamson has drawn up a simple typology of societies. Any one society, therefore, may be studied within the framework of any one pattern of society described by him. At the outset of his work he has made his position clear as a sociologist. He is in close sympathy with Max Weber and the method of sociological theorizing which uses the ideal typical type.

Weber's view, in Williamson's words, is:

*the social world is infinitely manifold and meaningful to its participants. Each society and culture is a unique configuration of different historical elements. To make*

*possible the scientific study of social reality it is necessary to reduce it to 'intelligible typological proportions' (Bendix and Roth, 1971: 258). The formulation of abstract descriptions of societies institutions or forms of political system - the ideal typical types themselves - is, on this view, the essential first step of comparative study.[2].*

The same is true for case studies of society. Further like Weber, Williamson's approach does not intend to discover *the invariant relationships between education and development or the laws governing cultural transmission through schools.[3].* Rather he expects to give accounts of change in education in different societies which are adequate according to the rules of experience.[4].

This is his starting point which concurs with the concept of social reproduction which is expanded upon in Chapter 3. Further he declares that if his accounts prove that *it is real men who according to their own lights, imagination and capabilities bring about change in society and not the unseen forces of natural laws[5]* then he might not be in strict sympathy with the methods of Max Weber but close to the spirit of his approach.

#### MODELS OF DEVELOPMENT ACCORDING TO WILLIAMSON.

Williamson has begun his discussion on models of development with the concept of social reproduction - that is, the transmission of values that are dominant in society. Social reproduction in Williamson's argument necessarily relates to a model of development and a model of development is used by the ruling group in a society to organise economic and social change: *A model of*

*development.....expresses the direction and manner of change in a society, it is the legitimating code of political practice formulating the sense of where a society or its dominant groups want to be in the future.[6].*

Such models of development are often expressed in political phrases like 'Socialism and Self-Reliance, 'Uhuru', 'Laissez Faire', 'Freedom and Economic Growth', 'Planned Socialist Industrialization' and infiltrate the daily activities and life of the people, giving significance and dignity to them working towards a planned future and to the routine of practical politics.[7]. A model of development determines broad social values. Also *models of development do not exist in a historical vacuum; they respond to historical conditions.[8].* As example, the Marxist ideology is a case in point; it was the revolutionary response to specific historical circumstances which culminated in the Russian Revolution of 1917 and Marxism lived on as political ideology of the State. Another significant historical condition particularly in view of the present case study is the *massive imbalance in the world economy between rich nations and poorer nations of the Third World.* [9].

Williamson cites Geoffrey Barraclough (1964) to assert that the significance of Marxism is that it suggests that the liberal economic, political and social institutions of the West are not applicable for emergent nations. *It has already shaped twentieth century society on lines different from anything known in the past and its force is not yet spent.[10].* It is imperative according to Williamson that models of development must reflect varying

ideologies in world societies - the Western Capitalist bloc, the Eastern Soviet Socialist bloc, and the variety of the emergent nations of the Third World. Therefore Williamson creates a classification designed to treat patterns of development as broadly socialist or broadly capitalist - though of course societies vary in the degree and kind of socialism and capitalism they practice.

Williamson, then, distinguishes a number of degrees of institutionalization. He argues for example, that capitalist societies vary in the degree to which central control on economic affairs is practised and socialist societies vary in their interpretation of socialist ideals when it comes to practice. So the degree of institutionalization of a pattern of development is of importance when formulating a model of development for all societies. The faith of the citizens in a pattern of development will establish whether it is of strong or weak institutionalization; the extent to which the pattern is accepted as the legitimate code for national planning - mass support for its programmes - will indicate the strong or weak degree of institutionalization of the particular pattern of development. [11].

Equally, societies function under economic constraints, in addition to the constraints exercised by their political ideology of a model or pattern of development and its strength of institutionalization. Economic constraints in a society will have important effects on the model of development adopted. For example, limited resources and competing priorities affect and influence development programmes, but societies differ in the kinds of



choices they face and the level of resources available to them. However the possibility of economic development does not only depend on whether a society is poor or rich, but also on the type of its economy and its national goals. Constraints imposed by economic factors vary to the extent that a society is developed or under-developed. Thus Williamson suggests in an underdeveloped society resources for education are scarce and distribution of education is uneven. This is one of the distortions which under-development imposes on social and economic life. On the other hand, there are fewer resource constraints in a developed society:[12].

*Economies with a well-developed infra-structure of social provision and a firm economic base in modern manufacturing methods and mass markets, the product of historical successes in being the first societies to modernize industrially, can call upon vast resources to further improve their social facilities. [13].*

However this need not imply that development will take place only within a strong economy.

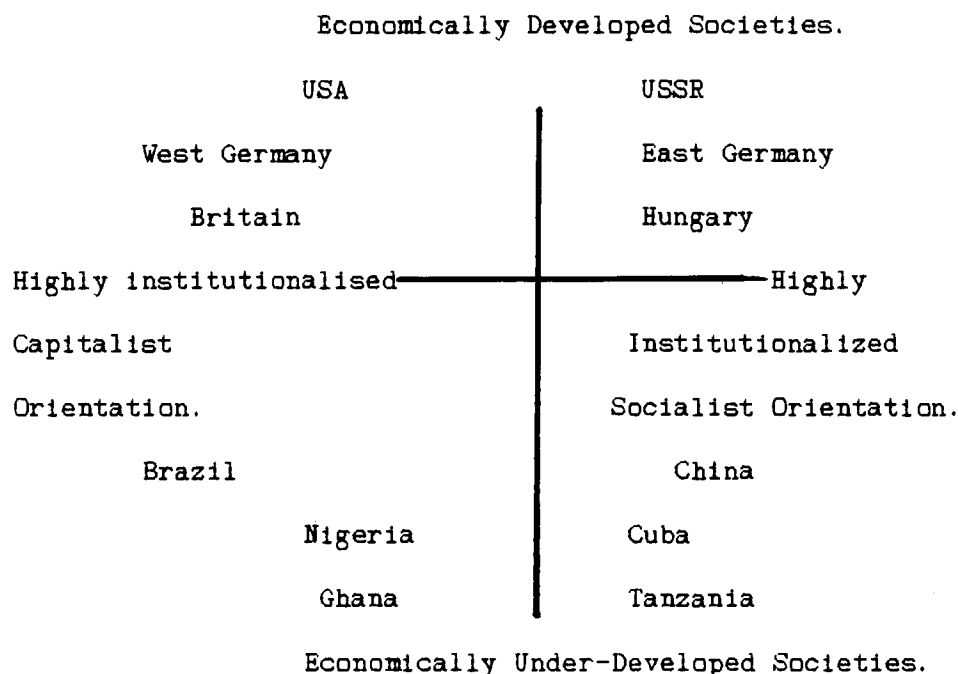
Williamson also stresses the importance of social stratification and political demands in establishing parameters for development. What is provided in society e.g. in education, is the result of demand by different social groups. Either the dominant groups assert successfully to others what they think is needed by them; or other groups demand the kind of education they believe they need. The resulting compromise between supply and demand is always unstable.

Thus it may be noted that development in a society is influenced and affected by political ideology, social and economic constraints and social stratification and political demands so that the development of education is also equally affected and in its turn affects the level of socio-economic development in a state.[14]. The intersection of these parameters give models of development.

MODELS OF DEVELOPMENT ACCORDING TO WILLIAMSON.

Such socio-economic and educational development in a nation may be studied within a given framework or typology for comparative purpose or as in the present instance for the case study of a nation. The model for comparison of societies presented by Williamson is given below in Fig. 1.

WILLIAMSON'S TAXONOMY OF SOCIETIES. [15].



Williamson classifies world society [16] into four main types which he has termed 'capitalist', [17] 'developed socialist', [18]

'dependent' and 'under-developed socialist', as given above. *These four segments of socio-political space each include societies which are very different from one another.* [19]. For example, several countries e.g. USA, West Germany, Britain, may be described as 'Advanced Capitalist Societies' facing the same structural problems, but they differ from one another and cope with their respective problems *in ways unique to their own historical experience.*[20].

In contrast to Advanced Capitalist Societies, the term economically underdeveloped societies refers to:

*the complex interdependence of poverty, low income, low productivity, high mortality rates, urban squalor, economic dependence, political corruption and illiteracy which to different degrees typify the life experience of nearly two-thirds of the world's population.*[21].

Within this general pattern, the concept of a Dependent Society involves three broad sets of constraints which make development difficult. These constraints are:

*firstly those imposed by the structure of the economy; secondly, those which depend on traditional patterns of economic behaviour; and finally those that relate to the capacity of a political leadership to mobilize support for development. In some societies such factors interrelate in a growth oriented way; in others they reinforce stagnation and dependency.*[22].

Williamson acknowledges that a contradictory literature exists on the problem of how such poverty is to be explained, and how such societies may escape it.

One set of ideas, or body of theory, aimed at overcoming such problems is "Modernization Theory," associated with the work of Rostow (1971) Hoselitz (1960), Mclelland (1961), and Parsons (1971). The central idea of this theory is that *with the correct economic policies, societies which are currently poor can following a well-known trajectory, pass through the stages of development to become fully modern and industrial.*[23].

Williamson, however, chooses a different interpretation:

*economic backwardness is an historically based phenomenon, the outcome of poor societies having had their economies and social systems distorted and conditioned by the overseas expansion of capitalist enterprise. The dependent economy has evolved to meet the interests of expatriate economic interests with whom indigenous entrepreneurs cannot properly compete.*[24].

In other words, Williamson locates the identification of economic underdevelopment in terms of a version of dependency theory, and surveys much of the dependency theory literature to assert his position.

Central to his position are three propositions (i) dependent countries are located within a world economy of unequal nations (ii) national elites within dependent economies assist in the creation of dependence; (iii) aid and western forms of education confirm dependency.

Various accounts from different writers have the common view that *economic backwardness is not a phenomenon intrinsic to premodern societies*. [25]. It is externally imposed on a people with the willing compliance of the few commercial and political elite. (Dos Santos 1973:78) has noted:

*"External" domination, in a pure sense, is in principle impracticable. Domination is practicable only when it finds support among those local groups who profit by it..... A consequence of poverty is that poor societies are forced into debt dependency and aid dependency.* [26].

Accounts from various writers point to the same fact that bureaucratic bourgeoisie' (Gavin Williams 1970) or the 'national bourgeoisie' of former colonial societies (Franz Fanon 1967) become the main recipients of foreign aid, state tax concessions and economic growth. A similar argument is offered by Tibor Mende (1973). [27].

Such a situation calls for fast economic modernization and a strong sector to the economy, so that funds for industrialization are produced. *But, in following such a policy, such states incorporate themselves further into the international economy.* [28]. Such conditions together with western aid and tutelage, encourage and result in the adoption of the western-oriented dependency model, by the dominant groups in society. National programmes within this dependency model would further encourage aid and trade with the rich nations abroad, to the disadvantage of the poorer sections of society at home.

Williamson himself argues in his various studies of different nations that *inequalities in education and western forms of education help to fashion the identity of dominant groups and convince them of the essential rightness of a dependency strategy of development.*[29]. These dominant groups are usually unable to employ peasants and workers for efficient service in the modern sector. Even with changes in ideology and new pressure groups in society the historical and economic constraints on development remain.[30].

Overall, then, Williamson, who is in sympathy with the sociologist Weber addresses the issue of development patterns or models, their institutionalization, economic and social constraints and the social stratification and political demands in a given society. Williamson presents a taxonomy of societies for comparative purposes which include four models or patterns of social and economic development.

One of these, the 'Dependent Society' model together with the dependency theory associated with it, is the development model within which the socio-economic development and educational pattern in India will be investigated in the chapters which follow, in counterpoint to certain Indian assumptions about modernization. To what extent, then, may Indian realities be understood within Williamson's model of a 'dependent society' and its assumptions about education? In particular what have Indians defined as their development problem, and what roles have they assigned to education in the modernization process?

One of the major places to explore Indian views is in the model of development (and education) appropriate for India, according to the Kothari Commission Report 1964-'66.

SOCIO\_ECONOMIC DEVELOPMENT ACCORDING TO THE KOTHARI COMMISSION REPORT 1964-1966.

KOTHARI COMMISSION \_ MODEL OF DEVELOPMENT.

The model of development - socio-economic, political and educational- implicit and explicit in the Kothari Commission, is within modernization theory assumptions. The political principles of the Report are democratic-socialist in nature. The Report suggests that the present system of education *will need radical changes if it is to meet the purposes of a modernizing democratic and socialistic society.* [31].

The references to "modernization" and "socialist society" are numerous in Chapter One of the Commission. For example the Report argues that, *the development of physical resources through the modernization of agriculture and rapid industrialization.....* [32] is a priority need in the country. Again, modern societies develop and use *science-based technology which helps modernization of agriculture and the development of industries.* [33]. The Report is stressing the reciprocal relation of science and technology and modernization. Science and technology *involves fundamental and cultural changes which are broadly described as modernization.* [34]. Other features of a modern society are: keeping pace with the explosion of knowledge and the quick pace of societal change. The Report suggests:

*The attempt to create a new social order naturally creates a host of unexpected social, economic, cultural and political problems .....The only solution to these transitional problems is to move rapidly forward and create a new equilibrium, based on the full implication of the process of modernization. [35].*

The Kothari Commission has similarly made heavy reference to the socialistic pattern of development needed for India. India needs to encourage aid from developed nations who believe in .....India's faith in democratic socialism and sympathize with her struggle to create a new social order. [36].

The Commission stresses the relationship between education and change: *In fact, one of the important principles to be emphasized in the socialistic pattern of society which the nation desires to create, is that individual fulfilment will come..... not through narrow personal loyalties, but through wider loyalties to national development in all it's parameters.[37].*

Again education must promote in pupils *the interests, attitudes and values needed for a democratic and socialistic society. [38].*

In this context the Public School system which was transplanted from Britain to India is criticized in its role in building this *traditional, hierarchical structure of our society..... ..such a system has no valid place in the new democratic and socialistic society we desire to create.[39].*

In contrast, students must be educated towards knowledge of the Constitution, and *the nature of the democratic and socialistic society which we desire to create and the five year plans of national development. [40].*



Thus the Kothari Commission's analysis stresses the development of India within the modernization paradigm and political principles of democratic and socialist nature.

Definition of Modernization - The Model.

Clearly, 'modernization' as a set of ideas is open to a variety of interpretations. The Kothari Commission has a brief definition. Scholars such as B.N. Verma have more abstract definitions. However an important question is how the idea of modernization is affected by the Indian context. In general terms B.N. Verma suggests that:

*Modernization refers to the process of directed change through which a nation achieves economic growth, political development and autonomy, and social reconstruction based on the principles of equality, fraternity, enhancement of freedoms, and satisfaction of basic needs. The principles of social reconstruction are articulated by individuals and cumulated by groups working in the short run through revolutionary methods but in the long run through consensus and democratic consent. The model stresses individual autonomy and community growth..*

[41].

However, whether this model has been followed in a revolutionary or an evolutionary way has varied. As too has varied the cultural definition - Catholic, Kemalist, the African Socialist model or the Gandhian model.

In the Indian context, some specifically Indian assumptions - notably Gandhi's - should be noticed. The Gandhian model is based in Gandhi's philosophy of Sarvodaya which has been called Gandhian Socialism.

Gandhi's philosophy of Sarvodaya has also been called Gandhian socialism. Sarvodaya means 'everyone's growth' and implies 'the free and full development of every individual'. Gandhi was against all coercion of the individual, even above the good of the state and majority. He wanted to build a social order based on non-violence, where the individual's rights would be safeguarded. *He propagated individualism in the form of self-reliance and self-help.* [42].

Gandhi believed that the individual's real merit lies in giving beyond what one can receive, based on the ancient Indian principle of dan. Vinoba Bhave, a holy man and disciple of Gandhi, thus initiated the bhoodan movement, or 'gift of land' from the rich to the poor. 50,000 villages were gifted to Vinoba Bhave, for the poor by 1968. This is known as gramdan. Within these villages management was to be on a co-operative basis- production and distribution in the community. Gandhi believed that co-operative enterprise was an extension of individualism.

*Gandhi believed in decentralization of the economy and mass education for all.*[43]. His system of basic education is described in chapters 111, 1V, and V, which follow. Craft is the centre of all learning. *He did not favour massive industrialization, but advanced the idea of intermediate technology long before the Western economists coined this term. Gandhi believed in the withering away of the coercive state as Marx did.*[44]. But while the communist party is coercive to the individual in favour of the State, the Gandhian ideal strives for work and responsibility going to the individual, away from the state, through co-operatives.

The co-operative structure must grow from below not to be imposed from above. On the basis of these principles the followers of Gandhi, with the aid of the government have started massive programmes of village government, rural self-help, cottage industries, and the uplift of the poor in India. The ' Panchayati Raj' movement, as it is called, has been exported to other countries as well. It is part of the Gandhian model of socialism in India, on the path to modernization.

The paths to modernization are many but mainly, the modernizing nations, except in few cases, are neither strictly Marxist, nor Capitalist-industrialist like the West. *The majority of nations has been eclectic in its approach.*[45]. In particular Varma argues, India .....has a 'mixed economy' based on the so-called 'socialist pattern of society'.[46]. Thus Varma suggests *India considers itself as midway between the capitalist route and the socialist route to modernization.*[47].

However, while Kothari Education Commission expects education to build a socialistic modern state and society, in India, conceptions of the socialistic state vary in meaning. The politician, the industrialist and the labour force may speak of socialism, each with different meaning in mind. Within the Indian context the term is often imprecisely used in speeches.

*Turning to India, one finds the whole gamut of socialist ideologies represented by political parties. Most of them use the word socialism and even democratic parties entertain the belief that they cannot survive without the aid of the magic word. Thus Socialism has acquired a dangerous flexibility of*

*meaning enabling Charu Mazumdar and JRD Tata to employ it although they are talking of totally different things. [48].*

Different varieties of socialism have grown on the Indian soil. In addition to the Gandhian variety and its off-shoot, bhoodan, with its vague utopianism and saintliness, there is the socialism of Congress, partly Fabian but deeply influenced by the achievements of the Soviet Union and of Marxism. Finally there is the more orthodox socialism of the communist parties. In recent years, the Communist Party India itself has split in two successive phases, producing the CPI and CPM (Communist Party Marxist-Leninist) [49].

Of the four different schools of socialism in India it has been the moderate middle-of-the -road socialism of the Congress which has guided policies of economic development in the country. It was at the Avadi session in 1955 that the Congress had sloganized its ideal of the socialistic pattern of society. Its famous resolution read:

*In order to realize the object of the Congress as laid down in Article 1 of the Congress Constitution and to further the objectives stated in the Preamble and the Directive Principles of State Policy of the Constitution of India, planning should take place with a view to the establishment of a socialistic pattern of society, where the principle means of production are under social ownership of control, production is progressively speeded up and there is equitable distribution of the national wealth.[50].*

The Congress Resolution stated a general ideal. To transform this ideal into practice required further detailed work. Some specification of how to turn the ideal into practice was provided in the Five Year Plans. The point is well made in the second Five Year Plan which observed:

*The Socialist pattern of society is not to be regarded as some fixed or rigid plan. It is not rooted in any doctrine or dogma. Each country has to develop according to its own genius and traditions. Economic and social policy has to be shaped from time to time in the light of historical circumstances. It is neither necessary nor desirable that the economy should become a monolithic type of organization offering little play for experimentation either as to forms or as to modes of functioning. Nor should expansion of the public sector mean centralization of decision-making and of exercise of authority.....What is important is a clear sense of direction, a consistent regard for certain basic values and a readiness to adapt institutions and organizations and their rules of conduct in the light of experience. The accent of the socialistic pattern is on the attainment of positive goals; the raising of living standards, the enlargement of opportunities for all, the promotion of enterprise among the disadvantaged classes and the creation of a sense of partnership among the(sic) all of the community.[51].*

Aiyar interprets the importance of this position as supporting .... a strategy of development which frankly recognized distinct sectors of the economy functioning in a complementary manner.[52].

Aiyar suggests that if present trends continue, India might well provide an illustration of the process of 'peaceful transition to communism.' [53].

What makes these choices of interpretation possible are the ambiguities of the word socialism.

*It has been used for referring to a society based on the abolition of economic classes, in which the means of production are owned by the State. It has also been used for referring to the means and techniques by which social justice is attained. The American Heritage Dictionary of the English Language (1969) mentions three meanings of the word : 1) A Social System in which the producers possess both political power and the means of producing and distributing goods. 2) The theory or practice of those who support such a social system. 3) In Marxist-Leninist theory, the building, under the dictatorship of the proletariat of the material base for communism. Again the word does not indicate whether the means employed are consistent with democracy or not. Yet it is curious that many people naively assume that a socialist State is per se a democratic State and that the means employed are necessarily democratic. This confusion arises primarily because of the common though mistaken, belief that socialism produces an egalitarian society. [54].*

In practice many people note the tyranny of socialist regimes and seek alternative solutions. For example Nehru in 1958 said, according to Aiyar:

*I do not want State Socialism of that extreme kind in which the State is all-powerful and governs practically all activities. The State is very powerful politically. If you are going to make it very powerful economically also it would become a mere conglomeration of authority. I should, therefore, like decentralization of economic power. . . . I am not at all dogmatic about it. We have to learn from practical experience and proceed in our own way.[55].*

*On the purely theoretical level there can be no case against Democratic Socialism, except that it is a more acceptable label for modern liberalism which for many people is still associated with business interests. Democratic Socialism operates within the framework of competitive free enterprise and parliamentary democracy; it can only exist on close and continuous co-operation between a governmental or public sector and a private sector which, strictly speaking, is the real 'public sector.' Democratic socialism can only provide the theoretical basis for public policies; in actual practice much depends on who exercises political power and, consequently, the proportions of democracy and socialism would vary from time to time.[56].*

In conclusion the terms 'modernization' 'socialism' and 'democratic socialism' have been used freely in the Kothari Commission Report as concepts basic to the reorganization of the educational system in India. Therefore it has been necessary to explain these concepts particularly within the Indian tradition and context, as it is important to understand something of the

traditions with which the Kothari Commission has taken its position.

It is on the basis of these concepts that the Kothari Commission offers its educational analysis. However between these concepts and its educational proposals is its detailed specification of the concrete problems of socio-economic development. It is to these problems of socio-economic development that attention now turns.

#### PROBLEMS OF DEVELOPMENT IN INDIA ACCORDING TO THE KOTHARI COMMISSION.

The Report has identified a number of problems, - social, economic and political - in national development. These are self-sufficiency in food; economic growth and full employment; social and national integration and political development.[57]. Detailed attention will be given later to education. Here it is merely necessary to note that the Commission sees a tight relationship between education and development:

*"Education has to be used as a powerful instrument of social, economic and political change, and will therefore have to be related to the long-term national aspirations, the programmes of national development on which the country is engaged and the difficult short term problems it is called upon to face.[58]."*

#### SOCIAL AND ECONOMIC DEVELOPMENT.

##### a) Science And Technology.

The Report emphasizes the central position of science and technology, which if correctly used, it is hoped will usher in an agro-industrial revolution, raising the standard of living for all



Indian citizens. It is hoped that progress in the field of science and technology will eradicate problems of food-shortage and unemployment which are two major problems in the country.

b) Agriculture.

It is pointed out, as a shortcoming in the educational system, that agriculture is not included at any level in schools nor in institutions of higher learning. It is recognized that Indians live mainly in villages and in rural communities, and therefore progress in agriculture would mean progress for eighty percent of India's people, and sufficient food for a population of almost seven hundred million.

c) Unemployment.

The Commission has noted that schools and colleges do not educate young people for specific technical and industrial jobs, instead they are producing academic graduates trained for nothing in particular, who swell the numbers of the unemployed in the country.

Secondary and University education also fail to meet the economic needs of the nation. The diversification of curriculum at these two stages of education would help towards preventing the increase of the educated unemployed. An unsatisfactory curriculum has also resulted in an acute shortage of skilled manpower in several sectors of the economy.

d) Population Explosion.

This is another major problem in the socio-economic development of the country. As indicated above there are almost seven <sup>hundred</sup> million people in India and half the population is young. The Report has

noted that in twenty years the numbers are expected to increase by another two-hundred and fifty million. In the educational context such extensive numbers generate complex problems which demand rapid action in evolving an adequate system to deal with them. On the adequacy and efficiency of the system depends the appropriate utilization of student numbers and student efforts towards national reorganization and progress.

e) Self-sufficiency in Food.

This is a top priority problem in economic development proposals. The Kothari Commission has quoted Mahatma Gandhi 'If God were to appear in India He will have to take the form of a loaf of bread.' [59]. The Report goes on to comment on the short supply of food in the country and the population increase in every five years being larger than the entire population of the U.K. Further it is noted that present trends indicate that in another ten to fifteen years, no country will have a surplus of food to export. Even if they do, India will not have the resources with which to purchase the great quantities of food that will be required. [60]. At the time that the Kothari Commission was formulated it was noted that *self-sufficiency in food is not merely a desirable goal but a condition for survival.* [61, and 62].

The Kothari Commission strongly recommended the modernization of agriculture through a science-based technology.

f) Economic Growth and Full Employment.

The "colossal poverty of the masses" [63] poses a challenging problem. Allied to this is under-employment and unemployment among the majority of the people. [64].

g) Overall the Kothari Commission has recommended effort in three directions. Firstly the nation must secure an economic growth of six to seven percent per annum. Secondly an important need is to distribute income more equitably so that the deprived sections share in a larger portion of the national income. Thirdly, an important measure is to reduce the birth rate by one-third and preferably by half. Also an attempt to double the national income per capita, at constant prices, in the next twenty years, is necessary. At the same time effort towards full employment for the people and particularly the educated must be undertaken.

In the educational context the Kothari Commission has noted that education at the moment is highly academic and therefore of little or no aid in the development schemes of the government to increase national wealth. Therefore education must be related to productivity since economic development is the challenge of the present time.

#### SUMMARY.

The four main problems in national development enumerated by the Kothari Commission, are the food problem; economic growth and employment problem; social and national integration; political development. Conveniently these issues are discussed here under the three categories of economic, social and political development. The Kothari Commission has recommended education as the main solution to these problems.

Within the framework of socio-economic development the problems of self-sufficiency in food, and unemployment are the major issues discussed, and the answer to these problems stresses expansion of

science and technology and their further development in the country.

This analysis of the main socio-economic proposals of the Kothari Commission established the definition of the problems of Indian development with the conventions of modernization theory of the 1960s. The lines of analysis opened up by the Kothari Commission are now ones twenty years old. However, there was continuity in Indian assumptions about how development might best take place. To establish some of these continuities, a further commentary is offered in a Report generated a decade after the Kothari Commission.

#### ANALYSIS OF THE ARTEP [65] MISSION ON THE EMPLOYMENT PROBLEM IN INDIA.

The Asian Regional Team for Employment Promotion (ARTEP) which has its centre at the International Labour Office (ILO) in Geneva, corroborated with many of the views of the Kothari Commission in 1975, and offered its own analysis of the employment problem along with solutions.[66]. In regard to the problem of economic growth and full employment, it pinpointed for discussion, the educational structure in India. This should aim at reducing the total flow of education, altering its structure, and the nature of the educated in terms of skills and values, or a combination of these elements. However, the ARTEP Report argued that no matter what is done, it will take time before the effect will be felt on the labour market. Nevertheless the ARTEP Report argued that the educational system could make an important contribution and an independent one to a *solution of the problem of educated unemployed*

*if it would prepare its pupils better for the world of work, not only in terms of skill-formation but equally in terms of values and expectations.[67].*

In other words the ARTEP Report like the Education Commission Report 1964/1966, found education to be *largely dysfunctional in terms of the society's developmental needs.[68]*. The ARTEP Report repeated the argument of the Kothari Commission that formal education in India had been designed to meet the needs for clerks and administrators in colonial days, and therefore until relatively recent times education was enjoyed by a small elite only and the number of educated was so small that they could be absorbed into government service.[69]. A consequence of this tradition, is that many educated persons still hold strong expectations of guaranteed government employment. However the expansion of the education system makes this impossible. Equally:

*... pupils do not learn much that they can make use of in subsequent employment. Subjects are largely traditional and academic, and so is the way they are being taught. One level of education logically leads only to the next level. While the overwhelming majority finishes formal education at the primary or secondary level (or drop out somewhere along the line), these stages have not been designed with any terminal objectives in mind.[70].*

This has two consequences. First many students who would much prefer to be earning members of society cannot do so, and therefore continue with education if they can afford it until the final stage has been reached. Second, students find it difficult to fend for

themselves in example self-employment, while looking for a job is time-consuming in India.

So the ARTEP Report, like the Kothari Commission stresses the problems of the Indian educational system which does little to make the large majority employable or ready for self-employment. It recommended measures for changing the structure of the educational system and the nature of the educated, - and these will be discussed in Chapter three of this thesis. Here it should be noted that like the Kothari Commission, the ARTEP Report stressed the role of education in contributing to economic and social change.

This line of analysis and especially the concern for the economic basis of India as a problem - continues through the Five Year Plans. Analytically here, it is not necessary to summarize the Plans in detail. What is important is to grasp the major assumptions and lines of interpretation of the Plans and their continuity with lines of analysis established by the Kothari Commission and continued by the ARTEP Report.

In the Plans, two core points are made, in relation to each other: employment and the two-sector economy. Solutions to the problems of employment and economic development ultimately cover both sectors of the dual economy.

In terms of employment the argument for interpreting the fifth Five Year Plan is:

*Expansion of productive employment opportunities is crucial to accelerate growth and reduce inequality. Idle man-power- the unemployed, the under-employed, and the very thinly employed -*

*is a vast potential resource for development. If utilized, it could give a powerful stimulus to growth.[71].*

Employment is described as of being of two basic types: wage employment and self-employment. The Fifth Plan envisaged substantial additional opportunities for wage-employment in the non-agricultural sector although in the Plan's Approach Paper the expectation was made explicit that in ... *our conditions, over a five-year period, the improvement in labour productivity generally would be fairly modest.[72].* There would also be problems of distribution of rewards.[73].

In other words the Approach Paper is indicating that the people of the non-industrialised sector of the economy need to be drawn into productive work - wage employment must be supplemented by a vastly expanded system of self-employment. But self-employment cannot be developed without demand from outside. Financial help alone is not sufficient. Demand for the output produced is necessary.

The second core point in the Approach Paper is that the non-agricultural or organized sector, constitutes almost an economy by itself. Growth in that sector does result in demand for its own output. But in the event of this modernized sector producing goods for the traditional sector, the latter might be unable to buy them simply because it does not have goods to sell in exchange - clearly an impediment to economic development. This dichotomy is a characteristic of third world economies. The two-sector economy undertakes different activities in its two parts, and is differently related to market forces. The "commercialized sector"

includes all the market-oriented economic activity whether in trade, finance, industry or agriculture. The "non-commercialized sector" includes all subsistence - oriented economic activity such as handicrafts, cottage industries and most of agriculture. While the commercialized sector is responsive to market forces, the non-commercial sector is not; in fact it is without dynamism. Further there is no interdependence between the two sectors. The result is that the income, from investment programmes undertaken in the Plans, has remained restricted to the commercialized sector only. Thus, quite contrary to the assertion of the Fourth Plan, it is not only the ten percent of the population consisting of the destitutes, the disabled persons, etc., who have remained outside the stream of activity generated by the Plans, but the entire non-commercial sector constituting more than forty percent of the population.[74].

Because of this structural discontinuity, in the social and economic pattern in the country, no centralized planning can succeed unless these two sectors become interdependent. The basic requirement of any developmental planning therefore is to transform the noncommercial sector into the commercialized one so that the entire economy will get linked together and start functioning subject to common market forces. At such a stage only the macro-economic approach to planning can succeed.[75].

Thus the basic defect in current economic planning in the country is the failure to distinguish between the concept of growth in a developed country and the concept of development in an under-developed country. The modern theories of growth are evolved in the



context of advanced or developed - economies. In such economies the whole structural set-up is adapted to the known technology and to absorption of any improvements which might occur. In these cases growth depends upon two variables, capital and labour. Labour remains more or less stationary in size, while capital is the dynamic factor which determines the productivity of labour:

*Under these circumstances these growth theories naturally concentrate on the size of the investment as the principal determinant of the rate of growth - of course assuming a particular capital output ratio. [76]. .*

Thus, planners in India have been very concerned about the rate of saving and investment in line with modern theories of growth, rather than with the problem of employment in the country. Thus one important conclusion to emerge from this analysis, is that the theories of growth applicable to developed economies have had a major influence on the ways in which problems of the developing economies have been perceived. There is a further important difference.

The main difference between the process of economic growth and process of economic development is that economic growth is concerned with gross national capita, while economic development involves a process of structural change in the economy and not merely the gross national product. Therefore, in an under-developed economy plans, based on estimates of growth on the basis of macro economic analyses, will not prove very useful unless they involve processes of bringing about the necessary structural changes in the economy.

Central to the necessary structural changes in the economy of an under-developed country is the question of different disconnected economic sectors. Government planning for economic growth has been criticized in that planners have failed to realize the problem posed by the existing dual economy in the country:

*The main defect of the developmental policies followed in India,..... has been the non-realization of the dualistic nature of the economy. The economy being divided into distinct unrelated parts, each part remains unaffected by what happens in the other part. This division is not on the basis of agricultural and non-agricultural or industrial sector. The division .....is by way of a traditional subsistence sector and a modern industrial sector not meaning thereby only a manufacturing sector. The difference between these two sectors is that the former feels satisfied with the subsistence standard somehow eked out in the traditional way of living; the latter on the other hand is always eager to raise the standard of living by exploiting every available opportunity to do that. [77].*

The growth of the national economy is therefore restricted to the investment of the savings in the modern sector only, and the traditional sector has no part in the growth process except when needed increase in labour force in the modern sector can absorb some of its people.

The traditional sector differs from the modern sector not only in per capita income and consumption, but also in (approach to living) the psychological makeup of the people and their attitude

to life. They know themselves to be poor but they have no strong urge for a different and better standard of living. They do not in fact psychologically qualify as "modern" economic men. So before one can transform their economy into being part of the modern economy, it is necessary to transform them into economic men.

This transformation is not merely an economic transformation. It is also a social transformation; the role of education is important.

Education itself must be modernized and equalized in the name of social as well as economic improvement. Here the recommendations of the Kothari Commission stress the social needs of India: the suggestion is for a new school structure which should be based on equality, freedom, and justice, and the suggestion is that the traditional system of education must give way to a new pattern in content and extent - a system that will possess flexibility.

The Commission has also emphasized social and national integration, and again education is expected to play an important role in this area of development. The criticism levelled at present day society is that *Indian society is hierarchical, stratified and deficient in vertical mobility.* [78]. There exists a wide barrier between the rich and the poor, between the educated and uneducated classes in society, and this situation is tending to grow worse. Differences and separatism has resulted from people professing a number of different castes within one single religion. This caste system has even managed to develop under the very democratic processes of the Constitution of India. [79].

Indian society consists of both highly sophisticated groups and primitive ones as well; the economy is a mixed one as already described, including modern factories as well as traditional agriculture, and there are a large number of languages which carry their own respective scripts. Such diversity is presented in the country *that it almost resembles a miniature world.*[80]. This complex social situation in India has now become critical, threatening national unity and progress. In the area of education another vital shortcoming is that it is not rooted in local culture and tradition so that educated persons become alienated from their own people. On the other hand education cannot promote the growth of local and state loyalties and regional languages only as they encourage people away from the important ideal of national unity.

Also social disorganization on all sides is on the increase, because the disappearance of old social values have not been replaced by new social responsibilities. There is no concerted effort apparent towards the building of social stability. Strikes, lawlessness, disregard for public property, corruption in public life and communal tensions are on the increase. Student unrest which is so well publicized is one of the symptoms of social disorder.

Such a social scene presents a challenge to education, which must endeavour to create an integrated and egalitarian society.[81]. Throughout the Commission has emphasized a radical change in education for the solution of most socio-economic problems in India.

Relating to the international scene and problems of development, India faces an urgent challenge in that there is a wide gap in living standards between the Indian people and the people of the industrialized nations. The scientific industrial revolution which began in the West around two hundred years ago left India untouched by it, at that time and for a long period to follow. However now the more important agro-industrial revolution has begun in India.

Further the world being on a second scientific industrial revolution of automation and cybernetics, further changes are foreseen in man's life, and unless India involves herself in these changes which are of vital social impact, the gap between her people and the people of the industrialized West will widen further.[82].

The nation's intellectual achievement has yet to make an impact in the international arena. India must add to her present intellectual and cultural effort to expand the frontiers of knowledge. She *cannot forever remain at the receiving end of the pipeline.* [83].

An important note by the Commission is that India has a long heritage of civilization and culture. She can therefore make a unique contribution to world society and strive to create *what Acharya Vinobhaji has described as the 'age of science and spirituality.'* [84].

India must strive to raise living standards in one generation even if sacrifice and discipline is required on the part of all its citizens. Co-operation with richer, industrialized

nations must be sought and encouraged, as their understanding and aid is necessary in the building of a new social order in the country.[85 and 86].

#### GENERAL CONCLUSION.

This chapter has undertaken a number of descriptive and analytical tasks. Descriptively, the chapter has reviewed some important literature, specifically Williamson's theories and models of development; and the theories and models of development implicit in the Kothari Commission and other major Indian documents.

Analytically the central point is the model of development proposed by Williamson. How well does this cover India's development situation? And how does the Williamson model contrast with Indian proposals for Indian development?

Williamson's model for comparison included the four patterns of social and economic development and his theories of a dependent society - within which the socio-economic development and education of India might be (and will be) investigated.

The strategic issues which emerge for this thesis are the applicability or otherwise of the dependent society pattern to India and of the applicability of dependency theory in that country. Equally, there emerges the strategic question of how Indian society may (or may not) be placed within the four social patterns given by Williamson - particularly the pattern of the 'Underdeveloped Socialist' group of nations. In so far as Williamson's taxonomy of societies is brought under test, and found to have weaknesses, this in turn raises questions about its

validity as a model for the comparative analysis of societies or its applicability to particular case studies.

In contrast to the Williamson theory position, there was offered a discussion of "modernization theory". This was reviewed both within a Weberian 'capitalist' framework and Marx's 'socialist' framework. It was necessary to clarify these concepts, as they are used by Williamson in his discussion on development and education.

In turn, "modernization theory" was identified as being central to the analysis of the Kothari Commission. The Commission analysed the process in terms of socialist aspirations. And here, socialism was reviewed within the Indian tradition.

At the level of policy intentions, the Commission identified four main problems for solution - the food problem; the economic growth and employment problem; the social and national integration problem; and the political development problem. Education was stressed by the Commission as the main solution to these problems.

Against these policy proposals, continuities and contrasts were drawn. The ARTEP Mission Report, it was suggested, equally stressed - like the Kothari Commission a critique of the educational structure in the country, and ARTEP identified the educational system as the main cause of the problem of educated unemployment in India. Very importantly, the Indian analysis was extended by the Appraisal of the Fifth Five Year Plan. Here the crucial extension was the stress on the system of dual economy as an important cause of non-employment within both traditional and modern sectors of the Indian economy. Analytically, the difference

between economic growth and economic development was explained and stressed, in the context of planning for economic development in a developing nation, where the economic problems of the traditional sector of the economy poses special problems.

In all the analyses, the idea of reform of education and equal opportunities in education, employment and cultural advancement were stressed. It was argued that a major shortcoming in the system of education in India was that it is not rooted in Indian or local culture, so the youth are educated away from their indigenous social background. Yet a new system of education must guard against narrow loyalties as opposed to national unity and international co-operation. Indian society and Indian education cannot ignore the international scene, with its levels of excellence. India must compete in the international arena, but wide disparity exists in living standards, between people of developed societies and the peoples of the Indian nation. Indian education must search for and find its talent in order to contribute to world society and knowledge. Politically, too, the Indian reports stress the need for an educated electorate to choose a competent leadership. The nation's goal is to create a strong democratic government, and therefore there is need for a relevant system of education in the country.

All these proposals were, for the Kothari Commission, proposals for modernization within or towards a socialist pattern of society. In the chapters which follow, the accounts of current educational thought and practice will make more clear whether



development progresses according to 'socialist' or 'capitalist' pattern, or lies somewhere between these two ideologies.

The following Chapter 3 will analyse the role of education in socio-economic development in the country. The views of Williamson and the Kothari Commission are noted for comparison and contrast.

Chapter II. Footnotes.

1. Bill Williamson, Education, Social Structure and Development, p.25.
2. Op. cit., p.27, [The phrase taken from Bendix and Roth, 1971, p.259 is cited by Williamson as being from R. Bendix and G. Roth, Scholarship and Partnership: Essays on Max Weber, London, University of California Press, 1971.]
3. Op. cit. p.28.
4. Ibid.
5. Ibid.
6. Op. cit. p.29.
7. Ibid.
8. Op. cit. p.30.
9. Ibid.
10. Ibid. [The phrase taken from G. Barraclough, 1964, p.232 is cited by Williamson as being from G. Barraclough, An Introduction to Contemporary History. London: Penguin, 1964.]
11. Op. cit. p.31.
12. Op. cit. p.33.
13. Op. cit. p.34.
14. Op. cit. pp.34, 35.
15. Op. cit. p.36.
16. Ibid.

[The empirical model for modernization for any country today is advanced industrialism. In a sense, Max Weber and

Karl Marx are the twin godfathers of the two chief models of advanced industrialism, capitalism and socialism. Weber's ideas and analyses shape the developments in the advanced stages of capitalist society, Marx's ideas and prescriptions guide the direction of the socialist society.] B.N.Varma, The Sociology and Politics of Development - A Theoretical Study, p.142.

17. Ibid.

[Weber's view of society, his 'ideal-type constructs, especially bureaucracy, his emphasis on the rational working out of social processes, and his summation of discrete variables, (e.g. market worth, social honor and political power) in the construct of social stratification, form the backbone of the functionalist school in sociology.

In the realms of economics and politics Weber believed that interest aggregation is continuous; various groups always safeguard their prerogatives; and in the end, societal power which 'claims the monopoly of the legitimate use of force within a territory i.e. the state,' reconciles divergent and conflicting interests. According to Weber, the market is the model for the circulation of currency as well as of wealth, status and power. What are needed are some general and legal safeguards and protections against the exploitation of the disadvantaged by the rulers. *The model for modernization in this framework could be better restated in terms of the interlocking relationship of the following variables: market economy, free enterprise, profit motive,*

*entrepreneurship efficiency, support for science and technology, freedom of the labor force, and a rational legal system.] B.N. Varma, The Sociology and Politics of Development - A Theoretical Study, p.143.*

18. Ibid.

*[For Karl Marx, in a socialist society ...the ownership of the means of production is transferred from private hands to the state and classes are done away with. The socialist society brings the proletariat to power; the old conditions of production (for private gain) are abolished and class antagonism vanishes forever.] p.144.*

*Furthermore, The state, in so far as it exists, is not hegemonic and an instrument of bourgeoisie power, but is dictated by situational needs to abolish capital and to eliminate the bourgeoisie as a class. The state at best is a mechanism for the reacquisition of labor's freedoms as well a vehicle of social control in the process of reorganization of power and societal values. pp.144, 145.*

*With the advent of communism, the state will 'wither away'. The guiding principle of such a society would be: 'from each according to his capacity, to each according to his need.' p.145.*

*The basic principles suggest to B.N. Varma that a ...socialist model for modernization as laid down by Marx could be construed in the following terms: abolition of private ownership of the means of production, dictatorship of the proletariat, reorganization of labor for higher*

*social production, planning, exhortation and group self-examination, non-accretion of stratum interests, societal pride, and labor freed from primordial bonds. p.145.*

B.N.Varma, The Sociology and Politics of Development - A Theoretical Study.

19. Bill Williamson, Education, Social Structure and Development, p.36.
20. Ibid.
21. Op. cit. p.39.[The phrase taken from Myrdal,1968, Dalton 1964, are cited by Williamson as being from G. Myrdal, The Asian Drama: An Inquiry into the Poverty of Nations. London: Harmondsworth, 1968, and G. Dalton, Economic Systems and Society. London: Penguin 1974.]
22. Ibid.
23. Op. cit. p.40.
24. Ibid.
25. Op. cit. p.41.
26. Ibid. [The phrase taken from Dos Santos, 1973, p.78. is cited by Williamson as being from Dos Santos, The Crisis of Development Theory and the Problem of Dependence in Latin America in H. Bernstein (ed.) Underdevelopment and Development: The Third World Today. London, Penguin, 1973.
27. Op.cit., p.40.
28. Op. cit., p.41.
29. Ibid.
30. Ibid.
31. Report of the Education Commission 1964-'66. New Delhi,

- Government of India Press, 1966. [Kothari Commission.] p.5.
32. Op. cit., p.4.
  33. Op. cit., p.6.
  34. Op. cit., p.18.
  35. Ibid.
  36. Op. cit., p.3.
  37. Op. cit., p.4.
  38. Op. cit., p.6.
  39. Op. cit., p.11.
  40. Op. cit., p.17.
  41. B.N.Varma, The Sociology and Politics of Development, p.15.
  42. Op. cit., p.25.
  43. Ibid.
  44. Ibid.
  45. Op. cit., p.26.
  46. Op. cit., p.168.
  47. Op. cit., p.171.
  48. S.P.Aiyar, Modernization of Traditional Society, p.48.
  49. Op. cit., p.49.
  50. Ibid.
  51. Op. cit., p.50.
  52. Ibid.
  53. Op. cit., p.51.
  54. Ibid.
  55. Op. cit., p.53.
  56. Op. cit., pp.53,54.
  57. Kothari Commission Report, pp.2,3.

58. Op. cit. pp.1,2.
59. Op. cit. p.2.
60. Ibid.
61. Kothari Commission Report, p.2.
62. India 1975, p.175, 174. [Since the publication of the Report, solutions from India'75 must be noted as significant. These solutions are the various agricultural development programmes which the country has been involved in for some years, as example, the programme of Land Reform given in India'75. The Directive Principle embodied in Article 39 of the Constitution is quoted. It lays down *the ownership and control of the material resources of the community are to be so distributed, as best to subserve the common good and prevent concentration of wealth and means of production in a few hands to the detriment of the community. On the other hand the agrarian structure which independent India inherited was semi-feudal in character, with intermediary features superimposed on the farmers over substantial areas.* (p.175). Therefore, in the fifth Five Year Plan of India, the small farmer has been particularly kept in focus, since he constitutes the bulk of the rural population. Further the land policy programmes figure prominently in the Central and State Government plans. The new Department of Agricultural Research and Education, DARE, was created in the Central Ministry of Agriculture in 1973 to provide administrative servicing and support to the Indian Council of Agricultural Research. Among its other major functions are the co-

ordination of work done in central and state agencies in the fields of agricultural research and education including animal sciences and fisheries, and developing new technology in these areas. Research into soil, land use survey and planning are its further functions. (p.174).1.

63. Kothari Commission Report, p.2.

64. Op. cit., p.2. [India is one of the poorest countries. The national income per capita, which was practically stationary for some decades, rose from Rs.256.5 in 1950/'51 to Rs.348.6 in 1964/'65 - an increase of 2.2% per year (at 1960/'61 prices). Both the rate of growth as well as the national income are unsatisfactory. Even this income is very unevenly distributed. A suggestion was made that every citizen should be assured of a minimum consumption of Rs.35.00 to cover the balanced diet recommended by the Nutrition Advisory Committee plus leaving a small allowance for other essential items (at 1960-'61 prices). This in itself is a ridiculously low standard but the lowest thirty percent of the population have a monthly income of less than Rs.15.00 and the lowest ten percent have less than Rs.10.00.] p.2.

Contrary to this scene presented, are facts given below, on income for unskilled labour in 1982, on a Tea Estate in Assam.

Income For Unskilled Workers - Labour - in 1982.

1. Wages: Men: Rupees 8.90 paise, per day;

Women:Rs.8.72p. per day;



Children:Rs.4.41p. per day;

(These wages escalate annually after bilateral discussions.)

2. Free Housing;
3. Free Water;
4. Free Firewood;
5. Free Medical Attention;
6. Free Lower Primary School;
7. Free Protective Clothing-
  - Umbrella - alternate years,
  - Raincoat/plucking apron - alternate years,
  - Footwear ('Chappals') every year,
  - Blanket - alternate years,
8. Subsidised cereal rations @ Rs.0.54p. per kg. (kilogram).  
(Normal price RS.3/- per kg. for rice/'atta' (wheat)).
9. Clubs - With radios and Games facilities, one for staff  
and one for labour,
10. Chreches - For worker's children, where free milk and  
biscuits are provided.
11. Provident Fund: 8% of wages, contributed by the employer  
towards Provident Fund i.e. equivalent to employee's  
contribution.
12. Retirement Gratuity - Payable after five year's service  
at half months wages for each year of service,  
calculated on last drawn salary subject to a maximum of  
thirty years service.
13. Workman's Compensation Insurance Scheme - whereby labour  
incapaciated through an accident at work are suitably

compensated for loss of wages and/or loss of earning capacity.

14. Annual Bonus - Calculated on Company's Profits but with a minimum of 8.33% on total wages irrespective of loss or profit.
15. Annual leave with wages: At one day for every twenty days worked.
16. Maternity Benefit: twelve weeks leave with full wages.
17. Sick leave: fourteen days annually, with two-third wages.

Note: Except for items No.4, and No.7, all other items are statutory requirements for this Industry, while some are statutory for all other Industries as well. Items Nos. 4 and 7 are peculiar to only the Industry in N.E.India, i.e. Assam and Bengal.

65. Asian Regional Team for Employment Promotion, (ARTEP), ILO, Geneva.
66. See Chapter IV.
67. ARTEP, Generating Employment for the Educated in India, p.38.
68. Ibid.
69. Ibid.
70. Ibid.
71. D.R.Samant, Approach to the Fifth Plan 1974-79: An Appraisal, p.19.
72. Ibid.
73. Op.cit. pp.20, and 21. [ *The increase in the output of the*

*non-agricultural sector will be appropriated by the one-third of the population who participate in that increase. It will not flow to those who do not get an opportunity to make any contribution to that increase.]*

74. Op. cit. p.12.

75. Ibid.

76. Op. cit. p.9.

77. Op. cit. p.51.

78. Kothari Commission Report, p.2.

79. Ibid.

80. Op.cit. p.3.

81. Op. cit. pp.2,3.

82. Op. cit. p.3.

83. Ibid.

84. Ibid.

85. Ibid.

86. Ibid. [Political Development According to the Kothari Commission.

The Kothari Commission has stressed the role of education in the political development of India. The nation's goal is to create a strong democratic government and therefore a committed competent leadership and an educated electorate are essential. The Commission has once again stressed the important role of education in the political role of India and recommended that people must cultivate values like tolerance, self-control, mutual goodwill, and consideration

for others in order to make Democracy a way of life rather than a form of government only.

The government is a multi-party democracy; the Indian Constitution is federal in character including constituent states, some of which are larger than many European nations. Such a situation calls for an educated electorate in India, and therefore the need for a relevant system of education in creating this electorate.]

## CHAPTER 3.

### THE ROLE OF EDUCATION.

The purpose of this chapter is to contrast the views offered on the role of education in relation to socio-economic development in societies, firstly, as suggested by Williamson in his Education, Social Structure and Development, and secondly as suggested by the Kothari Commission in India.

The argument of the chapter is that Williamson's analysis is skeptical and pessimistic about the potential of education to contribute to socio-economic development; the Kothari Commission is optimistic. Williamson's views stress the structural obstacles to growth and development which education is unlikely to overcome. This position is typical within dependency theory. The Kothari Commission's views stress in great detail the particular educational policies which are likely to contribute to socio-economic development. This position is typical within modernization theory. Williamson distinguishes between the role of education in developed and developing societies. He argues that it is true that the role *... which education plays in bringing about economic growth or in hindering it is not clearly understood.*[1]. For example, W. Williamson has made reference to the historian Eric Hobsbawm, who noted (1968) that education was not the moving factor in the Industrial Revolution in Britain, though later on it came to play a very important role in the nineteenth century, in the building of a disciplined industrial labour force. Nevertheless, in modern industrial twentieth century, Britain's future economic growth is decidedly dependent *on high levels of investment in human capital*

*formation, in research and development and in industrial training to preserve and extend ... knowledge and skill which are integral ... to industry and commerce.[2].*

Thus Williamson argues, for developed societies, that it is investment in the discovery and application of knowledge that will enable the industrialized developed societies to retain their economic power and prosperity.

According to Williamson the problem is more complex in the Third World countries. The point is made that these *societies require massive changes in patterns of education, research and training if they are to generate the expertise to exploit new technologies and man the services to which development ought to lead them - such as health, education and transport.[3].*

The crucial questions which according to Williamson emerge from such discussions are within the different contexts of different societies: 1)What kind of changes are required in education; 2) how will education help in national development: 3) what are the effects of investment in education?

Williamson illustrates his own doubt and skepticism about the role of education by quoting from writers like Adam Curle and Ivan Illich and documents of the World Bank

*Adam Curle has noted (1964), 'Contemporary attention is so concentrated on the role of education in development that we are inclined to forget its capacity to stunt growth. Yet in most societies for most of recorded time, education has been a reactionary force rather than a progressive one.'*[4].

Similarly Williamson quotes Ivan Illich (1973) as arguing that education equated to schooling is a myth:

*Schools rationalize the divine origin of social stratification with much more rigour than churches have ever done.[5]. Illich has argued that the concept of school has become interchangeable with the concept of education, stating that once a whole population is indoctrinated to believe that school has a monopoly of formal education, then the illiterate can be taxed to provide free high school education for the children of the rich.[6.]*

The key question posed in every society is what pattern of education that would most suit national development. The World Bank, concerned with the issue of scarce resources, has stated (1974) that the question should continually be: *Who shall be educated? How? For What? At whose expense? At what expense?[7].*

*These kinds of critical comments and questions indicate doubt if not disillusionment in the results which existing patterns of education have given, particularly in poorer developing nations.*

*In contrast, however both economists and planners in the development period of the 1960s, felt that investment in education was a necessary part of any programme for economic growth. The economic recovery of Japan and Germany after World War Two and - on the other hand - the inability of poor societies to respond economically to massive inputs of physical capital, brought into focus the importance of a human capital stock. How far, it was wondered, was economic growth dependent on the availability of human capital which could exploit new technology, and innovate economically?*

Williamson identifies the views of the American economists T.W. Schultz and F. Denison who argued, in the early 1960s, that 20% of the growth rate in the USA in the twentieth century was the result of increases in the educational level of the labour force.[8]. However their views have been attacked. Analytical procedures employed in calculating the importance of human capital investment and economic growth - the so-called Cobb-Douglas function - is inadequate and grossly misleading.[9].

Equally, Williamson invokes the views of Bowen who recommended that at this present stage, economic analysis does not provide empirical evidence that:

*programmes of human capital formation will produce the measurable consequences which might be expected from them.[10]*

Further, the simple argument that better-educated people are likely to work more effectively and productively, make better decisions and be more highly motivated to improve on current technologies has no basis in fact.[11].

On the other hand, it is not possible to argue with certainty the opposite case: that investment in human capital is unproductive. Williamson acknowledges that the question is a complex one and needs more knowledge on social and political structures in society and their relation to educational investment and results.

To approach such complex issues it is necessary - according to Williamson - to understand the role of education in terms which are broader than a narrow economic approach. In particular, it is necessary to understand the role of education in terms of social reproduction and cultural transmission. These themes are discussed



by Williamson with reference to well-known theorists in sociology. Durkheim, [12] Berger and Luckman, [13] Bernstein and the philosopher Peters are thinkers who consider social reproduction to be the main function of education. Another group of relevant theorists who work within the Marxist framework of analysis in education, are Althusser, and Bowles and Gintis.[14].

Williamson aims to relate processes of social reproduction, through education, to the broader problems of development and underdevelopment in different types of society. According to Williamson:

*the modernization of educational systems is not simply, however, a technical matter of finding the optimum mix of scarce resources, even less is it a matter of deschooling society as suggested by Ivan Illich in 1971. It involves choices not only among competing priorities but among different social values and models of development.[15].*

For example, elitism, the failure to produce the kind of citizens actually needed by a society, are defects which reflect the social structures within which educational systems function. When one relates the educational system to the broader aims of development, questions arise about which interests are best served by educational change? Who benefits? Who bears the cost? More particularly a central question is how culture is transmitted through schools.

Williamson argues that *Theories of development and underdevelopment will profit from studies of education,[16]* which

must begin with the realization that education is not a commodity but a programme of action. It is clear then that:

*the sociologically significant outcome of schooling is not that schools somehow pass on knowledge or specific skills; it is that schools consolidate habits of thought and attitudes which make clear to people what are the basic values of society and the place which different types of people and therefore they themselves have in society. It says something, therefore about the order behind social relationships and the relationship of the individual, or his group, to that order.[17].*

To illustrate this point, Williamson uses Bernstein and Peters to insist that the rituals in schools function to relate individuals to a social order. As a consequence, following Pierre Bourdieu's explanation, *the individual is therefore trapped into particular ways of thinking which are dominant in his culture and such ways of thinking are woven into the fabric of the language he speaks.[18].*

In this view, schools are transmitters of a taken-for-granted view of the world. In such a situation, education is the process of acquiring concepts and values of a culture, which give the world a particular meaning.

However, the processes of change and evolution, in a society, produce tensions among groups of people and despite resistance to innovations, educational systems change in various degrees to suit changing social needs and economic development. And *when the circumstances in which reproduction takes place are varied, we can gain some view of why the consequences of education are so different*

*in different contexts, or why the intended results of education are not realized in practice; and this last problem is vital in the study-field of development and underdevelopment.*[19]. An analysis of the circumstances of social reproduction along with attending tensions in India for the given period in time, is attempted as one aspect of this work.

In other words, Williamson's analysis has three parts. First, in terms of economic growth and development, Williamson concedes that the question is a complex one and needs examination particularly in the arena of development in the third world countries. He is skeptical of the Western model of education for development in the emerging nations.

Secondly, Williamson stresses the issue of social reproduction through education. In this process the values which are dominant in a society are reproduced for the next generation. However the concern here, is that these values, might or might not operate for national development. Rather, as Williamson has pointed out, western influenced curriculum in developing nations is often dysfunctional for development, and in fact, contributes to inappropriate patterns of social reproduction.

Third, at the macro-level, to study the role of education in relation to economic growth and development, and to social reproduction, a scientific framework of classified societies is necessary. Williamson offers such a framework for the classification of societies, (given in the last chapter).

These theoretical propositions about how to view the relationship of education and development may now be contrasted with the analysis of the Kothari Commission.

#### THE ROLE OF EDUCATION IN INDIA ACCORDING TO THE EDUCATION COMMISSION REPORT 1964/1966.

The Report of the Kothari or Education Commission 1964/1966 has stressed the role of education in the process of modernization in India and in building a socialistic state, as noted in the previous chapter. The Report has commented upon every aspect of education - structure, administration and finance, curriculum, teaching methods and evaluation, the link between education and man-power needs, science education, vocational and technical education, agriculture in education, adult needs in education, expansion of school education and equal opportunities in education. Solutions to national socio-economic problems are suggested through all these aspects of education at both school and university level.

#### NATIONAL REORGANIZATION FOR DEVELOPMENT - SOCIAL AND ECONOMIC ASPECTS.

According to the Report education is the main instrument of change. It has made reference to *these difficult, complex, significant and urgent problems* [20] which are interdependent, that is, the problems of national development noted earlier in the last chapter - self-sufficiency in food; economic growth and full employment; social and national integration; political development. The solution to these problems given is a *simultaneous attack on all fronts*. [21]. The two main programmes discussed are - the development of physical resources and development of human

resources. The first programme, development of physical resources, is to be achieved through the modernization of agriculture and rapid industrialization. A science-based technology must therefore be developed; further heavy capital formation and investment is needed; and a built-in structure of transport, credit marketing and other institutions are essential.

The development of human resources on the other hand will be achieved through the correct organization of education. This programme is considered to be the more crucial of the two. Comment from the Report continues that while the development of physical resources is a means to an end, the development of human resources is an end in itself and without it the adequate development of physical resources will not be possible.[22]. This becomes clear when it is realized that people must be trained in new skills as well as develop changed social attitudes.

In the press toward economic development, for example the Indian farmer must move away from conservatism and adopt science and technology, in his farming methods. The same is true in the area of industry. Skilled workers are needed to produce more goods of higher quality which are suitable to a modern lifestyle. But training in necessary skills alone is not sufficient for economic growth and progress. A social transformation is necessary. The Report has quoted Heilbroner who has described the effort towards economic success by a traditional society, as the 'great ascent'. He further observed that the acquiring of capital equipment though indispensable is not sufficient to change a traditional society into a modern one. An entire social transformation is necessary, a

*wholesale metamorphosis of habits, a wrenching reorientation of values concerning time, status, money, work; and an unweaving and reweaving of the fabric of daily existence itself.*[23].

EDUCATION - THE CENTRE OF ECONOMIC AND SOCIAL DEVELOPMENT.

At the centre of reorganization is Education, the *main instrument of change*, [24] according to the Report. Only an effective system of national education can reach all the people and help fulfil their aspirations and needs. However education is not to be considered a magic wand which being waved will bring wishes into existence. Rather, education requires strength of will, hard work and sacrifice on the part of citizens to make it effective. It has been an instrument of development in other countries and must prove to be the same for India.

The Report continues with the argument that the expectation that education will help achieve national goals and fulfil national challenges does not imply that the individual will be sacrificed to the nation. Rather it is hoped that education will provide the individual with opportunities to develop personal potential to the full.[25]. Such a goal is to be achieved through social reorganization. There is no room for narrow group loyalties. In the socialist pattern of democracy which the state is trying to build, individual fulfilment will come through dedication to wider loyalties of national development. The main concern of the Report is to identify the major programmes that can bring about this revolution in education which has three main aspects -

1. internal transformation of education so that it caters to the life, needs and aspirations of the nation;

2. a qualitative improvement and rise in standards, so that it will be internationally comparable;
3. expansion of education on the basis of man-power needs, with emphasis on equality of educational opportunity.[26].

In order to achieve these national goals, education must be linked and related to productivity; committed to social and national integration, and help democracy develop into a way of life for the people, hasten the process of modernization, and strive to build character by cultivating social, moral and spiritual values.

#### EDUCATION FOR PRODUCTIVITY.

India is in a transitional stage where the concept of education as the privilege of the few is giving way to the concept of education for all. For acceleration of this process education should be linked to productivity, when expansion of education will lead to a rise in national income, and further investment can be made in education. Education may best be linked to productivity through four programmes which need top priority in educational planning -

1. the development of science as a basic part of education at all levels;
2. work experience as an integral feature of education at all levels;
3. vocationalization of education especially at the secondary level to meet the needs of industry, agriculture and trade.
4. improvement in science and technology at the university level in research, and particularly in the field of agriculture and allied sciences.[27].

1. Science-Based Technology.

Science-based technology is the significant difference between a traditional and modern society. It is used in the development of both agriculture and industry. Agriculture in India, is yet to adopt science-technology on a full scale. *Several countries have been able to raise their GNP very rapidly because of their investment in basic science, technology and education.*[28].

Science education at all levels is of the utmost importance to India in her effort towards modernization. The spirit of enquiry and experimentation is to be promoted. The quest for Truth, as man's highest duty and obligation, must be recognized. Fear, superstition, dogmatism, fatalism and passive resignation can then be dispelled. Ideological tensions will lessen and probably disappear. In fact, although science is more concerned with Nature at present, it is becoming more involved with man's understanding of himself and his place in this universe. It is hoped that present development will achieve not only the desire for material affluence and power, but higher values and self-fulfilment. *This concept of the mingling of science - and spirituality is of special significance for Indian Education.*[29].

## 2. Work Experience.[30].

Work experience as an integral part of education is another major solution towards productivity in the nation. Work experience refers to participation in production-work in the school, home, factory, farm or any other productive situation.

Good and purposeful education must consist of literacy, numeracy, work experience and social service. The traditional pattern of education emphasised the first two, and ignored the last



two. But these need to be included at school level of education, if productivity and integration are to be achieved. Work experience was part of education in the days when all members in a society participated in its daily activities. The weakness of such a system however, was that education was neither dynamic nor forward-looking, and perpetuated traditional patterns of behaviour. Formal education on the *other* hand encouraged students away from the world of work, while they trained for future roles in society. In the case of first generation learners, this became a particular problem and tragedy in that children became alienated from their homes and communities.

The introduction of work experience into formal education is a means of combining the advantages of formal and informal education. In the traditional pattern of society, methods of production were more simple and did not necessarily require formal education, hence work was low-paid and left to the unlettered class of society, while those who went through formal education, did so in order to acquire interests for the future enjoyment of life. They therefore became parasitical in character, while worker-peasants and artisans, remained at a low level of efficiency but undertook the burden of real work.

Science-based technology has reversed the situation; if workers are to be productive, they need education in the skills required for farming and industry. Otherwise they now become the parasites of society. Furthermore the formally-educated no longer conform to the traditional resistance to productive work; since both farm and industry are remunerative and no longer in an inferior social position. The educated person is now an important source of

production; the uneducated has become a burden to society. This process now begun in India, must be encouraged; hence work-experience in education is of major current significance. Further it is of significance to note that Mahatma Gandhi launched a revolutionary experiment in the form of Basic Education in 1937. The concept of work experience in current education is based on the same principle and may be considered as a redefinition of the Mahatma's educational thought related to an industrializing India.

### 3. Vocationalization. [31].

Vocationalization of secondary education is another important step which relates education to productivity. At the University level, an emphasis on technology and agriculture is expected to produce similar results. Vocationalization is particularly important in the Indian context, since formal education, previously trained young persons for government work and white-collared professions only.

Practical subjects now included in the school and college curriculum will help to channel students into different occupations. Such a need has been pointed out in the Indian Education Commission 1882, and it remains the current need of the times. To conclude school level education of the future needs to combine both general and vocational education. General school education needs to include prevocational and technical courses as well, while vocational education needs to contain an element of general education. Future society in India should not allow a separation of the two.

Need for Agriculture and Technology at the University Stage.

[32].

Further in the interests of national productivity, agriculture and technology at the university stage, must expand beside the other traditional professions. India is largely an agricultural country, therefore agriculture needs to have a place of priority at all levels of education, if there is to be sufficiency of food and a developing economy. A programme of agriculture must be based on an effective link between teaching, research and extension.

There is need for an agricultural university in each state and encouragement must be offered to other general universities which desire to introduce courses in agriculture. Undergraduates and post-graduates in agriculture should be trained at these universities, so new agricultural colleges need not be established.

Further, polytechnic institutions which offer agriculture at the school leaving or lower secondary level should be encouraged, and affiliated to agricultural universities, particularly in rural areas. Polytechnic courses need to be technical in character leading to specific employment, but exceptionally gifted students should be transferred into higher education. Also these polytechnic institutions should offer facilities to young farmers and to girls and women in rural areas.

#### SUMMARY.

Thus far the comments and proposals on the role of education in India, according to the Kothari or Education Commission 1964/1966 indicate a firm belief in the power of education as the instrument

of change and social and economic development in the country - in contrast to Williamson. Science and technology are given central importance in overcoming problems of food shortage, industrialization, unemployment, through an Education for Productivity programme, which highlights work-experience, and vocationalization of education. Western-based science and technology are recommended but innovations in the traditional 'dependent' pattern of education is the stressed need, and thus the introduction of work-experience at all levels of education and secondly, vocationalization of education at the higher and lower secondary stages are programmes now in operation.

The Report has emphasized the development of human resources in contrast to Williamson. His skepticism relating to educated manpower for economic development has been noted.

#### SOCIAL AND NATIONAL INTEGRATION.[33].

The Report also addresses the pattern of social reproduction through education in the Indian context. It argues that there is a need for a changed power-group in the nation to assist in the shift from imperialist to democratic socialist patterns.

The Report of the Education Commission 1964/1966, makes recommendations for social development and for social and national integration in the area of education: social and national integration in a country as large and diverse as India is obviously essential towards national progress. Education can play a major role in this area by implementing a number of programmes in school and college.

1. The Common School system of public education needs to be introduced.
2. A programme of social and national service should be initiated at different stages of education.
3. The language issue - a major problem in India - can be vigorously<sup>ly</sup> and effectively tackled by developing all modern Indian languages at the school stage, and enriching Hindi so that it can take its place as the official language of the Union as soon as possible.
4. The school can help further in promoting national consciousness.

1. The Common School.

According to the Kothari Commission the Common School system merits attention, as it can help in the building of an egalitarian and integrated nation. At present about 10% of the population only enjoy a well-rounded education, in private schools mainly; the remaining population attend poorly equipped but free government schools. The Common School system when implemented, will bring the benefits of good education to all its citizens. It is suggested that such an education be made free to all children, *irrespective of caste, creed, community, religion, economic conditions or school status.*[34].

Talent should be the deciding factor. Further the Common School must maintain an adequate standard, so that parents do not feel the need to send their children *to expensive schools outside the system*[35]. It is commented that the Public School system in England and the somewhat similar system in India *has no valid place in the new democratic and socialist society we desire to create.*[36].

2. Social and national Service.

The suggestion for social and national service education according to the Report, keeps a realistic and practical view of the Indian educational system. [37]. Various pleas for social and national service had been made but not implemented as they were not approved by the people - namely, the Plan of the National Service Committee. Later in 1962, the period of the national emergency saw the introduction of the compulsory National Cadet Corp Scheme (NCC) at the university stage.

At about the same time the Ministry of Education sponsored a study of national service in several countries - Yugoslavia, U.K., U.S.A., Sweden, Japan, Phillipines, etc. The recommendation of this study group was that social and national services should run concurrently with academic studies in school and college; the programme should commence in the upper primary classes and continue on to university level, so that the right attitudes were inculcated in young people. These programmes should encourage students to live in community on campus, and provide opportunities for service in the community.

Further every educational institution should develop such programmes of social and community service for all students to participate for short periods of time. Also every district should organize such programmes in obligatory social service camps, for students belonging to institutions without such activities.

The NCC scheme should be continued until appropriate arrangements were made for similar training in other programmes, and other forms of social and national service should be developed,

after which the NCC scheme could become voluntary rather than obligatory.

### 3. The Language Question. [38].

The Kothari Commission has pointed out that a suitable language policy is of major importance in the issue of social and national integration. For the purpose of education the medium of instruction should be the mother-tongue; the development of all Indian languages is essential to integration; so that the minority elite and the people in general could come closer together; so that science and technology could become accessible to the majority of the people. So also literature and science needed development in all regional languages. The University Grants Commission, UGC, could guide and finance such a programme.

Further, use of the regional language at the school-level of education would encourage mastery of the subjects studied. With the passage of time, it is reasonable that the regional language should become the medium of higher education as well. It would be a means of closer communication between university graduates and the people in general. It is recommended that the changeover to the regional languages at all levels of education should be effected within a time-span of ten years, while All India institutions should continue to use English until the eventual adoption of Hindi. Further it is necessary that the regional languages become the languages of administration for the various regions respectively. The administrative services in the regions then become open to persons educated in regional languages. At the same time English must continue to receive encouragement from the school stage

onwards, and other languages of international communication need to be developed as well e.g. Russian.

A recommendation is that it would be desirable to set up a few institutions at both school and university level which would use important world languages as media of education. At the same time it is recommended that English will serve as the link language in higher education for academic work and intellectual communication. However, Hindi must take the position of <sup>the</sup> link language in due course, if the majority of the people are to be involved. All effort for the spread and encouragement of Hindi in non-Hindi areas of the country, is necessary, since Hindi is the official language of the Union and the link language of the people. Further it is important to develop other Indian languages as well for inter-state communication purposes. Groups of students should be encouraged and educated to be fluent in other modern Indian languages and literature, than their own. Also it should be possible to combine two modern Indian languages at the University level of the B.A. and the M.A. degree respectively. It may be noted here that the language issue and education in India focus on two aspects of society - social and economic.

#### 4. National Consciousness. [39].

The promotion of national consciousness should be a central objective of the school system, as it fulfils an important social need. The school needs to introduce an understanding and re-evaluation of India's cultural heritage and a faith in the nation's future. To know the nations cultural heritage, students require to



study the history, language and literature of India, beginning at the school level.

At the higher levels of education they need an introduction to the philosophy, religion, architecture that are indigenous to the country. The five arts - painting, sculpture, music, dance and drama, should be included in the curriculum at both school and college level of education.

In order to break down regional barriers, inter-state programmes like summer camps and summer school should be organized and encouraged among students at both school and higher education levels. Further an exchange of teachers on a statewise basis would encourage unity while study of the different regions in the country should be included in the educational curriculum. These issues are discussed further and at length in the chapters which follow.

The school system can create a faith in the nation's future by including the study of citizenship, the Constitution of India, the principles on which a democratic socialist society operates, and knowledge of the Five Year Plans of national development.

Finally and of major consequence the school can simultaneously encourage and develop international understanding among students, as the two ideals of national consciousness and international understanding are not in conflict. The education system at all levels should also be designed to promote democratic values among students.

The Report has commented that in order to modernize, the Indian nation must strive for a total transformation in her system of

education, that is, from a traditional 'dependent' model to a socialist pattern, relevant to national needs.

#### CHANGE IN THE STRUCTURE OF EDUCATION.

Towards a qualitative improvement in education, a changed educational structure has been recommended, i.e. one to three years of pre-school education and ten years of primary and lower secondary school. The lower secondary level should offer two to three years of general education or one to three years of vocational education. The enrolment in vocational courses should be raised to 20% of the total school enrolment. At the higher secondary level there should be a course of two years general education, or one to three years of vocational education. The suggested enrolment in the two courses is 50% of the total enrolment respectively.

Further the Higher Secondary schools would be established with the two classes 11, and 12, with the purpose of specialization. Accordingly the pre-university class and the intermediate classes in universities would be abolished since the establishment of the higher secondary classes at school level.

Such a changed structure would improve the quality of education and help in national development. In practical terms this change in structure should be placed in the care of the UGC and the State Education Departments which could effect a smooth transfer. The Board of Secondary Education would then need to reorganize themselves for the purpose of incorporating the higher secondary classes as well.

Qualitative improvement is expected at every level of education by minimizing wastage, and raising the standard of every class.

Comparability between the various states should continue, developed by efficient machinery at the State and National levels which must define, evaluate, and revise national standards.

Further in order to raise standards in education, a better co-ordination between the different levels is necessary. Colleges should advise schools how to improve their efficiency. School complexes should be formed, and group<sup>ed</sup> together for co-operative general improvement. Such beneficial action would also discourage and destroy the isolation of various existing institutions.

The duration of all courses must be investigated and carefully planned. The number of instructional days should be increased. The UGC, the Ministry of Education, and the State, together, should plan a school calender for holidays during the School Year. The Vacation period should be fully utilized by participation in studies, social service camps, literacy drives etc. and full use should be made of libraries, workshops, craft-sheds etc. throughout the year. At College level, adequate facilities for self-study must be provided.

In conclusion, plans of educational reconstruction need to emphasize the intensive utilization of existing facilities, besides the reorganization of the structure of education.

Further from the above recommendations for innovation in education, we may conclude that the Kothari Commission has adopted a positive view to the role of education in the social and economic development of the country.

#### GENERAL SUMMARY AND CONCLUSION.

In this chapter two views of education and development have been analysed. One view was from Williamson; the other from the Kothari Commission Report. The views vary in their optimism about the possibilities of development; in their optimism about the role of education as an agent of development; and in their views of the balance between exogenous and endogenous factors in the creation of development. Williamson drew a distinction between the role of education in a developed society, and education in a developing one. With reference to the United Kingdom he commented that in the period of the Industrial Revolution, education was not the moving factor. Later it helped in creating a disciplined labour force, but in the present twentieth century the developing nations are certainly dependent on investment in human capital and industrial training.

Williamson's analysis of developing societies was that they require massive changes in patterns of education to suit the needs of development. The crucial questions then emerge - what kind of changes? How will education help in national development? What are the effects of investment in education within the context of different societies?

Williamson was skeptical on the role of education in national and social development. He quoted Adam Curle, Ivan Illich, and the World Bank for support in his skepticism, which specifically refers to the Western model of education - in his opinion, inadequate in meeting the needs of a developing nation. In fact western forms of education initiate inappropriate patterns of social reproduction which may actually hinder or retard national growth and development. Williamson reiterates the questions of the World bank: Who shall be

educated? How? For what? At whose expense? At what expense?

Williamson stresses the disillusionment indicated by world social opinion, about the existing patterns of education, particularly for developing countries. Williamson's counterpoint to these questions is the role of education for economic growth. In the decade of the 1960s and onwards, economists and planners alike put their faith in investment in education. After World War II the speedy recovery of Germany and Japan brought the concept of human capital into focus. How far was economic growth dependent on human capital? Williamson argues that the question is a complex one, which is best investigated in the context of third world societies which currently face this specific problem.

In other words, Williamson offers a pessimistic view of the power of education to change societies; suggests that the conditions of the reconstruction of societies through education are now changed (compared with the early and mid-twentieth century) and raises the question of the appropriateness of any educational policies which do not address questions of local relevance, equality and rural-urban balance. In contrast, the Kothari Commission has stressed the role of education for modernization and the development of a socialistic pattern of society. For national reorganization and socio-economic development 'a simultaneous attack on all fronts' is recommended. The two main programmes discussed are development of physical resources and development of human resources.

Development of physical resources can be achieved through modernization of agriculture and rapid industrialization, science-based technology and heavy capital formation and investment. The

development of human resources (more important than physical resources) is to be achieved through the correct organization of education.

In other words, the Kothari Commission gives education the central position in economic and social development. It is to be the main instrument of change for national development and for fulfilment. The Kothari Commission is therefore optimistic of the role of education in socio-economic development. The main aim of this Commission is to identify the major programmes that can bring about this revolution in education. [40].

This contrasts strongly with the position of Williamson towards education and socio-economic development - a position of skepticism. While he accepts that the twentieth century 'developed society' is dependent *on high levels of investment in human capital formation.....Knowledge and skill which are integral..... to industry and commerce*, [41] he continues to question the role of education in economic growth, and investment in human capital for productivity whether in a developed society or a developing one; he remains skeptical about western models of education for such societies, and points to the need for an indigenous system of education.

This contrasts with the firm faith of the Kothari Commission in education as the main instrument of change, and its insistence that an effective system of national education should reach all the people, should help fulfil their aspirations and needs. In the Kothari Commission's view education has been an instrument of development in other countries and must prove the same for India.

In the chapters which follow these two models - these two ideological views - of education and development will be contrasted in terms of educational reform and educational practice in India. In practice, what has been done in India in the name of education for economic progress and development, what has been the nature of the search for a relevant pattern of education for a developing nation, and - in particular - what has been done in the three areas which the Williamson thesis stresses explicitly: the relevance of curriculum to development goals, what has been the effort to balance equality of educational opportunity with some necessary inequalities in education and how well have educational facilities redressed rural-urban imbalances in education?

This analysis is broken down into the following sub-themes: the role and relevance of curriculum in education - Williamson and Kothari; the relevance of curriculum - historical development - education commissions; the relevance of curriculum - current policies; the relevance of curriculum - current experimental innovations and practices.

Chapter III. Footnotes.

1. Bill Williamson, Education, Social Structure and Development, p.11.
2. Op. cit. p.12.
3. Ibid.,
4. Op.cit., p.13. [The phrase taken from Adam Curle, 1964, p.97, is cited by Williamson as being from A. Curle, Education, Politics and Development, in Comparative Education Review, vol.17.
5. Ibid. [The phrase taken from Ivan Illich, 1973, p.363, is cited by Williamson as being from Ivan Illich, Outwitting the "Developed" Countries, in H. Bernstein (ed.), Underdevelopment and Development: The Third World Today, London: Penguin, 1973.
6. Ibid., [Op. cit. p.362.].
7. Ibid., [The phrase taken from the World Bank 1974, p.11, is cited by Williamson as being from World Bank Education Sector, Education, New York: 1974.
8. Op. cit., p.14.
9. Op. cit., p.15.
10. Ibid., [The phrase taken from W.G.Bowen, 1968, p.11, is cited by Williamson as being from W.G. Bowen, Assessing the Economic Contribution of Education, in M. Blaug (ed.), Economics of Education, I. London: Penguin, 1968.
11. Op. cit., pp.15,16.
12. Op. cit., pp.4,5, [Emile Durkheim, the French sociologist



has written that *Education is the influence exercised by adult generations on those that are not ready for social life. Its object is to stimulate and develop in the child a certain number of physical, intellectual and moral states which are demanded of him by both the political society as a whole, and by the particular milieu for which he is specifically destined.* (p.4.).

According to this definition then *education is the organized intelligence of a society functioning to consolidate in each successive generation the values, norms and habits of thought which are embedded in its culture. Organized education in the form of schooling is only the mechanism through which the more general purpose is realized;...* (p.4.).

According to Durkheim *the form of education will vary according to evolutionary complexity of the society in question.* (p.4.).

Again, *For us...the principle object of education is not to provide the child with a greater or lesser degree of items of knowledge but to create within him a deep-lying disposition, a kind of perspective of the soul which orients him in a definite direction, not only during childhood but for life...* (Emile Durkheim, Education and Sociology, in A. Giddens, Emile Durkheim: Selected Works, p.208. London: Cambridge University Press, 1972.) Williamson, p.4.

However Durkheim's work rests on an undifferentiated view of society, hence he did not enquire about *whose values*

*form the central core of an educational system* (p.5.) - the most important question in societies with a complex and hierarchical division of labour. In such societies custom and tradition are no longer the authority against which educational values can be measured; in fact the educational field provides an arena for ideological conflict.]

13. Op. cit. pp.5,6. [Berger and Luckman discuss the phenomena of intersubjectivity and identity as aspects of social interaction and processes of world building which they themselves call 'the social construction of reality' (1966), (Williamson p.5.), Both of these problems relate to the way in which the distribution of power in society affect education and to the nature of the educational experience itself.

The link between the two problems is the phenomenon of knowledge and its role in achieving or not achieving, in the terminology of Berger and Luckman *the integration of an institutional order*'. (Williamson, p.6.: Berger P., and Luckman, T., The Social Construction of Reality: A Treatise in the Sociology of Knowledge, 1966, p.82., London: Penguin, 1966.) Further, they comment *If the integration of an institutional order can be understood only in terms of the "knowledge" that its members have of it, it follows that the analysis of such "knowledge" will be essential for an analysis of the institutional order in question.* Williamson p.6. Berger and Luckman, etc. Williamson comments from Berger and Luckman that this "knowledge" is not complex

theoretical knowledge or the codes of an official ideology. Rather it is *primary knowledge* or knowledge at the *pre-theoretical level*. (Williamson, p.6.)

From Berger and Luckman, *It is the sum total of 'what everybody knows' about a social world, an assemblage of maxims, morals, proverbial nuggets of wisdom, values and beliefs, myths and so forth, the theoretical integration of which requires considerable intellectual fortitude in itself, as the long line of heroic integrators from Homer to the latest sociological system-builders testifies.* (Berger and Luckman, etc., p.83. in Williamson, p.6.).1.

14. Op. cit., pp.7,8. [ Theorists of the Marxist framework of analysis in education - Althusser (1972) and Bowles and Gintis (1976) state that *the main function of education is to prepare people for their economic fate in capitalist production, either to be exploiters or to be exploited.* (Williamson, p.7.).

Education then needs to be studied in relation to forms of production and occupational placement, and according to Marxist theory education is thought of as subordinate to the economic order of society.

Bowles and Gintis point to 'the correspondence Principle' by which the educational system *tailors the self-concepts, aspirations, and social class identifications of individuals to the requirements of the social division of labour.* (Williamson p.7.: Bowles,S. and Gintis,H., Schooling in Capitalist America: Educational Reform and the

Contradictions of Economic Life p.129; London: Routledge and Kegan Paul, 1976.)

Bowles and Gintis are much more concerned with the way education relates to the economic organization of society. Berger and Luckman 1966, and Bourdieu and Passeron 1977 are, in contrast, although not in opposition, far more concerned with education and the broader realm of culture. They all, however, have a common preoccupation with education and social reproduction. (Williamson p.8.).

15. Op. cit. p.2.
16. Op. cit. p.3.
17. Op. cit. p.6.
18. Op. cit. p.7.
19. Op. cit. p.9.
20. Education Commission Report, 1964-66, Delhi: Government of India. 1966. [Kothari Commission.] p.4.
21. Ibid.
22. Ibid.
23. Ibid., [The phrase taken from R.Heilbroner, 1963, p.66, is cited by the Kothari Commission as being from Robert Heilbroner, The Great Ascent, New York: Harper and Row, 1963.
24. Op. cit., p.4.
25. Ibid.
26. Op. cit. p.5.
27. Op. cit. p.6.
28. Ibid.,

29. Op. cit., p.7.
30. Op. cit., pp. 7,8.
31. Op. cit., pp.8,9.
32. Op. cit., p.9.
33. Ibid.
34. Op. cit., p.10.
35. Ibid.,
36. Op. cit., p.11.
37. Op. cit., p.11-13.
38. Op. cit., pp.13-16.
39. Op. cit., pp.16,17.
40. Op. cit., pp.5-14.
  1. internal transformation of education so that it caters to the life, needs and aspirations of the people;
  2. a qualitative improvement and rise in standards so that it will be internationally comparable;
  3. expansion of education on the basis of man-power needs, with emphasis on equality of educational opportunity. (p.5.)

In order to achieve these national goals; education must be linked and related to productivity. Education for

Productivity is to be achieved through four programmes -

1. development of science as a basic part of education at all levels;
2. work experience as an integral feature at all levels; such a measure combines the advantages of formal and nonformal education. It is closely related to the central concept of Basic Education;

3. vocationalization of education especially at the secondary level to meet the needs of industry, agriculture and trade;

4. improvement in science and technology at the university level in research and particularly in agriculture and the allied sciences. (p.6.).

Towards social development the Commission has recommended social and national integration. In a country as large and diverse as India it is an essential towards national progress. Education can play an important role in this area by implementing changes and new programmes at both school and college level:-

1. the common school system should be introduced towards social equality;

2. a programme of social and national service should be initiated as an integral part of education at its different stages;

3. with regard to the language question, indigenous languages should be used as a medium of instruction, at both school and the higher education level, together with English and foreign languages like Russian at the secondary and university level. State languages should also become the languages of administration along with the prevailing English and Hindi. This would create true equality of opportunity in the administrative services.

4. the school can and must help in the promotion of national consciousness through the study of India's ancient culture,

in history, literature, the fine arts; and at the level of higher education, through the addition of philosophy, religion and architecture. Interstate summer camps at school and college level, the study of citizenship and the Constitution of India, must be promoted. (pp.9,10.)

International understanding and democratic values, must be encouraged towards modernization of society. Further towards this end a transformation in the system of education is necessary, from the traditional 'dependent' model to a socialist pattern relevant to national needs.]

41. Bill Williamson, Education, Social Structure, and Development p.12.

## CHAPTER IV.

### THE ROLE AND RELEVANCE OF CURRICULUM.

#### INTRODUCTION.

The purpose of this chapter is to review the relevance of curriculum to India's development needs, especially in the areas stressed by Williamson i.e. relevance in the curriculum, rural-urban imbalance and equality-inequality in education are discussed next.

The focus is upon the case study of India in relation to these issues. Education and socio-economic development is discussed at length mainly according to the Kothari Commission 1964/'66 and the ARTEP Mission Report in order to investigate the position of the three issues stressed by Williamson in Indian education and to enquire into the validity of the 'dependent' society pattern in relation to the current educational scene in India.

Therefore there is detailed investigation into manpower needs and curriculum in education, vocationalization of the curriculum, agriculture and work experience in the curriculum and the issues of vocational guidance and employment information, the role of teachers in a relevant curriculum, scholarships, the special needs of girls and women's education, and special education for the physically handicapped.

*Serious imbalances are observed between the skills generated by education systems and actual needs of most developing countries. In some areas, the number of graduates surpass the absorptive capacity of labour markets, while in others critical shortages in skills continue to create problems. These discrepancies between the supply of and demand for skills are caused by a*



*complex set of social, cultural and political conditions and aspirations which condition the development to respond to countries needs (sic) [1]. is accentuated by the fact that educational institutions have been borrowed from developed countries and have not acquired an indigenous character. [2].*

Williamson establishes his argument by quotation from the writings of well-known authors. Thus according to Williamson Tibor Mende has argued:

*As a matter of fact, much of education now dispensed in poor countries is not only irrelevant to the solution of the problems they face but tends to be positively harmful. It perpetuates contempt for menial tasks and widens the gulf between the privileged minorities and the under-educated or illiterate masses. Sometimes, with substantial foreign aid in the form of technical assistance, it stamps alien attitudes and values on minorities who, because of their foreign education, are destined to become members of the ruling groups. [3].*

In the area of the economics of educational planning, the issue of relevance of curriculum in particular contexts, has been hotly debated. Professors Balogh (1974), Anderson (1973) and Foster (1965) have all argued strongly in favour of rural training as against training given in urban schools and universities, in the context of Third World societies striving for development. The problem in general, seems to be that societies produce educated personnel who cannot be assimilated by the economy. Again Tibor Mende (1973) has noted that in the India of 1960-'61, there were over 1,192,000 professionals or post graduates in the labour force and ninety

percent of them held diplomas in law, arts and commerce. This was in a country where two-thirds of the employed are in agriculture. Graduate unemployment is endemic in India, Burma, SriLanka and Indonesia. Unemployment among secondary school leavers is similarly endemic in many societies of Africa and Latin America.[4].

*The effect of misalignment between manpower needs and educational outputs can, in the short run, be to reinforce underdevelopment by slowing down the growth of poor economies through bottlenecks in the supply of appropriately qualified labour in key sectors and thereby increasing a society's reliance on the import of foreign trained labour or the purchase of foreign training facilities.[5].*

It is at the lower levels of the labour market where highly trained manpower is not essential that the shortage exists. This is the case because in Third World countries only the white collar jobs are prized, as affording opportunities for social mobility as was the case in colonial days. Thus in Ghana efforts by the British colonial government to encourage technical education failed entirely.

The same comment is appropriate for India, where the introduction of technical education in the 1950s in a developing country proved to be a complete failure. The expectation for academic education in India prevents any attempt at restriction in favour of technical studies, aimed at rural change and low level technology. The consequence of such an attitude is "qualificationism" where paper qualification becomes the measure of

a person's capacity to perform a job, even when its technical nature does not require it.

*Ronald Dore has recently described this phenomenon as the 'qualification-escalation ratchet' and in so doing pointed to the paradox that: 'the worse the educated unemployment situation gets and the more useless educational certificates become, the stronger grows the pressure for an expansion of educational facilities.'*[6].

These issues, misalignment in supply and demand of manpower, failure of technical education, qualification escalation, and elitist attitude among the educated, will be illustrated in the discussions which follow on current situations in India.

A well-known feature of the educational scene is rural-urban imbalance, particularly in the developing countries; the poorer the society, the poorer is the education provision for rural areas, where illiteracy and dropout rates are higher than in urban areas. Also there are fewer schools and fewer teachers there. People tend to migrate from village to town, hence the urban demand for better and more education is high, while the rural areas remain educationally under-resourced. The best educational institutions which are usually urban-based tend to swallow the greater portion of educational finance provision, from the central or state government, leaving very little for rural institutions and the growth of education in rural areas.

Thus far educational planning has made small impact on rural-urban balance. Peter Donaldson has noted,

*If education is to act as an instrument of development policy it must be purged of its present overwhelming urban bias and disdain for the practical. All too frequently, the values which young people absorb at school and at university lead them to regard work in the rural sector as the hallmark of failure - and to seek, above all, employment which involves no dirtying of hands.[7].*

Many thinkers and writers of education in the modern era have discussed this problem, whereby the few educated in the traditional pattern of the adopted western model, are entirely divorced from the pattern of life which prevails for the majority of people.

In India, Mahatma Gandhi's Wardha Scheme of Education presented in 1937, may be correctly quoted here. According to this innovative pattern, the village and the rural area is the centre of educational activity while practical work is suited to the local region and forms the base of the curriculum pattern. An important feature is that the medium of instruction is the regional language.

Further Williamson has referred to Julius Nyrare's plea that education should be made relevant for Tanzania, instead of encouraging urban arrogance, towards the way in which the people actually live. [8].

Meeting the challenge of educational development in rural areas will involve innovations in existing inegalitarian structures of resource distribution and in conceptions of what it means to be educated well. (Case studies are given in Chapters VI and VII, which give further evidence of the changing conception of education in India.)

The third and final issue interconnected with relevance and balance in education, is equality and inequality. Inequality is 'maintained and legitimated through education.' There exists an immense amount of literature on this topic. Williamson quotes the World Bank Report to establish the general pattern.

*The regressive character of educational systems and policies is a prevailing feature in most cases, irrespective of the level of development of countries. Educational systems not only fail to ensure mass participation, as discussed in the previous section; they also practice discrimination in their process of selection, promotion and future determination of careers. They show an elitist bias, favouring urban upper and middle-income groups at the expense of the rural and urban poor.....*

*Students of higher income origin have a greater chance not only of access to education, but also of promotion within the system. This is seen in the socio-economic profile of the drop-outs, repeaters and successful students, and in the fact that middle- and upper-income groups are particularly over-represented in higher education. In some countries other factors, such as, sex, ethnic origin or religion, play a role which is frequently combined with the effect of income levels. These inequalities are aggravated by differences in the quality of teachers, educational facilities and other inputs between schools serving different geographic areas and income groups. [9].*

In under-developed countries rural-urban imbalance in resources is tied up with inequality. Education leads to higher incomes, authority and power. Williamson quotes from Gunnar Myrdal:

*Monopoly in education is - together with monopoly of ownership of land - the most fundamental basis of inequality, and it retains its hold more strongly in the poorer countries. [10].*

Educational inequality is more in evidence in poorer societies, but it exists in both rich and poor nations of the world, though it possibly inhibits economic development more acutely in poorer countries. Williamson follows the argument of Myrdal who has commented that the educated of South Asia are detached from the harsh realities known to the mass of the population. The most successful of these educated, are incorporated into government bureaux and business firms, thus achieving the aim of their parents to prevent them from manual work. The rest of the educated are then found to be unemployable.

The contribution to national development by both groups is found to be minimal: *In the lower strata of the employed and unemployed educated there is even less sense of identification with national interests.[11].* The consequence of this is that the ... *social processes which allow those with power to appropriate educational resources for themselves leave the poor not only poor but unable to perceive the structures which cause their poverty. [12].*

The theoretical work in this area has been done by Paulo Friere in Latin America (1972). Friere has discussed the phenomenon - 'culture of silence' in Latin America which is found wherever inequality and imbalance in education exists, for example in poor areas of modern cities in modern societies, as much as in rural areas of the underdeveloped world. Lack of educational facilities

means lack of perception in the social forces which shape current poverty.

Further lack of education diminishes the occupational opportunities of the people. Education is an important determinant of income in all societies but the correlation between education and earnings is greater in poorer societies than in rich ones. Hence the aspiration towards urban employment which may be traced back to structures of opportunities for employment in colonial times: The consequence is that *Because of the growing inegalitarian and urban concentration of educational resources the skills required for development are not diffused and encouraged throughout society, and manpower of the type that can be mobilized is not formed to the extent required. All societies exemplify these problems but each in different ways.*[13].

It must be noted that the educational problems under discussion, thus far, prevail in both under-developed and developed societies as well. In Williamson's argument, they are not particular to Third World societies alone. However these problems vary in dimension and pattern according to context. Making education serviceable in the fields of social and economic development is the problem of every country. Developed societies have no doubt achieved mass education, and higher education has been available on the basis of selection. But even these societies show evidence of the problem of social inequality. Selection in education is a case in point and the problem has not yet been satisfactorily resolved. Further the expansion in student numbers has placed a burden on the national economy and raised the important questions of what should be taught

and to whom. Another case of inequality is the regional imbalances of educational provision which still prevail, though solutions now exist through resource distribution and positive discrimination. Thus: *Qualificationism inflation, elitism, inequality and irrelevance while taking on a different character and having quantitatively different dimensions are thus problems of the developed world.*[14].

The difference in various social structures make their impact in the field of education. Schools and universities belong within a social structure and must cater to the needs of different groups in society. Therefore education and economic growth cannot be discussed separately from the institutional patterns which govern society.

Thus there is a need for classification of the different social institutions, as discussed in Chapter II, so that social, economic and political forces in different national contexts may be clearly identified. The role and relevance of curriculum may then be analysed within a particular framework of society, e.g. India within the 'Dependent Society' model of development.

#### SUMMARY OF WILLIAMSON'S POSITION ON CURRICULUM.

Williamson has discussed the role of curriculum for socio-economic development, through curriculum in relation to its relevance/irrelevance, balance/imbalance, and equality/ inequality in any given society. He has quoted several writers in education and society and given examples to indicate how curriculum may be dysfunctional for development in third world countries which have borrowed a western model of curriculum. Such irrelevant curriculum patterns contribute to inappropriate patterns of social reproduction.



He has investigated the role of curriculum in relation to supply and demand of skills needed for developing countries, i.e. in the area of development. His comment is that misalignment in supply and demand of manpower can result in underdevelopment. Further he has discovered patterns of curriculum to be positively harmful in that they perpetuate an elitist attitude among the educated who consider themselves apart from the illiterate masses.

Failure of technical education in countries like Ghana and India are the result of borrowing colonial attitudes to the white-collar jobs. The educated non-employment situation has resulted in qualification escalation, that is, the increased desire and effort for higher qualification, as its value tends to diminish with increase in unemployment.

In reference to rural-urban imbalance, Williamson has pointed out that educational provision for rural areas is poorest in poor societies, where illiteracy and dropout rates are higher. Rural areas remain educationally under-resourced. He has referred to lack of educational planning towards rural-urban balance. There is still an overwhelming urban bias and disdain for the practical in the field of education. Educational development in rural areas will need change in the existing inegalitarian structures of resource distribution and in the conception of what it means to be educated.

With reference to equality-inequality in education, Williamson judges that educational systems show an elitist bias favouring urban upper and middle income groups at the expense of the rural and urban poor. In some countries other factors like sex, ethnic origin, religion, combine with income levels to produce further

inequalities. Further it has been pointed out that these problems in education are not unique to the developing societies only, but prevail in the developed world as well.

Williamson's position on curricula for socio-economic development is one of ambivalence. He points out the irrelevances, the imbalances and inequalities in educational curriculum, obviously with a view to inspire change. Investigators within a particular social system, throw light on the causes for such inadequacies in the educational pattern; the socio-economic and political constraints responsible for lack of development are made known, so that positive recommendations and remedies may follow.

#### EDUCATIONAL CURRICULUM AND SOCIO-ECONOMIC DEVELOPMENT IN INDIA.

Educational curriculum and socio-economic development in India is now investigated against the background of the comments made in regard to developing and 'dependent' societies. Analysis of the social and economic situation in the country is based on the Kothari Commission Report and the international Asian Regional Team for Employment Promotion (ARTEP) Mission Report which focus on irrelevance in education, inequalities and rural-urban imbalance. This investigation will enquire the extent to which the educational pattern is 'dependent' and the extent to which Indian educationists are aware for the need for change.

The major issues discussed here are education and manpower needs, vocationalizing education, agriculture in education and work-experience, towards a more relevant curriculum for socio-economic development. The Kothari Commission Report has stressed

modernization and the development of a socialistic state, through a changed educational curriculum.

#### MANPOWER NEEDS AND CURRICULUM IN EDUCATION.

According to the Kothari Commission Report *Estimated requirements of manpower needs or available job opportunities form a good basis for planning the expansion of educational facilities.*[15]. As noted earlier the problem in developing societies is that a traditional western model of educational curriculum encourages students to consider white-collar work only, which results in unfilled job vacancies and educated unemployment as well. Such irrelevance in the curriculum points to a requirement for estimates of manpower needs. Such views are in contrast to Williamson's doubts regarding needs and its calculation.

However the Kothari Commission Report has pointed to three reservations in regard to this recommendation, firstly, the method of collecting data needs continuous improvement, and techniques of forecasting manpower needs should be continuously revised; secondly, emphasis must be laid on the quality of manpower produced; thirdly it is important to combine manpower needs with other criteria in planning the expansion of education.

The Kothari Commission Report has in general accepted the requirement of educated manpower according to the ISI/LSE Paper (Indian Statistics Institute/London School of Economics paper.) The estimates are for workers <sup>e</sup>required, and output of educated personnel during the next twenty years. It is therefore necessary that estimates are continuously revised in the light of the best

available up-to-date data. Educational policy based on these estimates point to the need for:-

1. restriction of unplanned and uncontrolled expansion of general secondary and higher education, in order to avoid further educated unemployment;
2. intensive efforts to vocationalize secondary education and to develop professional education at the university stage; and
3. the need for devising suitable machinery at both national and state levels to relate estimates of manpower needs effectively to output of the educational system, so that in general every job would find a suitably trained person, and every trained person would find a job. [16]. Curriculum change would then be based on manpower needs.

#### Administration of Manpower Needs.

As the machinery for manpower planning at the national level for all sectors is the Planning Commission, the recommendation is that it set up a Standing Committee for Manpower which would be responsible for preparing and revising manpower forecasts, to help in the output of the educational system and for different categories of specialists. At the state level similar bodies should be organized. At the national level manpower planning should relate the output of the educational system to manpower needs in higher education in the fields of engineering, agriculture, medical education and preparation of teachers for higher education. The planning of the remaining sectors of employment should be conducted at state level by state governments. Manpower needs should further

form the basis to expansion of vocational education at both school and college level on priority terms.

School education should be planned by specially organized District authorities in collaboration with national bodies at the Centre. To assist in this work local manpower needs should be investigated. [17].

The ARTEP Mission Report findings support those of the Kothari Commission Report. Generally speaking the content of education, or curriculum, in India is irrelevant to the needs of prospective job seekers.

#### Restriction of Unplanned Expansion in Education.

The attention of the ARTEP Mission Report is focussed on the employment problem. To this end, it considers it necessary to restrict the flow of the educated unemployed in the country. The Kothari Commission Report has also stated the need to reduce the growth of enrolment at higher levels of education, though strong political opposition exists against such policy. Further the ARTEP Mission Report points to the need for reappraising India's fee policies as a measure of limiting the flow into higher education, though this seems an impractical policy when viewed from the political standpoint.

Along with restriction of unplanned expansion in education, the vocationalization of secondary education is important towards building a relevant, equal and balanced curriculum. Further, teaching method is also important in creating a relevant curriculum.

#### Teaching Method For A Relevant Curriculum.

The ARTEP Mission Report has pointed to the classroom teaching method and the crowded curriculum as added causes for an irrelevant curriculum. Teachers often lack confidence and deliver a monologue to students who are conditioned to receive it passively. The result is a negative influence on student personality, and diffidence on their part when faced with new problems.

The ARTEP Mission Report argues that the reason for the monologue method of teaching is the overcrowded curriculum, with which teachers and pupils have to cope. The time given to the process of teaching and learning needs to be increased, if the curriculum is to become relevant, where children have time for class-room participation and building their own personalities towards a successful, meaningful future.

#### VOCATIONALIZING THE CURRICULUM.

An important step towards making the curriculum relevant is vocationalization, at the various levels of education depending on its feasibility. Therefore a prior, thorough investigation of the best means and approach to vocationalize the curriculum, is necessary.

As pointed out further on, and in the last chapter, vocationalization of education had been discussed in India since the late nineteenth century, but little action had been taken. However attention has now been focussed increasingly on this issue, and in 1966 the Kothari Commission Report recommended that about 20% of the enrolment at the lower secondary stage and 50% at the higher secondary stage should be for vocational education, as against 3.5% respectively of an earlier period.[18]. However the issue involves a

critical investigation regarding the extent to which secondary schools should be vocationalized in view of the manpower needs on the one hand, and the higher costs involved in vocationalizing education, on the other.

#### Data On Manpower Needs Required.

One major reason for the lack of effective action, in this field of vocationalization of the curriculum and education in general, is the absence of realistic economic plans at the State and particularly the District level, which could specify manpower targets.

Discussions have remained general and failed to suggest concrete steps - a situation related to lack of personnel. In consideration of this in 1970 the Ministry of Education established Intensive Educational District Development Projects, in one district each in the states of Bihar, Maharashtra, Mysore and Punjab, to identify and operate experimentally, concrete programmes which would link the district educational structure with its overall economic and social development, with special reference to employment, productivity and social justice.

*Occupational and educational surveys were carried out which disclosed emerging job opportunities and potential needs for vocational preparation. This is the first attempt in India to scrutinize the relevance of educational services at local level.[19].*

#### The National Staff College.

Secondly the ARTEP Mission Report has commended the establishment of the National Staff College for planners and administrators who can reorganize planning at both State and

District levels. Such planning personnel could make vocationalization possible at all necessary levels of education in order to meet specific, local manpower demands. However the forecasting of manpower demand, for a future period of more than four to five years, still remains a problem because of changing socio-economic needs with the passage of time. At present there is no statistical data regarding the existing extent of vocationalization and its relationship to market demand. In the light of these facts it is unwise to decide on a uniform percentage of students on a countrywide basis, who should be enrolled in vocational education, since demand throughout the country varies.

It will thus be seen that vocationalizing the curriculum towards relevance and socio-economic development, is a critical venture, which contrary to expectation may even prove disastrous. A great deal of investigation is therefore needed before the secondary school curriculum is successfully vocationalized.

#### Number of Vocational Subjects At Secondary Level Are Limited.

The ARTEP Mission Report also noted that another feature of the existing system of education is that the secondary schools offer a most limited number of vocational subjects, even though less than half of the secondary school leavers proceed to higher education, and dropouts have small chance of further education even if they desire it at a later stage. Such a situation indicates that a number of prevocational subjects should be provided at the secondary level.

#### Multipurpose Schools.

Further the ARTEP Mission Report noted that with reference to multipurpose schools which are supposed to be vocation-based, one



reason for their failure was that subjects remained optional so that many students irrespective of aptitudes and ability, elected for science courses which gave them advantage in regard to university entrance, instead of vocation-oriented courses.[20]. Thus the Report argues that it is *...essential that a number of prevocational subjects be made obligatory for all the students irrespective of their future careers and that they be considered as examination subjects which would qualify students for higher levels of education.*[21].

#### Schools For Dropouts.

With regard to catering for dropouts the ARTEP Mission Report has emphasized the need for opening schools for those unserved by educational institutions.

*There is no need to adhere to the traditional concept of schooling, which requires academic qualifications. For example, agricultural schools at the higher secondary level should recruit those fourteen years and older who have interest and aptitudes in agricultural jobs such as farming, cattle breeding, bee-keeping, poultry, and food processing, and who are sufficiently capable to follow and benefit from the courses. Those interested in pursuing further academic education during the above schooling period should be provided means of obtaining required credits through correspondence.*[22].

Such measures to vocationalize curriculum will create a relevant system of education. One useful example, to which the Report draws attention is Delhi University.[23].

#### A Project On Manpower Needs.

In connection with further investigation of manpower needs and effort toward making the curriculum relevant to the employment market, a special Project sought concrete answers to such questions as, what types of education are required to satisfy the demands of the labour markets, and where were the unfilled jobs to be located? The project party visited such organizations as the Ministry of Labour, Employment Exchanges, Association of Manufacturing Employers, private firms and public undertakings. They found most firms were keen to assist the University by providing available facilities and part-time teaching staff. [24].

The Project Team suggested that vocational subjects should be offered to students only after establishing close personal liaison with employers as this could have far-reaching benefits for them. Further, prospective graduates with no guarantee of employment, but with solid preparation would feel more confident and in position to know where jobs could be located. Further a number of universities could be provided additional financial, and organizational support to undertake innovative activities. Another essential step would be to remove administrative hindrances towards collaboration between firms and universities.

#### Polytechnic Education.

In view of the above investigation it must be stressed that polytechnic education should be adapted to the changing needs of the Indian economy. In the state of Maharashtra, polytechnics in theory are free to design their own curriculum but in fact, they have little control over planning and organization of technical education, or forming links with local industries.

However there are isolated private projects in which private donations play a significant role together with government funds, in making curriculum relevant to the needs of industry and business. This indicates a community awareness of curriculum irrelevance to societal needs. While it is difficult to demonstrate that the private management of a college is more conducive to innovation, it is true that many government colleges have little scope for innovation due to rigid bureaucratic control.[25].

#### Collaboration of Firms with Education.

Such projects have given proof of the active interest shown by leading firms in transforming commercial education, by participating in educational working committees and welcoming students for practical training. Employers also benefit from such active participation in the world of education. The two obvious advantages are that they obtain better qualified and useful employees and that they save substantial training expenditure.

#### ARTEP Mission Recommendation.

The AMR recommended active support by the Government for such private innovative projects. They bypass the overburdened administrative machinery and offer scope for valuable shortcuts towards much needed curriculum reforms. [26]. The Kothari Commission Report has stressed that the current *curriculum places a premium on bookish knowledge, and rote-learning which makes inadequate provision for practical activities and experience and is dominated by examinations external and internal.*[27]. Efforts to rectify this situation have been limited. Hence the significance of the above investigations, projects and recommendations.

## AGRICULTURE IN THE CURRICULUM.

The importance of agriculture in the curriculum for productivity and economic progress has been stressed by the Kothari Commission Report. The aim is alleviation of food shortage in the country.

*Agricultural education at the secondary level seems surprisingly negligible in comparison with the economic importance of agriculture in India. The enrolment in agricultural schools at the lower secondary level was 7939 and 69% of this figure was in the state of Maharashtra alone. [28], [29].*

The Kothari Commission Report comments that attempts to train in agriculture at the *primary and lower secondary levels have failed and further efforts should be held in abeyance.*[30]. Instead of any narrow vocational training at the school level, institutions should rather concentrate on providing a strong general education with emphasis on mathematics and science in preparation for the change that must characterize future agriculture. Further, the proposal for setting up a large number of junior agricultural schools should be abandoned. Agricultural education should be part of general education.

Undergraduate and post-graduate courses in colleges and universities should give prominence and orientation to agricultural and rural problems. The UGC (University Grants Commission) should involve itself in this matter. The agricultural universities and polytechnics should assist in raising professional and technical competence of specialists through special courses, i.e. extension programmes. The ICAR (Indian Council of Agricultural Research) should undertake the responsibility for agricultural education being

launched on the basis of an integrated approach i.e. teaching, research and extension programmes. Inclusion of agriculture into education is for the purpose of vocationalizing curriculum and establishing it as more relevant to national needs, and moving away from a traditional dependent western model of education.

A similar argument is offered for work experience in the curriculum. The Commission recommended *...that work-experience should be introduced as an integral part of all education, general or vocational, and defined it as participation in productive work in school, in the home, in a workshop, on a farm, in a factory or in any other productive situation.*[31].

The purpose of introducing work experience is to change the attitude of the pupils toward manual work. Those concerned with employment strategies, as well as some educationists, expect work experience to increase employability and generate initiative for self-employment among school leavers, who otherwise would have no preparation for work.

Others seem quite skeptical about such far-reaching positive effects on attitudes toward manual work, and emphasize its mainly educational role in cultivating problem-solving attitudes and active thinking habits. Nonetheless it becomes clear that inclusion of work-experience in the curriculum means a more relevant curriculum, one that is more job-oriented and related to national needs and economic development.[32].

The ARTEP Mission Report observes that *the Ministry of Education was not in a position to describe the implementation of work experience throughout the country.* [33]. Therefore the Mission

obtained information that the Maharashtra State had developed the best programme of work-experience thus far and accordingly investigated it.

They found it to be a large-scale experimental programme designed to remove dichotomy between 'cultural' and 'vocational' education; further, to reduce the existing emphasis on book-learning, and to familiarise pupils with the world of work; to highlight the importance of mathematics and science in relation to modern production; and further to enable students to discover their aptitudes and interests through a wide variety of jobs. *One big achievement observed is that children seem happy with this programme and thus involved more actively in these lessons than in ordinary subjects. In view of the history of education in India, this could significantly change the learning pattern.*[34].

However schools, in general, are still operating very much in isolation from the surrounding world of work, whereas it is essential to expose children to the real circumstances of work besides the class-room atmosphere only, which remains unrealistic to life. Furthermore the regular teachers rather than the practitioners of various trades fail to reflect real conditions of work. Many teachers use teaching methods similar to those used in traditional subjects. After taking a week's training course, teachers are unlikely to adopt the appropriate techniques and attitudes needed for the purpose:

*Under existing practice, it seems quite uncertain that this programme alone can bring about a positive change in students' attitudes towards manual work, including farming, because the*

*formation of certain attitudes towards manual work, is not only an educational process but also a social one. [35].*

In other words, schools can build up positive attitudes to manual work through encouragement of the concept among students; but the programmes of work-experience can affect only marginally their final decision for jobs involving manual work. Rather, the raising of economic rewards and social status related to those jobs, is of chief importance.

Similarly, vocational guidance and employment information should form part of the school curriculum, but though this has been implemented in several schools in several areas, career guidance in schools is still quite unsuccessful. Students learn of employment opportunities and jobs suited to their educational qualifications, interest and aptitudes through parents, relations and friends. The students need is concrete information and specific job offers rather than impractical and ideal suggestions on their careers.

The ARTEP Mission Report's findings were that schools did not utilize the career pamphlets made available by the Central Institute of Research and Training and various state governments. The numbers of counsellors in schools were small, their teaching load heavy and the information they provided was abstract rather than concrete. Also due to lack of an adequate communication network, individual schools were not provided the latest information on labour market trends, and specific jobs available, unless schools were located close to employment exchange offices.

At the school level however the problem of unemployment has not yet become a serious concern. Most schools unfortunately function

independently without regard to the relevance of their service to other socio-economic systems. Talks on careers, a widely used method of communicating career information to students are at present included under extra curricular activities though not mentioned in syllabi and courses for Recognized Schools e.g. in the Delhi Administration. Students and parents do not seem involved in Guidance activities in a positive way. However there is need for Vocational Guidance and employment information to become a more serious part of the school curriculum.[36].

#### TEACHERS AND THE CURRICULUM.

The Report finally notes the importance of the teacher in changing the curriculum into one relevant to socio-economic needs and progress. The teacher must be interested in educating students to the fullest extent and enabling them to develop themselves. The student's interest in the outside world and their future careers, and their ability to apply their basic knowledge and techniques, is most important. Teachers must also cope with various external factors, such as exam requirements, certain rules, and non-educational needs of students as well. It is they who can change the daily process of education, and thus the development of children, even within the present framework of education, with its existing limitations. Towards this aim teachers should be provided with opportunities and stimulus to initiate their own innovative activities for a more relevant curriculum. [37].

Finally, toward equality and balance, the Kothari Commission Report has commented on the following areas in education - scholarships, the special needs of girls and women's education,



special education for the physically handicapped and regional imbalances.

Equalization of educational opportunities has been cited as one solution to the socio-economic problems of the country. *The country should work towards a stage when all education would be tuition free.* [38]. Other private costs in education have increased greatly, and efforts are needed to reduce them. In the meantime the Kothari Commission Report has outlined a system of scholarships which need to be fully implemented as soon as possible. At the school level, both, scholarships for talented students, and quality institutions to cater for them are required.

Scholarships are recommended for every level of education, for resident students also, and particularly at the higher levels of education. The scheme of national scholarships should be expanded, UGC scholarships encouraged, scholarships for vocational education introduced on an egalitarian basis, and scholarships abroad for the most talented students need to be increased.

Loan scholarships should be available particularly for students in the sciences and in the professions. If these students should enter the teaching profession then one-tenth of the loan should be cancelled for each year of service. Such a policy might encourage good students to enter this profession. [39].

Girl's needs require preferential treatment in the allotment of scholarships. The education of women needs special attention. Three committees have investigated into problems attached to women's education. The recommendations of the National Committee on Women's Education are endorsed by the Kothari Commission Report. Women's

education needs to be regarded as a top priority programme for some years to come. Special machinery both at the Centre and State levels, is needed to deal with this branch of education. [40]. Similarly the physically handicapped children need special education facilities. Although teachers and finances in this area of education are limited, effort and progress in this field are essential.

#### REGIONAL IMBALANCES.

Regional imbalances, and unequal development even between districts in the same state, exist. The Report argues that these must be reduced if equal opportunities in education are to become a reality. Thus general education is under-developed in some areas, and calls for a planned policy of equalization.

In regard to the existing programmes for the 'schedule castes' these should be continuously expanded. Education for the tribal people needs great emphasis. The language, life and environment of the people must be kept in focus when the school curriculum is organized, and teachers and workers should slowly be recruited from among the local people. [41].

#### CONCLUSION - THE KOTHARI OR EDUCATION COMMISSION 1964/1966 ON CURRICULUM.

In conclusion, the position adopted by the Kothari Commission Report to educational curriculum is one of faith in its capacity for national development - social, economic, political. Hence the criticism of inadequacies in the existing traditional pattern of the curriculum, in which it has been supported by the ARTEP Mission Report. Hence the recommendation for change, so that the Indian curriculum pattern should satisfy the needs and aspirations of the

people. To this end the ARTEP Mission Report conducted its own investigations and submitted its own recommendations, which in the main, supported the Kothari Commission Report. The practical measures discussed within the chapter, are towards a relevant, equal, and balanced curriculum.

The Kothari Commission Report has given abundant evidence of its faith in education for modernization, and in building a democratic-socialist state, as this is understood in India. Hence curriculum change is with this purpose in view.

Therefore the stress is on a new curriculum pattern centred in man-power needs. Vocationalizing the curriculum at all levels of education has become a need of utmost importance. The stress on agriculture in the curriculum at both school and college level is based on the importance of agriculture in the Indian economy.

Work-experience in the school curriculum is designed to change social attitudes among the educated towards manual work. Otherwise an elitist attitude prevails among them. Its significance for job-orientation is however doubted by the ARTEP Mission Report.

Equality, that is, access to the various aspects of the curriculum by all sections of the people irrespective of sex, caste, or class, is offered by the new system, which recommends special attention to the needs of girls and women, the handicapped and the scheduled castes. Scholarships are recommended for them, and particularly in the case of study for the professions, science and study abroad.

It is important at this point, to note that the investigations into curriculum needs and recommendations of the Commission

highlight the fact that this Commission is in sympathy with the skeptical position adopted by Williamson in relation to the western model of curriculum for a developing nation. Both Williamson and Kothari in unison see western forms of curricula as irrelevant or dysfunctional to development. Both consider the borrowed western curriculum for developing societies as responsible for generating an inappropriate pattern of social reproduction.

But whereas Williamson shows no awareness that the developing nations have noted these inadequacies in their traditional, inherited, educational structures, the Kothari Commission has already listed the shortcomings of the educational system and curriculum, and has accordingly made proposals for radical change, as has been seen in the last two chapters. These recommendations are evidence of its interest in the relevance, equality and rural-urban balance of education.

#### GENERAL CONCLUSION.

The role of curriculum has been considered in this chapter. The first analysis was of Williamson's views in relation to the three main issues identified by him, that is, relevance/irrelevance, equality/inequality, and balance/imbalance in education.

Emphasis has been laid by Williamson on the misalignment in supply and demand of manpower which can result in underdevelopment, and further the failure of technical education in developing countries has been noted. Well known writers in education, are quoted by him, as being strongly in favour of rural training as opposed to training in urban schools and universities, in the context of Third World developing societies. It is at the lower

levels of the labour market where highly trained manpower is not essential, that the shortage exists.

The expectation for academic education rather than technical education results in the phenomenon of 'qualification-escalation', since all those who do not find suitable jobs after acquiring their academic degrees, continue into higher levels of education and aim for still higher qualifications.

This situation is true of the educational scene in India though evidence further on, and in later chapters, establish the efforts of Indian educationists to change to a relevant system of education which would suit the needs of the people.

In relation to rural-urban imbalance in education, Williamson has noted the lack of provision for rural areas. Urban areas swallow the greater part of educational finance. Williamson is valid in his perceptions thus far, but evidence from the study on India proves that changes have been formulated and implemented already. The provisions being made for the rural areas and the under-privileged urban areas in India are fully described and discussed in Chapter VI and VII.

Further criticism is in regard to the lack of educational planning. Students from the system have a disdain for manual work and occupation in rural areas. White-collar jobs are prized above all others. However, the changes in curriculum in India as recommended thus far and in chapters to follow, prove that Indian planners in education have proposed wide changes in the curriculum to include, for example, work-experience, agriculture, and vocational training towards relevance in education and socio-

economic development. In the context of such changes, the Wardha Education Scheme introduced by Mahatma Gandhi as early as 1937 is of significance and therefore quoted here. The village and rural areas is the base and centre of educational activity. Local work and activity is at the centre of the curriculum, and the medium of instruction is the mother-tongue or local language.

In connection with the third interconnected issue: equality and inequality in education, Williamson is of the opinion that inequality is 'maintained and legitimated through education.' The World Bank's opinion is quoted in support of his statement. In under-developed countries rural-urban imbalance is tied up with inequality. Educational inequality is more in evidence in poorer societies but it still exists in both rich and poor nations of the world, though it possibly inhibits economic development more acutely in poorer countries. In such environments the educated are detached from the harsh realities known to the mass of the population. They are incorporated into government bureaux and business firms, but together with their unemployed colleagues their contribution to national development is minimal. Lack of educational facilities means lack of perception of the social forces which shape current poverty, and lack of education diminishes the occupational opportunities of the people.

The counterpoint to this analysis by Williamson was the investigation of assumptions about the Indian educational scene through the recommendations of the Kothari Commission Report and the ARTEP Mission Report. The foregoing analysis of these recommendations gives evidence of an all-round effort to overcome

those structures in education. Williamson has pointed to these inadequacies in education, in developing countries, but without showing awareness that these societies are striving to achieve precisely such goals. However the Kothari Commission Report 1964-'66 and the ARTEP Mission Report of a decade later themselves stressed relevance, equality and balance in education, and their absence, and offered recommendations to redress these imbalances in education. For example, on relevance, the emphasis was firstly on manpower needs and curriculum in education. The Kothari Commission Report stated that *estimated requirements of manpower needs or available job opportunities form a good basis for planning the expansion of educational facilities.* [42]. The Commission in general accepted the requirement of educated manpower according to the Indian Statistics Institute/London School of Economics paper. It was recommended that manpower needs should form the base to expansion of vocational education at both school and college level. Human resource development was accepted as central and relevant in the new educational pattern in India, in contrast to the position of ambivalence adopted by Williamson earlier in Chapter II on this issue.

The ARTEP Mission Report on analysis, was found to support the Kothari Commission Report's recommendations. It discussed the problems of restricting the unplanned expansion in education, especially in the light of demand for academic education. A further important step towards a relevant curriculum is vocationalization, recommended by both the Kothari Commission Report and the ARTEP Mission Report. The latter has investigated the problems of

vocationalization in practice and found a vast discrepancy in educational training as related to jobs actually available.

Therefore the pertinent question arises regarding the extent to which secondary schools should be vocationalized, in view of the meagre existing knowledge on manpower needs, on the one hand, and the high cost of vocationalizing education on the other. Efforts in this direction could prove disastrous.

The serious problem remains that precise data on manpower needs is not available, though positive efforts in this direction have been made, and recommendation for new policies exist. The AMR has commended the National Staff College which could prepare personnel for the specific task of vocationalizing education at different levels in order to meet specific manpower demands. They could contribute fine service in designing a relevant curriculum.

It is noted that the number of vocational subjects offered at the secondary level of education are too limited and yet on the other hand the earlier established multipurpose schools were a failure. It is now recommended that pre-vocational subjects should be obligatory; that differentiation is necessary between higher secondary education with prevocational subjects, and vocational education directly linked with employment; that vocational subjects should be based on local needs and student aptitudes. These measures would aid toward a relevant, equal and balanced educational curriculum.

In the area of higher education, it is noted that the Delhi University has taken a great step forward in order to make academic education more relevant to the economic needs of the country. In a



pilot programme, it vocationalized 30% of the courses in the College of Professional Studies, at the B.A. Pass degree level, and expected to diversify further in order to suit employment needs.

A project on manpower needs investigated a limited field and identified potential if not actual need for specific jobs which could not be filled by students studying the traditional courses. Industrial firms were found to be interested in collaborating with universities by providing available facilities and part-time staff towards encouraging closer ties between education and the world of work. This was commended by the ARTEP Mission which further suggested that administrative hindrances towards such collaborations should be removed, so that universities were free to organize their own programmes. Such efforts are towards vocationalizing curriculum and building a relevant system of education for national development.

In view of the above investigation and results, the Report advised that polytechnic education should be readapted to the changing needs of the Indian economy and be provided with the freedom to design its own curriculum and form links with local industries.

In regard to agriculture in the curriculum the Kothari Commission Report has stressed its importance towards productivity and economic progress. It is recommended that agricultural education should be part of general education and could be part of the work-experience programme at the school stage. The agricultural universities and polytechnics could conduct extension programmes for the improvement of specialists in the field, and for helping farmers and the rural community. The inclusion of agriculture into education

is a major step towards vocationalizing curriculum, and moving away from the traditional western model in existence.

Work-experience in the curriculum is recommended for general and vocational education by the Kothari Commission Report. It is defined as participation in productive work whether in school, home, farm or factory. Its purpose is to change the attitude of people towards manual work, and create a job-oriented, relevant curriculum.

A further recommendation towards a relevant curriculum is the inclusion of vocational guidance and employment information in the curriculum, but in spite of its implementation in several schools in several areas, it is not a popular programme. However it is important that it become a more serious part of the school curriculum.

Stress is also laid on the role of the Teacher in the process of changing the curriculum to a relevant one. The Teacher must be provided with opportunities and stimulus for initiating innovative activities to be included in the curriculum.

Finally the Kothari Commission Report has made recommendations for special attention to the education of girls and women, to facilities for the handicapped, to minority groups like the schedule castes and to regional imbalances between two areas, or two sections in the same area. For the equal and balanced distribution of curriculum to all sections of society, a scheme of national scholarships is recommended, to be given on an egalitarian basis whether in vocational education, or for talented students to study abroad, or in the sciences and professions at home. Girls' needs are

specially recommended as requiring preferential treatment in the allotment of scholarships.

In regard to the minority group of scheduled castes and tribes, educational programmes are to be expanded to include the life and culture of the people. Teachers and workers for the new curriculum must slowly be recruited from among the local groups.

In other words, the Kothari Commission Report and the ARTEP Mission Report have given clear evidence that Indian educationists and planners have widely changed the curriculum through investigations and innovative recommendations. According to the new system which has introduced work experience, vocationalization, and agriculture, the educated should no longer remain detached from the harsh realities known to the mass of the population, as has been the case with educated persons in developing societies in the past, as noted by Williamson.

All of these recommendations are further evidence of national interest in a transformation of education from the traditional dependent model to an indigenous relevant one which caters to equality and balance as well. The awareness shown by such recommendations of issues of dependency and of efforts to contradict the inappropriateness of traditional, inherited forms of education contrasts strongly with Williamson's theoretical assertions.

Chapter IV. Footnotes.

1. Bill Williamson, Education, Social Structure and Development, p.20. [The quotation taken from The World Bank Report 1974, p.20, is cited by Williamson as being from World Bank Education Sector, Education; New York; 1974.]
2. Ibid.
3. Op. cit., pp.18, 19. [The quote taken from Tibor Mende, 1973; p. 101, is cited by Williamson as being from Mende, T. Aid to Recolonisation, London: Harrap, 1973.
4. Op. cit. p.19.
5. Ibid.
6. Op. cit., p.20. [Quotes taken from Ronald Dore, 1976, p.5, is cited by Williamson as being from Dore R., The Diploma Disease. London: Allen and Unwin, 1976.
7. Op. cit., p.17. [The quote taken from Donaldson, P., 1971, p.124, is cited by Williamson, as being from Donaldson, P., Worlds Apart. London: Penguin, 1971.]
8. Ibid.
9. Op. cit., pp. 20, 21. [The quotation taken from The World Bank Report, 1974, pp.33,34 is cited by Williamson, as being from World Bank Education Sector, Education. New York, 1974.]
10. Op. cit., p.21. [The Phrase taken from Gunnar Myrdal 1973, p.199, is cited by Williamson as being from Myrdal, G., The Effect of Education on Attitudes to Work in R. Jolly, E. de

Kadt, H. Singer and F. Wilson (eds.) Third World Employment Problems and Strategy. London: Penguin, 1973.]

11. Op. cit., p.22. [The phrase taken from G. Myrdal 1973, p.199, is cited by Williamson as being from Myrdal, G., The Effect of Education on Attitudes to Work, in R. Jolly, E. de Kadt, H. Singer and F. Wilson (eds.) Third World Employment Problems and Strategy. London: Penguin, 1973.]
12. Ibid.
13. Op. cit., p.23.
14. Ibid.
15. Education Commission Report 1964-'66. Delhi: Government of India, 1966. [Kothari Commission.] p.625.
16. Op. cit., p.626.
17. Op. cit., pp.626, 627.
18. Asian Regional Team for Employment Promotion, Generating Employment for the Educated in India. Geneva: International Labour Office, 1975. [ARTEP Mission Report.] p.46.
19. Op. cit., p.48.
20. Ibid.
21. Op. cit., pp.48, 49.
22. Op. cit., p.49.
23. Op. cit., pp.46, 47. [The facts quoted are cited by the ARTEP Mission Report 1975 as being information obtained by an interview with the Project Leader, College of Professional Studies, University of Delhi.]  
  
[As a first venture at vocationalizing education in Indian universities, the University of Delhi introduced ...the

*following vocational subjects in the College of Professional Studies for the B.A. (Pass) as a pilot programme: Tourism, Book Publishing, Office Management and Secretarial Assistance, Insurance, Retailing and Trade, Foreign Trade, Store-Keeping and Stores' Accounting, Library Science and Personal Secretary Programming. (ARTEP Mission Report, p.46.)*

400 out of 16,000 students were enrolled in B.A. (Pass) courses. About 30% of the courses are vocational and 70% of the courses are allocated to traditional subjects.

*It is the future intention to spend 60% on vocational subjects, with the addition of such new subjects as Child Care Services and Pre-School Training, Hotel Management and Food Services, Textiles and Clothing Work, Instrument Technology, Computer Science and Electronics. On the other hand because there is no guarantee of actual employment after these courses, diversification is considered more desirable than an increase of intake in each course. This pilot project was started three years ago, after graduates began to suffer seriously from unemployment due to the 1968 recession. (ARTEP Mission Report, pp. 46,47.)]*

24. Op. cit., p.47.

25. Op. cit., pp.44, 45.

26. Op. cit., p.45.

27. Ibid. [The quoted information is cited by the ARTEP Mission Report as being obtained through the interview with the Chairman, Central Board of Secondary Education.]

28. Ibid. [The quoted information is cited by the ARTEP Mission

Report as obtained from the Statistics Division, Ministry of Education and Youth Services.]

29. Ibid. [As example of the situation at the district level, Ludhiana, the centre of the Green Revolution in the Punjab has 120 High and Higher Secondary Schools, out of which only eight schools offer agricultural subjects.

*While the organization of short training courses for farmers in about 90 farmers Training Centres is a step in the right direction, more systematic scientific education should be undertaken as an integral part of secondary education. (ARTEP Mission Report, p.45.)*

30. Kothari Commission Report, p.657.

31. ARTEP Mission Report, p.50. [The ARTEP Mission Report cites the quotation as being from the Kothari Commission Report, p.13.]

32. Op.cit., pp.50, 51.

33. Op. cit., pp.51, 52.

34. Op. cit., p.52.

35. Op. cit., p.53.

36. Op. cit. pp.54, 55.

37. Op. cit. p.56.

38. Kothari Commission Report, p.627.

39. Op. cit., pp.628-630.

40. Op. cit., p.631.

41. Op. cit., p.630.

42. Op. cit., p.625.

## CHAPTER 5.

### REVELANCE OF CURRUCULUM \_ THE HISTORICAL DEVELOPMENT OF CURRICULUM.

#### INTRODUCTION.

The purpose of this chapter is to analyse the historical development of curriculum in India, with special emphasis on the relevance of curriculum to Indian needs as it evolved.

The argument of the chapter is that - in Williamson's terms - a dependent pattern of curriculum development can be identified, characterised by the destruction of indigenous educational institutions, and the creation of a curriculum which served the interests of the colonial power in economic and political terms.

The structure of the chapter is linear in time from the end of the eighteenth century when the British arrived in India, through the nineteenth century when they slowly settled into firm occupation of the country, to the early twentieth century when they faced strong Indian reaction, until their final withdrawal from India. Thereafter, educational thought in India continued to evolve after 1947 when it felt the impact and influence of American and Soviet aid, advice and educational activity.

Williamson's central theoretical argument is that curriculum in developing societies is not relevant to those nations' socio-economic and developmental needs. According to Williamson and the authors quoted by him the foreign western model of education is normally the cause of the main problem which is that, in general, developing and dependent societies produce educated personnel who cannot be assimilated into the economy. The educated prize white-collar jobs only as affording opportunities for social mobility. But such jobs in the numbers required



do not exist, while at the lower levels of the labour market there is a shortage of manpower.

These inequalities, according to Williamson, are *maintained and legitimated through education*. [1.] Discrimination exists in the processes of selection, promotion, and future determination of careers. There exists an elitist bias so that urban upper and middle income groups are favoured as against the urban and rural poor. Middle and upper income groups are particularly over-represented in higher education. As noted earlier, sex, ethnic origin or religious factors combine with income levels to produce and maintain inequalities in education. Furthermore there are differences in the quality of teachers, educational facilities and other inputs between schools of different areas and income groups. [2.] Equally, educational provision for rural areas is scarce while illiteracy and drop-out rates are high. They have fewer schools and fewer teachers. People tend to migrate from village to town, hence the demand for education in urban areas is high, leaving the educationally less popular rural areas educationally under-resourced. Educational finance provision from the Central and State governments is usually spent on the best urban-based educational institutions and very little is left for the growth of education in rural areas. [3.]

Williamson quoting P. Donaldson argues that if education is to act as an instrument of national development, it must disassociate itself from *urban bias and disdain for the practical*. [4.] Young people from the urban schools and universities tend to *regard work in the rural sectors as the hallmark of failure* [5] and hope to achieve employment where manual work is not involved.

Overall, Williamson argues that if rural educational development is to be achieved in actuality there needs to be innovation in existing *inegalitarian structures of resource distribution*, and secondly, there needs to be change *in the conceptions of what it means to be educated*.<sup>[6.]</sup>

The effort is to recover from economic dependency, which was historically created. In Williamson's words:

*economic backwardness is an historically based phenomenon, the outcome of poor societies having had their economies and social systems distorted and conditioned by the overseas expansion of capitalist enterprise. The dependent economy has evolved to meet the interests of expatriate economic interests with whom indigenous entrepreneurs cannot properly compete*.<sup>[7.]</sup>

In other words - those of Dos Santos:

*... a situation in which a certain group of countries has its economy conditioned by the development and expansion of another economy... The relation of interdependence between two or more economies, and between these and world commerce, assumes the form of dependency when some countries (the dominant ones) can themselves generate their economic expansion, while other countries (the dependent ones) can only expand as a reflection of the dominant country expansion, which can, in turn, be a positive and/or negative effect on their immediate development*.<sup>[8.]</sup>

In such situations, what develops is an educational structure influenced and patterned to meet the needs of such a socio-economic system - in this case, the situation which India experienced during the colonial period under the British rule, where the main consideration

was the relevance of education to the capitalist needs of the ruling power.

It is with these themes in mind that the historical genesis of curriculum in India will be analysed.

#### HISTORICAL BACKGROUND TO CHANGING CURRICULUM.

The text which follows now will review firstly the earlier British period, the late eighteenth and early nineteenth centuries, when traditional Indian models of education operated simultaneously with Christian Missionary endeavour. This period in education was succeeded by the Anglicist phase when the two-tier system of education operated for the elite on the one hand and the masses on the other.

Reaction to this double system began in the second half of the nineteenth century and, over time culminated in the Wardha Commission on Education in 1937 initiated by Mahatma Gandhi. This developed the concept of Basic Education, an indigenous and unique system which was offered as an alternative to the British model of education. The concept of Basic Education, outlined a system which was to be equal, relevant and balanced; organized for the entire population without discrimination and biased towards the socio-economic needs of the people and the nation. The work of the Wardha Commission was modified and extended by the Sargeant Commission Report, 1944, of the British Indian Government and the Mudalier Commission Report 1952-1953 of the nationalist Indian government. These Commission Reports lead up to the classic document in Indian education, The Kothari Commission Report 1964-'66 which is the Indian assertion of the concept of an indigenous curriculum - relevant, equal and balanced in character. This was influenced by

several foreign influences since 1947 and some borrowings in the educational area, notably from the USA and Soviet Union.

The changes in the curriculum pattern over this long period of time from the early British period through the later British period, to the nationalist India period, give evidence of change from a 'dependent' capitalist, imperialist pattern to one that is more indigenous and socialist in design. These changes in the pattern of educational curriculum are parallel to the changes in political thought and socio-economic life.

The educational pattern in India was changed to suit the needs of British colonizers and the 'dependent' socio-economic pattern which they imposed on the country. A foreign model of education was imposed on her - a feature of the 'dependent' pattern of society. Traditional economic and educational structures gave way to an European-oriented hierarchy:

*A top-heavy bureaucracy and educational system was created... Cottage industry was destroyed, without incorporating artisans with their skills, into the new structure. For the British "development" in India meant controlling Indian resources for British use, and education was structured to achieve that goal.[55].*

#### Historical background: eighteenth and nineteenth centuries.

In the eighteenth and nineteenth centuries India became an *occupied and administered colony, where a few European colonists, primarily traders and soldiers controlled the colony for the home country.* [9.] Initially such a colony served the mercantile needs of the

*imperialist powers. Taxes and primary goods flowed into Europe from the colonies under tight trade monopolies. [10]. The result was that -*

*Her taxes and exports were traded for simple manufactures and helped finance the growth of industry in Britain.... as soon as textile production became important in England, Britain protected her own manufactured goods in free trade. Thus, India remained an exploited and tightly controlled expansion of Britain throughout 'the idealistic' years of capitalism.[11.]*

In fact, before the colonial period agriculture and industry were well established. [12.] However - *English competition dealt a heavy blow at Indian village industries, which were once famous throughout the civilized world.[13.] Her industry was destroyed and her people impoverished for over a century, as a result of capitalism. Romesh Dutt, former ICS (Indian Civil Service) has cited Henry St. George Tucker (1823):*

*What is the commercial policy which we have adopted in this country, with relation to India? The silk manufactures and its piece-goods made of silk and cotton intermixed have long since been excluded altogether from our markets; and of late partly in consequence of the operation of a duty of 67%, but chiefly from the effect of superior machinery, the cotton fabrics, which hitherto constituted the staple of India, have not only been displaced in this country, but we actually export our cotton manufactures, to supply a part of the consumption of our Asiatic possession. India is thus reduced from the state of manufacturing to that of an agricultural country. [14.] [15.]*

The consequence was that:

*The British rulers though they promoted modernization of the Indian economy, obstructed free and rapid industrialization. In fact they ruined the town handicrafts and the village artisan industries without replacing them adequately with modern industries. The ruin of the old industries destroyed the productive skills of the old type. The absence of a free and extensive growth of modern industries prevented the development of new productive skills. [16.]*

*These economic consequences of classical colonialism should now be understood in counterpoint to educational changes. Educational policies themselves were ...made by European capitalists, traders and missionaries, [17] and these new policies intersected badly with existing educational provision.*

The first wave of foreign influence was missionary influence.

#### Early Missionary Period in Education.

Educational change in India began in the early stages of British involvement in this country, with missionary work in the field of education. They could ...provide essential information about the social structure, culture, economic production, and trading habits of the people. [18]. They learnt the vernacular languages, set up the first printing presses, translated the Bible and other books into indigenous languages, worked in cities and got to know the Hindu and Moslem elites, converted in the villages, and set up houses of worship, hospitals or schools to try relate to the poor, and socially degraded lower castes - depressed classes.

Missionaries set up schools in indigenous languages for Indian children, and up to 1770 the East India Company gave them aid

financially and otherwise to build and repair houses etc. Their motive was to convert to Christianity and to make loyal subjects for the rulers. Charles Grant - *By planting our language our knowledge, our options and our religion in our Asiatic territories, we shall put a great work beyond the reach of contingencies.* [19].[20].

The Missions brought the Indians into contact with the West long before the East India Company thought of entering the field of education. They persisted even after their effort at mass conversion failed miserably. They provided India with the best of institutions - in discipline, academic records and loyalty to the rulers.

*These institutions because of their religious philosophy brought education to such depressed classes as well, who would have otherwise remained outside the pale of modern civilization.*[21].

If we were to credit any one single body for modernizing India, we would point to the Missions. They were first to think of the "concept of mass education." With all their bias in favour of their own languages, they developed and taught the vernaculars. In 1882 the government could seriously consider withdrawing from the field of education in favour of the Missions.

*As a mark of their success it is necessary to note that the missions had their schools all over the country, and number of them were where the government had failed to open even one. And also, the best talent for India's leadership in all walks of life came largely from these institutions.*[22].

Some of the early missionaries who did much to modernize India according to H.V. Hampton, are the first Protestant missionaries namely the Danish in 1706 under Ziegenbalg who arrived in South India and

started to learn Tamil. In a few years the Bible was translated into vernacular languages and a few schools were opened as well. His successors were Schultz and Schwartz who arrived in 1750 and laboured for almost half a century. Among the many great services Schwartz rendered to the country of his adoption, was the establishment of schools in various centres- Tanjore, Trichinopoly and Madras. The success of these Mission schools inspired John Sullivan who represented the Madras government at the court of Tanjore to prepare a scheme for the funding of government schools in every province for the instruction of Indians through the medium of English. He was supported and assisted by Swartz, and on his own responsibility started a few schools in the south. He presented his case to the Board of Directors and explained that his object was to break down prejudice which existed against the British rule. However the social climate at the time was such that the British government feared the influence of the English language, English opinion, improvements and Christianity, on the Indian people. They feared that Indians would desire English liberty and form of government, a share in legislation, and Commissions in the Army. The Indian people would then find it a hardship to be in a subject position and paying tribute to a foreign country. They would finally assert their independence.

However the Missions continued their work of educating. Alexander Duff 1806-'78 was pioneer among Scottish missionaries, and believed in converting the higher caste Hindus through higher education, like the Serampore missionaries had tried to do in their own area. Duff and other missionaries thought *Indians as a whole inferior, their superstitions and vices removable, and their own language and*



*literature 'poor and moribund.'*[23]. Yet missionaries were active, zealous workers, and modern Indian education owes less to the British government, and more to the voluntary organizations like the missions.

According to Dr. A. Lingajamnani *the credit of having started the earliest educational institutions goes to the Christian missionaries who came along with the European traders. These Missionaries first established schools so as to educate the children of these traders. Gradually they used education as a medium to spread Christianity.*[24].

A significant point is that this Mission education was open to all irrespective of caste, creed or sex. They encouraged the poor to join their institutions by providing free clothing, food, books and other facilities. However much this might have been with the motive of proselytisation it had the effect of giving the East India Company impetus to start schools, with the English medium of instruction. This marks the beginning of Western education established by the British during the modern period. Viewed in a broad context there was equality and balance in the education distributed by the missionaries, though relevance of curriculum existed only in the narrow context of mission teaching, and imperialistic needs of loyalty to the crown and knowledge of the English language for administrative purposes.

Missionary activities in the field of education were not appreciated in the later British period and therefore Warren Hastings and other leaders changed their policy and began a hostile attitude and approach to the missionaries who were regarded with suspicion by the Indian elites.

#### Orientalist Phase in Education.

*The Directors thought that restricted education of the social elite was more important to the general well-being of the natives and they decided to educate a small number against providing superficial education to millions.[25].*

In the Orientalist phase in the late eighteenth and early nineteenth centuries education was provided for elites in their own language and largely under their control. Warren Hastings established the Calcutta Madrassah from his private capital to conciliate Moslem families of that city so that their sons could qualify for lucrative and responsible offices in the State, and to produce competent officers for Courts of Justice. In 1791 the Benares Sanskrit College was established for Hindu families, who could later help British administration by expounding Hindu law to the people. In 1818 the Orientalist policy was adopted in Bombay.

As funds were short, encouragement was given only to Sanskrit and Arabic scholars as 'learned natives.' Prior to the period of Lord Macaulay, the policy makers thought it wrong policy to compel Indian scholars into studying the language and literature of a foreign country, since they possessed their own glorious literature and culture. These policy makers favoured oriental education for Indians. They were in favour of the Indian arts and sciences being taught to Indians through indigenous languages, that is, their mother-tongue.

But gradually during this period between 1823 and 1833 English as a medium of instruction in higher education also became popular in preference to Arabic, Persian and Sanskrit.

This should be understood against existing Indian traditions in education. There had existed in India a fine and long tradition of

education: *India had a glorious educational heritage.[26]. However, on the eve of British conquest of India, development of education stood at the crossroads.[27].*

The country lacked a coherent and organized system of education, although there remained a network of indigenous schools - the Tals and Madrassahs (seats of higher Sanskrit and Arabic learning) as well as the Pathshalas and Maktabas (the Hindu and Muslim elementary schools). However, ... *the ancient Hindu system of education was no longer a dynamic institution and also the Muslim system of education could not cater to the needs of the vast majority of non-Muslims. This was due to the lack of an organized system of education acceptable and useful to the people.[28].* Against this background, education during the modern period began.

Under pressure of administrative, political and economic needs, Britain established a *complete new pattern ...[of education]... with the passing of the Charter Act of 1813.[29]. [30].*

Between 1813 and 1853 both official and non-official attempts were made to educate the people of India. Important changes in education were introduced in the first half of the nineteenth century: the so-called Anglicist phase. It was argued that an English education was required, and Macaulay came to India to decide in favour of the issue; the result may be read in the well known Macaulay's Minute.

*More than the need to have a cheaper, more extensive and more efficient (English Law) administration, more than the desire to have a greater body of consumers through economic development, the primary purpose was to build a cultural dependency among the*

educated and ruling classes so that revolutionary overthrow would never be a likely alternative.[31].

The primary purpose of schooling was control, not change....The British first concentrated on winning over the co-operation of already well-established and welldefined elites...Once the British were well-established however, they began developing an English-speaking Europeanized elite who could serve as middle-men between the British high administration and important elements of Indian society. Although changes were made in education over the next century, this policy remained the back-bone of British education in India.[32].

Indians were given education in the English language, which in turn led to the employment of Indians trained in English, at a lower level of bureaucracy in their colonial government. The consequence was that once ...this new social structure was imposed, secondary and higher education expanded gradually and then rapidly,[33] in the mid nineteenth century. But primary education was neglected; funds were scarce and few children attended. To reach the general population, education in the vernacular was used in primary schools.

Of crucial importance is the form that education took for the elite, i.e. the curriculum of study offered. Students were not given the fundamental principles of economics, technology, science and politics, rather they were offered English Literature, philosophy, metaphysics.

The purpose of the colleges in the universities was to create a class of Indian professionals qualified to serve in the administration and modern professions.

*From the 1840's, college certificates were preferred for entrance to the services, and after 1857 University degrees were required for admission to the law and medical colleges. In consequence, many Indian managers were content to operate arts colleges merely to prepare boys for the university degree examinations, and for the later vocations which required them.[34].*

These students were not from the land-owning families made rich by the permanent settlement, as the Government had hoped, but rather from a newly forming class of professionals,- lawyers, doctors, and government servants. They took advantage of this new higher learning, as they would need to earn their living by using their education.

"Presidency College" in Calcutta continued to draw its students from these "middle classes" as they were termed by the college Principals. The accepted pattern came to be that the brighter boys from the Districts and middle class Calcutta sought admission to "Presidency" after securing a first class in the Matric or Intermediate examinations. These students were members of the small educated Indian public, a privileged and elite group of people, who <sup>e</sup>were also the potential political class of the future.

The curriculum in Presidency College, was designed to diffuse the modern knowledge in the Hindu community - i.e. English Language, European History, and the sciences as well. In 1884, the masters degree was offered in English, History, Mental and Moral Philosophy and in natural and Physical Science. In 1910 the size of its physical plant was <sup>b</sup>doubled with the opening of the Baker Science laboratories. By 1916 courses were offered in all postgraduate subjects - English, History, Political Economy, mixed Mathematics, Physics, Chemistry and

Physiology, to the picked students of Bengal, [35] according to a written comment of James Sutcliff, the first Principal of the College.

So much for evidence of inequality in educational opportunity and limited curriculum, which was therefore irrelevant for the majority of the people.

#### Orientalist-Anglicist Controversy.

*While educational activity was proceeding apace in the decade of 1823-'33, there was brewing a controversy called historically 'the Orientalist-Anglicist Controversy' over the issue whether oriental learning and science should be spread through the medium of Sanskrit, Arabic or Persian or Western Sciences and literature be spread through English as medium of instruction. [36].*

During the controversy a third party arose who wanted that Western Sciences should be taught through modern Indian languages. But both Orientalists and Anglicists objected that vernaculars at that stage were 'crude and poor' and incapable of expressing scientific and literary ideas.

By 1831 there was a complete deadlock between Orientalists and Anglicists. At this point Macaulay appeared upon the scene, as mentioned above, and put the balance in favour of English. English and not any other language would be the medium of instruction for India.

Lord Macaulay affirmed that the study of English would bring about the renaissance in India just as Greek and Latin did in the West. He examined the rival claims of the mother tongue, classical languages and English as the medium of instruction, and decided that the Indian languages were too poor to be the powerful vehicles of modern thought

and expression, required, and therefore also it was not possible to pursue higher studies through them.

Lord Macaulay thus became responsible for initiating a new educational policy in India, that is, the introduction of western education through the medium of English. Bentinck's Resolution, March 7th. 1835, approved of Macaulay's Minute, firstly that the-

*great object of the British Government ought to be the promotion of European literature and science amongst the natives of India and that all funds appropriated for the purposes of education would be best employed on English education alone. That while colleges of oriental learning were not to be abolished, the practice supporting their students during their period of education was to be discontinued.[37].*

*This declaration of Lord Bentinck gave to educational policy in India a definite form. It was no doubt, the first declaration of the Indian Government in the sphere of education; it determined eventually the aim and the medium of education in the country.*  
[38].

In order to spread the English education, councils of education were set up in every province. In 1844 Lord Hardinge issued a proclamation that every province should submit an annual list of students who merited employment in public office. Perhaps he could not foresee that such a policy led most students into literary study in the hope of white-collar jobs, which finally resulted in a great mass of educated unemployed people, while the study of agriculture, trade and industry was neglected to the detriment of socio-economic progress in the country. This is further evidence of irrelevance in the educational

curriculum. The system of education at that time was academic and policy-makers did not foresee that such a policy would lead to the development of an irrelevant curriculum.

#### A Western Model of Education for India.

So began a western model of education in an exploited and dependent India. The system was irrelevant to the needs of the majority of the population. Martin Carnoy has quoted the historian H.N. Brailsford who stated that,

*...the Brahman intellectual and the classical scholar of the ICS, bred in public school were equally indifferent to science and technology. The result was that Indians rushed into the legal profession and neglected the studies and careers which might have ended Indian poverty by the development of scientific agriculture and modern industry. This land was cursed with an unemployed proletariat of intellectuals. [39].*

This is further evidence of irrelevance in the educational curriculum.

Macaulay's "downward filtration" theory was adhered to. Education was for a tiny elite group - to whom Western values and concepts were imparted, in order to 'filter down' eventually to 'the masses.' The real purpose of the Filtration Theory of Education can be summed up in these words:

*Education was to permeate the masses from above. Drop by drop from the Himalayas of Indian life useful information was to trickle<sup>K</sup> downwards, forming in time a broad and stately stream to irrigate the thirsty plains.[40].*



This theory proved very detrimental in developing a smooth system of education. This theory created a class of people who began to consider themselves to be aliens in their country.<sup>49</sup>

Then for political and economic reasons by the middle of the nineteenth century, from the 1850s to the 1860s the government had to undertake responsibility of education for the entire population.

In 1853 the House of Commons in England enquired into the position of education in India. This enquiry resulted in the Woods Despatch, 1854.

In summary the Despatch declared that -

*...our object is to extend European knowledge throughout classes of people. We have shown that this object must be effected by means of the English language in the higher branches of instruction and by that of the vernacular languages of India, to the great mass of the people.... [41].*

The Anglicist policy continued, but a two-tiered approach to education evolved: English for the elite and vernacular languages for the masses.

The Despatch of 1854 was not so explicit about education itself, as about the consequences for both the administration and the subject people. It stated,

*this knowledge will teach the natives of India the marvellous results of the employment of labour and capital, rouse them to emulate us in the development of the vast resources of their country...and at the same time secure to us a large and more certain supply of many articles necessary for our manufactures and extensively consumed by all classes of our population as well as*

*an almost inexhaustable demand for the produce of British labour.*

[42].

The imperialist nature of the Despatch is clearly evident. But before action could be taken on it, India underwent a revolt, and subsequently came directly under the British government, and was accordingly treated as a 'colony' with all the implications attached to such a political status.

#### ELEMENTARY EDUCATION AND IMBALANCE.

The imbalance in education was partly rural-urban in nature, and included the neglect of primary education.

*Very little was actually done in mass education. In 1881 -1882 there were about two million people in primary schools incorporated into the departmental system in British India. This represented 7% of the school age population (taking school age population as 15% of the total population.)*[43].

In 1882-'83 the first Commission - the Hunter Commission, with a few Indian members on it, gave consideration to the issues of elementary education together with improvements in this neglected area; to the religious policy in education thus far, and whether the government should adopt a neutral or compulsory attitude for the future; and whether it should leave the field of education to the missions or intervene and take responsibility in this area.

It admitted that indigenous institutions had survived severe competition which was evidence of their vitality and popularity, and they laid stress on the extension and promotion of elementary education. They recommended two types of elementary education, one leading to university and another for life. This was reminiscent of

English practice. The control of primary education was to be handed over to District Boards or Municipalities, also an English practice.

They voted against leaving education solely to the Missionaries, and after 1857 they preferred neutrality to interference in the religious matters of the people.

However the Sadler Commission's observation on the Hunter Commission was that *Although they fixed their hopes upon the system of instruction becoming more thorough and scientific, they had no measures to recommend whereby it could be made so.* [44].

The imbalance in rural and urban education, and inequality in educational opportunity was gradually coming into focus. In 1910 the great educationist and patriot Gopalakrishna Ghokale introduced his elementary education Bill in the Imperial Legislative Council pleading for universal, free and compulsory elementary education for the masses. The plea was unfortunately rejected.

1921 -1922 saw an increase to six million or seventeen per cent of the school age population - however this meant that only one in six children, were in primary schools learning in the vernacular, in British-administered India. Two Indian administered states, Travancore and Baroda had 'progressive' rulers who put great emphasis on education, and had almost sixty percent of school-age children in primary schools by 1920. Otherwise most Indian - administered states had few children in school.

According to Kingsley David for the period 1891-1931, in the group of children aged ten and above, Parsis show the highest percentage of literacy, while Jain and Christian groups follow in that order.[45]. From the same source, several surveys in education were carried out

before the British launched their educational schemes, e.g. the survey in Bareilly in the state of U.P. in 1827, where until then the British impact had not been fully felt Messers. S.M. Boulderson, J.Davidson and C.Bradford informed the committee:

*In the town of Bareilly there were 101 schools in which Persian was taught, and 20 in which the children of the Malinjuins were taught accounts; besides which there were 11 which taught Arabic, and two who taught the science of Medicine.[46].*

There were also 111 Persian and 106 Hindu schools in the State. We do not know whether this area was unique, or whether education was satisfactory in other states as well during this period.

#### Irrelevance in Education.

But unfortunately the Indian economy could not absorb the products of 'new' schools and colleges which grew up, nor on the other hand, prevent those who wanted to educate themselves. Therefore chaos ensued.

Another aspect of the social, economic, educational scene was *the general masses were poor. Their agricultural produce was insufficient, what need had they of any education? The ones who lived in cities and had long traditions of learning and those who knew of no other skill than 'quill driving' needed it and for them there was sufficient provision. Those who had to pursue education for religious ends also sought it. But imagine the people whom Louis Fischer met and found desperately hungry demanding the right to education. They could not have even a possible liking for it.[47].*

This is evidence of irrelevance in the curriculum of the 'new' learning during the British period in India. The children of the poor and indigent families found no significance or use in the new education, which could only leave them jobless and alienated from their homes and social environment.

Further indicative of irrelevance in the curriculum, there seems to be little relation between industrial expansion and expansion of primary schooling, except in a negative sense in that the lack of primary schooling among factory workers was identified as a major problem of low labour productivity. Apparently factory workers belonged to the lowest castes of landless untouchables, and therefore would have suffered most the lack of education.

Further in regard to the general administration of education, in the period of total economic and educational 'dependency', a key provision of the Wood Despatch was that grants-in-aid would be given to primary schools which charged monthly fees to all their students, and also that the local community should help pay part of the costs of the school. Such a policy was in part a reflection of capitalist ideology.

*The school system was organized to keep a tight control over whatever education existed ....The old social, economic and educational system was broken down, and a very tightly controlled and not very extensive new system was put in to replace it.[48].*

K.S. Shelvanker had noted in *The Problem of India*:

*The neglect of mass education merely showed that the new rulers of India had not come to the country to indulge in 'Social Uplift' and the excessive importance attached to English was the natural consequence of their desire to economise in administration by*

*creating on the spot a class of minor officials instead of importing every clerk and civil servant from England...[49].*

#### Awakening and Expansion of Education.

However between 1917 and 1932 a general awakening occurred in India to the urgent need of expanding elementary education.

In 1935 the British government granted provincial autonomy to Indians, when they passed various educational acts. They empowered Municipalities and District Boards to make elementary education free and compulsory in eleven provinces. Earnest hopes of great educational promise were raised. Unfortunately in 1939 the World War II intervened - finance and care were then bestowed upon the process of war. So education did not receive proper attention again until 1947.

However,

*In the field of primary education, the period of 1937-'47 is an epoch-making period. It was at this time that Gandhiji gave the lead to make education meaningful by relating it to life. He conceived the idea of 'Basic Education' and put it into practice. Basic Education was introduced on an experimental basis in many rural primary schools and he took up the stupendous task of fighting 'mass illiteracy'. These marked the beginning of the evolution of a national system of education in India. The Zakir Hussain Committee was appointed in 1937. This Committee with the great educationist Dr. Z. Hussain as its Chairman submitted in 1939 concrete proposals about the implementation of basic education. On account of II World War and the prevailing political commotion the progress of basic education became extremely slow.[50].*

In 1944 the Sargeant Commission prepared a phased plan for the reconstruction of the educational system in India to be spread over a period of forty years. However within two years of cessation of World War II the Labour party in England decided to declare India free.

A new era for education began. Indian leaders, educationists and countrymen became responsible for evolving a national system of education for the country.

#### Higher Education.

In the area of higher education, during this period, Indians trained to be low level bureaucrats in the colonial government. To this purpose Secondary schools and Universities expanded rapidly. English was almost exclusively the language of instruction at these levels of education and those who reached these limits suffered a separation from their indigenous Indian culture.

During Curzon's regime in 1902 the Indian University Commission was appointed to elevate the standard of university teaching and learning. The covert aim was to subject universities to stricter control and supervision. The government had become aware of the political awakening among unemployed university graduates. In 1904 and again in 1913, Government Resolutions solely for the Secondary stage in education resolved to provide 'sound' education based upon need. The second Resolution in 1913 was more elaborate and covered all aspects in education.

The Calcutta University Commission or Sadler Commission of 1917/1919 was voluminous. It discussed the vocationalization of education, that less stress be laid on liberal arts and more on practical skills. It recommended the Intermediate stage of education as

a break-off point for either, entrance to universities or alternatively for entry to medium type jobs, by pursuing six or seven alternative and equally prestigious courses. It also recommended a system of internal and external organization of universities.

During 1917-1922 a number of universities came into being. The Saddler Commission 1919, recommended the immediate establishment of a new Unitary Teaching University at Dacca and the gradual development of similar universities elsewhere. However at the time of Lord Curzon's departure some discontent arose regarding the existing educational system which led Indian patriotic groups to establish institutions like Jadavpur College of Engineering, Jamia Milia, Kashi Vidyapeeth etc.

By the early twentieth century, then, a more relevant and balanced curriculum was recommended for higher education.

#### Contribution by Indian and British Thinkers in Education.

During this period when an official system of education evolved there were parallel efforts at the same time on the part of several Indian thinkers in education, who strove for a more indigenous and universal pattern of education since the early nineteenth century, though their real movements started in the 1860's and gained popularity and strength in about seventy years' time. These institutions are yet in current operation in India.

Among the foremost of these thinkers, are the names of Raja Ram Mohan Roy, Dayanand, Ram Krishna, Vivekanand, Aurobindo and others as well, though each one of them was somewhat different from the other. Roy was responsible for the founding of Brahma Samaj, Dayanand for the Arya Samaj, Vivekanand for the Ram Krishna Mission and Aurobindo for



Mother's Ashram. With the exception of Dayanand however, none were opposed to western knowledge; rather it was welcomed.

Hindu revivalism was also a reaction to Christian Mission Education and their conversions, and secondly to the possible universal, secular education which would have resulted in a serious imbalance in the caste hierarchy. All these revivalists were caste Hindus - Brahmins and Kayasthas. In the meantime Muslims also saw in this revivalist movement a danger to their own survival, their social status of primacy, and their chances of entering avenues opened up by the favourable climate created by the British. As with the Hindus, the Muslim revivalists were also from traditional feudal families, with the similar aim of maintaining their own social superiority.

Efforts towards a more indigenous form of education also came from a few British official voices, for example, the two well-known names of Sir Thomas Munro and Monstuart Elphinstone, Govern<sup>e</sup>or of Bombay. The Directors of the Company listened but merely responded with policies, dispatches and orders which were no more than words only.

However in the early nineteenth century Munro got surveys done on the state of education in the Madras Presidency. He had spent more than forty years of service life in both the army and civil administration in India, and knew this country well. When he pronounced the Indians to be civilized people, as a result he drew from Dr. Marsham *regrets that a responsible government official should have 'volunteered the most extravagant panegyric on the Hindu character.*[51].

His survey on education in the Madras Presidency brought out several facts, example that only a very few females were taught in

schools. Briefly stated, his findings showed: a) that of the total number of pupils attending existing schools only about 13,500 were Muslims and only some 4,500 were girls; of Hindu pupils under instruction one in every four was a Brahmin; b) that few schools had been endowed by the public, the majority being supported by parents or by grants from ancient rulers and zemindars; c) that fees varied from one anna to four rupees a month, the average being about four annas; d) that Teachers did not earn more than RS.6/- to Rs.7/- per month.

Munro recognized that caste and class existed in India from ancient times, and that members of these groups were the acknowledged teachers of society and the masses. In 1826 he appointed a Committee of Public Instruction and began the preparation of Teachers in earnest. The Committee had the sanction of the Directors and in appointments, preference was given to Brahmins. At the same time Munro wrote that similar facilities should be given to Muslims, because the great proportion of them belong to the middle and higher classes. Munro believed in efficient schools and not 'mass education'.

Monstuart Elphinstone, Governor of Bombay was a contemporary of Munro. His championing the cause of Indian education has been much admired. Elphinstone wanted the media of instruction to be the living languages of the people. He wanted to encourage the languages and learning of the people "for its own sake" and said that *at no time could I wish that the purely Hindu part of the course should be entirely abandoned.*[52] J.W. Kaye has noted in Lives of Indian Officers that Elphinstone protested against rash innovations and experiments to anglicise everything, by a new race of statesmen, that they were piling

up for themselves and country a mountain of future difficulty and disaster.

Elphinstone agreed that in Bombay there was a growing demand for English, but he thought it was not universal but rather among those who sought profit in business or employment under government. *He was firm in his opinion that the foundation of the Indian education should be laid on indigenous thought and culture and 'not on Knowledge however valuable in itself, imparted from abroad.'*<sup>[53]</sup> Therefore,

*He advocated the appointment of Indians on all types of posts...He had wanted education of the masses promoted by effecting improvements in the existing schools and by the starting of new ones in towns and villages. For him while training the recruits for government service, a balanced combination of English with an indigenous knowledge was about the best solution. He also wanted that in order to expand education the government should assist the voluntary bodies (excluding missionaries) and start its own institutions under direct management.*<sup>[54]</sup>.

Due to the efforts of Elphinstone, several institutions in higher education were opened in Bombay during his tenure of office. In 1824 an Engineering Institution was founded and in 1825 a Medical College was established. There were other instances of the Company Officers who wished to promote indigenous education and they were not critical of Indian morals either, but the Directors were rarely in agreement with their wishes to open new institutions or enthusiasm to Indianise all the service cadres. These liberals were from ordinary families in England or generally Scotland, neither Orientalist nor Occidentalists. They were matter-of-fact people with courage to say what they felt.

In conclusion therefore, during this period of British Rule in India there developed a British system of education, alongside which there grew up the individual institutions of Indian thinkers in education and British Indian officers who also recommended an indigenous pattern of education and the inclusion of more native Indian officers in the Service.

#### Concluding Summary.

In summary of the above account of historic events and changes in educational curriculum in India in terms of socio-economic needs, the noteworthy feature has first been recorded, that indigenous schools both Hindu and Muslim existed but learning was traditional, Maktabas and Patshalas at the elementary level, and Tols and Madrassahs at the advanced level of learning. In the eighteenth and nineteenth centuries the Missionaries opened schools at both elementary and later secondary levels, in indigenous languages and the English medium as well, for the children of the Company, and later for Indian converts to Christianity. Personal efforts on the part of the English also existed, in the late eighteenth and nineteenth centuries, that is, schools in the English medium were established in the South, and in the rural areas of the North. But in general terms the poor in rural areas were not attracted to the new type of education offered by the government, as it was not related to life as they knew it, and poverty prevented them from attendance. In other words the curriculum was not relevant to the life of the masses. The official pattern of education given by the British government in India neglected primary education and rural areas.

The members of the landed classes took education either for polish or later on for occupations. The members of the Brahmin and

Kayastha caste groups also availed of the new education offered - English and Western Science - as their livelihood depended upon this. They were the non-landed elite of India with a long tradition in learning. It was a caste occupation. The British meanwhile were quite satisfied to leave the situation as it was, because they needed to educate the upper castes and classes for their own bureaucratic system, instead of importing people from England.

Meanwhile the lowest Harijan castes neither wanted nor received even elementary education, which was reserved for the Brahmins, Kayasthas and Vaishyas (the trading class). Thus there was neither equality, balance nor relevance in the system of education which prevailed at the time. Rather it suited the needs of the ruling British government of the period, and was 'dependent' in pattern and within a 'dependent' socio-economic pattern of society.

In higher education Indians were offered English Language and Literature, Philosophy and History of the West and later the non-applied sciences. They were not trained for political roles, nor to appreciate their own language and culture, which was not included in the curriculum. It was the early British phase which experienced the Orientalist policy in higher education, when Arabic, Persian and Sanskrit were advocated, but this period gave way to the anglicist phase and an English education which however encouraged Indians to white-collar jobs and away from practical pursuits. Since not many jobs were available, not many students were prepared in this manner. Education was thus for the elite and privileged members of society, and the curriculum was relevant for the few chosen only, and for the needs of the government of the day. Macaulay's 'downward

filtration' theory was to take care of the masses, while practical attention was given to Secondary and Higher Education. Later when Primary education was developed for all, the 'two-tiered approach' was evolved - English for the elite, vernacular for the rest. Higher education was given in the English language exclusively, while at all levels practical science and technical subjects were excluded from the curriculum, and study of Indian culture totally ignored.

Simultaneous with these activities in the area of education, several thinking Indians initiated their own indigenous-based movements in education - the Brahma Samaj, The Arya Samaj, the Rama Krishna Mission and the Mother's Ashram, which last offered a blend of eastern and western culture. Later Rabindranath Tagore built 'Santiniketan' of high quality, in higher education. Pandit J. Nehru himself was a believer in Western education, science and technology.

However Gandhi with his famous Wardha scheme of Education held the imagination of the masses and tried to offer a workable and universal system of education - Basic Education - to suit both rural and urban people in their respective pursuits. The British government through the Sargeant Commission accepted the Wardha scheme of Education and plans were made to change the whole system in India. However the problems involved were many, and complications prevented its final implementation and success.

Also when the time for its implementation arrived administrators found that Teachers were non-available and the link between Secondary Basic Education and the existing system of Higher Education was difficult to create. Nonetheless Post Basic Schools came into operation, and they were indeed intended to lead on to colleges of higher

learning. It must be noted that the concept of Basic Education does prevail in the current educational system which includes work experience and the study of indigenous languages. Further vocation-based education is now included at the various levels of education in many institutions of the country, while the pattern of non-formal elementary education offered on a national scale is admittedly vocation based.

#### CONCLUDING COMMENT.

Thus the educational pattern in India was changed to suit the needs of British colonizers and the 'dependent' socio-economic pattern which they imposed on the country. A foreign model of education was imposed on her - a feature of the 'dependent' pattern of society. Traditional economic and educational structures gave way to an European-oriented hierarchy:

*A top-heavy bureaucracy and educational system was created....Cottage industry was destroyed, without incorporating artisans with their skills, into the new structure. For the British "development" in India meant controlling Indian resources for British use, and education was structured to achieve that goal.[55].*

As pointed out above, education was for the small elite group of people who were to serve the needs of the ruling power. Education of the masses was ignored by the government in power and financial resources were set aside for higher and secondary education mainly. Rural India suffered and became impoverished. Discrimination was in favour of the higher caste Hindus and elite Muslims, for the landed classes and later on for urban professional groups. Only a small percentage of girls received any education at all.

As education served the needs of the colonial administration, so did the economic life of the nation. The deindustrialization and impoverishment of the country have been described above. Unemployment was the consequence, as it was in the case of the 'new' learning. There were not sufficient jobs for all who received this 'new' learning, yet agriculture and applied science were not subjects of the curriculum offered in secondary schools and higher education, which could have solved the problem. Irrelevance in the curriculum was the official pattern.

The economic and social life of the country as depicted above points to a 'dependent' pattern of society and the same 'dependency' is true in the area of education; as already described it was 'dependent' in pattern and relevant mainly to the needs of a colonial government. However although the socio-economic and educational pattern was 'dependent' in nature during this long period of almost two-hundred years, in the early twentieth century a reaction to this 'Dependent' pattern gathered force and in every sphere - social, political, economic and educational - a change in favour of the mass of people and the nation is noted; both Indian reactionaries and British Indian officers were active and outspoken in such movements.

The pattern of recommendations as given in the education commission reports which follow point to the fact that equality, balance and relevance were already perceived needs in education. A 'dependent' system was changing through the medium of socialist thought. But it is important to note that the pattern was 'dependent' in India, only during imperialism and not after the foreign power departed the country in favour of self-rule.



## SECTION B.

### Reaction to a Western 'Dependent' Model of Education in India.

By the third decade of the twentieth century there was complete reaction against the existing pattern of education; the socialist nature of all the recommendations in the educational reports which follow are indirectly indicative of the previous 'dependent' form of education in that they are a reaction to an imperialist system of thought.

Examples of reaction in educational thought is discussed first from the Wardha Education Commission of 1937 initiated by Mahatma Gandhi and held under the chairmanship of Dr. Zakhir Hussain, and from the Assessment of the Committee on Basic Education and its Concept in 1956; the same period of 1936-'37 produced the Abbott-Wood Report of the British Indian government which also gave evidence of enlightened thought in education and commented on both technical and general education for the first time, as the current need for India. Therefore the importance of this Report and its mention here. Again in 1944 an important education commission produced the Sargeant or C.A.B.E Report (Central Advisory Board of Education) which commented on all aspects of post-war educational development. Finally another significant commission to be noted is the Mudalier or Secondary Education Commission of the next decade 1952-'53. It is a comprehensive Report on Indian education at the secondary level.

The period between 1956 and 1964 produced other relevant education commissions e.g. on Integration of Post-Basic and Multipurpose Schools 1957; Religious and Moral Education 1960; Emotional Integration 1961; Girls' Education 1964-'65, etc. These topics of concern, have been incorporated in the Kothari or Education

Commission 1964-'66 which is the important document for this discussion, in which current socio-economic needs are identified with the purpose of recommending solutions through educational development, as given in the earlier chapters.

Williamson's significant themes of relevance, equality and rural-urban imbalance are identified in these Commissions and the gradually changing model of education from 'dependent' to indigenous is simultaneously noted.

#### Indigenous Model of Education Recommended By The Wardha Education Commission.

The Report of the Wardha Education Commission 1937, is a model example of a country's reaction to a capitalist and 'dependent' pattern of education, as had been prevailing in India for a hundred years and more.

The Commission clearly focused on the educational needs of Indian society in general and offered the concept of Basic Education, which is indigenous in nature. This was duly accepted by C.A.B.E. in 1944 as the basic principle and technique which should guide and inform educational reconstruction in India. Eight years' compulsory universal schooling and the use of the mother-tongue as the medium of instruction were the accepted principles. *Basic Education ... is essentially an education for life, ... and an education through life.*[56]. It aims at eventually creating a social order free from exploitation and violence. Hence productive, creative and socially useful work is placed at the very centre of Basic Education. All students - boys and girls - irrespective of caste and class distinction may participate in the curriculum offered. Hence the basic craft is important. Ideally the sale of the

product is important as well; proceeds from it were to be used for mid-day meals, uniforms, or school furniture. In practice however such a procedure proved non-workable. Further the base craft required to possess intellectual content and provide scope for the development of knowledge and practical efficiency. It required to fit into the social environment of the school and contain the maximum of educational possibilities. However books were not ignored, and a good library is essential in a Basic School as in any other type of good School.

Further Basic Education foresees and hopes for close integration between the school and the community, so that through education the children become social-minded and co-operative in out-look. The School must be organized as a living and functioning community including social and cultural programmes, social service of various types, and a student self-governing body as training for democracy.

Unfortunately there exists a wide gap between the theory and practice of Basic Education. But a positive aspect of the system is that it is based on the universally accepted five principles of good child education -

*the actual participation of the child in the learning process; the choice of craft as a purposeful, creative and socially productive activity; co-relation between subject, the craft selected, and the physical and social environment; dignity of manual labour; mother-tongue as a medium of instruction.* [57].

The WEC was the first study of elementary education on a national level; the earlier commissions being on secondary and higher education. It was resolved that free and compulsory education be provided for seven years on a nation-wide scale, and that this system of education

should gradually cover the remuneration of Teachers. This however proved to be a difficult task.

#### Craft Work In Schools.

Of significant note is that craft-based knowledge is related to life.

*Modern educational thought is practically unanimous in commending the idea of educating children through some suitable form of productive work. This method is considered to be the most effective approach to the problem of providing an integral all-sided education. [58].*

The Commission considered this craft-based approach to education psychologically desirable and the answer to the -

*tyranny of a purely academic and theoretical instruction... It balances the intellectual and practical elements of experience...[59]. It involves the literacy of the whole personality.[60.]*

Concerning the positive expectations for students, the introduction of such practical work is expected to break down social barriers which exist between manual and intellectual workers - the dignity of labour and human solidarity being stressed as prized values. An increase in the productive capacity of workers, and knowledge to use leisure time advantageously are further positive results expected of the system.

It therefore becomes evident that the ideals of the WEC are those of equality in education, relevance to social needs, and attention to rural-urban imbalance. As early as 1937 then, an indigenous Education

Commission in India had already considered the three issues which Williamson has discussed as being neglected in the emergent nations.

Finally, however impractical the system of BE has proved for the growing needs of the nation currently its essential theory is yet to be correctly adapted to the current educational system towards national development. The system is a change to an indigenous, socialist pattern of education, as evident from definitions above and through description of the curriculum to follow. It is clearly a reaction to the previous 'dependent' model in operation.

#### The Curriculum in Basic Education.

As already noted, the stress is on the basic craft. *Such reasonable skill should be attained in the handicraft chosen, as would enable the pupil to pursue it as an occupation after finishing the full course.* [61]. A choice may be made from the following basic crafts in various schools - spinning and weaving, carpentry, agriculture, printing, vegetable gardening, leather work and other crafts appropriate to the local and geographical conditions. Spinning and agriculture should be compulsory in all areas. Stress has been laid on the mother-tongue and the method of teaching it, and mathematics which is chiefly concerned with the four simple rules. Social Studies has received attention as a subject which is interested in human progress and in man's social and geographical environment. Courses in History, Geography, Civics, Current Events and World Religions are included. The science subjects offered are Nature Study, Biology, Physiology, Hygiene, Physical Culture, Chemistry and Knowledge of the Stars.

It is evident that the curriculum is quite varied and all-inclusive. Drawing is stressed and correlated with reading in the

initial years; it moves into Design, Decoration and Mechanical Drawing in later years. Music and 'Hindustani' are also recommended. In general the syllabus is similar for boys and girls up to the fifth grade. However in grades 4 and 5 the syllabus in general science is to be modified for the inclusion of domestic science for girls. In grades 6 and 7 girls are to be allowed the choice of an advanced course in domestic science in place of the basic craft.

The inclusion of general science in the school curriculum is expected to help change an ancient and traditional society into a modern and forward-looking one. Scientific observation and experimentation is expected to replace superstition in relation to natural phenomenon, and an understanding of the principles of science should help in the service of man. General Science is stressed as most relevant to the school curriculum.

#### General Recommendations.

The WEC made further general recommendations toward establishing a more relevant and equal educational system. Thus malnutrition and backwardness in rural areas had been focused upon as needing remedy; therefore light nourishment for children during school hours, and public co-operation to meet these expenses was recommended. Teachers' salaries and the quality of Teachers was marked out as needing improvement and specially trained Teachers for BE was stressed. These Teachers were to be locally recruited and the emphasis was for women teachers. The importance of refresher courses was stressed. Training institutions were to be residential and the need for Demonstration Schools attached to every institution was strongly recommended. Craftsmen and expert artisans were needed for craft-training classes.

The number of students in every BE class was not to exceed thirty in number so that Teachers could carry out their responsibilities well. Thus the WEC focussed its attention on the quality and status of Teachers and on the quality of education as well.

Another innovative and worthwhile recommendation was for the formation of an independent and non-official Central Institute of Indian Education, which was to remain free from administrative responsibility, and consist of persons eminent in the field of education, as well as in other spheres of cultural activity. The object of such an Institute would be firstly, advisory in all educational matters, in relation to policy and practice; secondly it would organize research on problems relating to education; thirdly, to disseminate information collected through the issue of monographs and magazines for educational workers. It would be a liaison body between Indian States as well as for countries abroad; and the ideas and aims underlying educational efforts in India and in countries abroad would receive particular attention and study, and later this knowledge would be made available to interested educationists.

The WEC also stressed the unco-ordinated public utility services of the country which could be more concerned with the welfare of its citizens. Thus it recommended that the Department of Education should be in a position to secure the co-operation of other departments like Health, Agriculture, Public Works, Local-Self-Government in the State, towards building up a healthy, happy and efficient school community.

#### The 1956 Assessment Committee on Basic Education.

In 1956 an Assessment Committee on BE was set up. It was entirely in favour of the system and proposals were put forward for its

development on a large scale, through Central and State governments, Universities, Basic Schools and the Public.

Each department was to play an important role - the Central and State Governments were to be involved in the spread of the concept among the public, through all communication media - films, radio, press, publications, etc. The Union Ministry was to publish a brochure on the progressive conversion of all elementary schools into Basic Schools without delay, even while waiting for the emergence of trained Basic School Teachers. The State Governments were to make similar declarations in favour of the change over from elementary to Basic Schools. Further it would become necessary for Universities to recognize Post Basic Education so that students could pass out to Post Basic Colleges.

*The peaceful and constructive evolution of a socialistic pattern of society depends so largely on the development of Basic Education, that the education of the public in regard to all the relevant issues in and for Basic education should be undertaken in all seriousness without delay.[62].*

However in fact, as has been already noted, the Basic School has not proved to be a workable idea, though it is yet hoped that the central concept will be adapted to education for the changing needs in society. Yet the WEC was unique, innovative and reactionary in its proposals for its day and time. It proposed to transform education towards relevance, equality and rural-urban balance for national socio-economic progress.

Concluding Comment on Wardha Education Commission Proposals.



The WEC of 1937 was a challenge to the prevailing 'dependent' British system of education in India. Unlike the 'dependent' system which existed for the elite, it included in its sphere pupils of all categories, urban and rural, boys and girls, rich and poor. It is craft-centred education and therefore based in work-experience, with a view to the future occupations of its students. The craft is local based and the teaching medium is the mother-tongue. Hence in theory it is a system that is equal, relevant and balanced.

It is organized to be related to life and is recommended towards socio-economic development of the nation. It was twice proposed for general implementation in the country in all seriousness, in spite of the difficulties involved in changing over to such a system; once in 1944 by the Sargeant Commission organized by the British Indian government, and later in 1956 by a national Indian government.

In fact the WEC proposals were never fully implemented. They did not prove workable thus far. However the WEC Report was a unique proposal for education in India, sound in concept and theory, and many aspects of the system have already been included into the changing pattern of education in the country. In fact it is hoped that the central concept of the system may yet be adapted to education in a large way towards the changing socio-economic needs of the nation.

In conclusion the contrast between the two systems may be noted. Whereas the system and model of education which evolved for British India in the eighteenth, nineteenth and early twentieth centuries was for the Indian elite, the WEC proposed an education system for the entire population.

Primary education and vernacular languages had received little or no attention from the government in the previous existing system of education. Rather it was expected that Macaulay's 'downward filtration' theory would provide all the education necessary for the general population, while at the higher levels of education the medium of instruction was only English, and when primary education developed, the two tier system provided English for the elite and vernacular languages for the people.

The WEC on the other hand proposed a system of primary education for all- rural and urban children - to be delivered in the mother-tongue; which is an egalitarian concept. The earlier 'dependent' model of education had ignored Indian culture in the curriculum, whereas the concept of BE is centred in local culture, craft, occupation and language of the people.

Science and technical subjects were excluded in the earlier British system of education. As noted earlier, Indians were trained to be low-level bureaucrats. The system of BE on the other hand concentrated on the local craft, work experience, the technical side of education, so that students would find their training to be relevant to life and the environment in the future.

Whereas the 'dependent' system of education catered mainly to the Indian elites who were educated away from indigenous Indian culture, the Basic system of education is rooted in Indian life and culture. The proposals of the WEC are evidence that focus was constantly kept on equality in education, relevance to both national and individual needs, and balance, i.e. rural education received full attention, in contrast to the earlier period of British education in India.

ABBOTT-WOOD REPORT 1936-'37.

As already mentioned 1936-'37 was the period of the Abbott-Wood Report as well. It was a government Report on education and showed changed thinking and policy, on the part of the ruling British power in that it commented on both technical and general education as the need for India. A technical curriculum would be a step towards relevance in education.

THE SARGEANT REPORT 1944.

1944 saw the emergence of the Sargeant or CABE Report. It was the first attempt by the British Government in India to focus attention on educational development at every level on a national scale.

*It is inspired by the desire to provide equality of opportunity at different stages of education. - At primary stage it envisages ... free schooling ... mid-day meal, books, scholarships, medical inspection and treatment. At higher stages, free places and scholarships are proposed for all bright and deserving students.[63].*

*This is certainly a welcome step forward towards educational opportunity and would be a great improvement on the existing situation.*

*The Sargeant Report,*

*...stresses in clear terms the importance of the teaching profession and makes proposals for increasing its miserable standard of salaries and poor conditions of service...[64].*

*[Further,] It is the first comprehensive scheme of national education...[65].*

Such are the views and comments on the Sargeant Report by the educational expert K.G. Saiyidain in India.

The Report began by quoting the 1944 Butler's White Paper in England, 'upon the education of the people of this country the fate of this country depends.' It is *concise, comprehensive and workable*.<sup>[66]</sup> It has commented upon Basic Education, which it commends in concept and practice as a system, upon Primary Education, High School and its functions, the Academic and the Technical High School; University Education; Technical and Vocational Education; the Role of Adult Education; Training of Teachers; Health of the School Child; Teaching of Hygiene in Schools and in Training Colleges; Physical Education, Corporate Activities, Administration, Education of the Handicapped; Recreative and Social Activities; Employment Bureaux and financial estimates. This is evidence of the changed outlook on education by the ruling British government.

The Sargeant or C.A.B.E. Report <sup>e</sup>commented<sub>1</sub> on a wide range of important issues in education, and thus gave evidence of its liberal, forward-looking and socialistic aims. Its prediction was that it would take thirty to forty years for a national system of education to evolve.

*Unfortunately it was drafted when the techniques of perspective planning were not known and the research available on planning was meagre. Nor were the national goals precisely known.*<sup>[67]</sup>

However it is known today that the forecast in figures and time were not far out. It was a pity that the Report was looked upon with unmerited suspicion and subsequently shelved.

The aims of education are set out in its Introduction - the fundamental principles of education must remain the fostering of such attributes as physical fitness, intelligence and integrity of character.

The moral and spiritual side of education cannot be ignored; -at all stages of education the training of the intellect and the training of character must proceed side by side.

It may be noted at this point,that the aim of national development, social and economic has not been specifically mentioned among the fundamental principles of education, however the list of topics discussed in the Report are indicative of the ruling government's awareness of such a need, where education must be relevant to the progress of a people, hence for example the stress on technical and vocational education, and the acceptance of the pattern of Basic Education.

#### Comment on Basic Education.

With reference to Basic Education the Sargeant Commission Report has commented -

*A system of universal, compulsory and free education for all boys and girls between the ages of six and fourteen should be introduced as speedily as possible though in view of the practical difficulty of recruiting the requisite supply of trained teachers it may not be possible to complete it in less than forty years.(681).*

The character of the instruction to be provided was to follow the general lines laid down in the reports of the C.A.B.E.'s two committees on B.E. The Senior Basic (Middle) School being the finishing school for the great majority of future citizens, is considered to be of fundamental importance, and it is suggested that it be generously staffed and equipped.

#### The Teacher.

With reference to the position of the Teacher the Committee<sup>m</sup><sub>^</sub> noted, all education depends on the Teacher. Yet the present remuneration of Teachers and especially those in Primary Schools are deplorable. The standards in regard to the training, recruitment and conditions of service of Teachers prescribed in the Report of the Committee approved by the C.A.B.E. 1943, represent the minimum compatible with the success of a national system; it is suggested that these should be adopted and enforced everywhere. Also, the number of trained women Teachers should be greatly increased.

#### Nursery Education.

With reference to Nursery Education, pre-primary school is stressed both in rural and urban areas. These Nursery Schools should be staffed by women teachers who are specially trained. Parents need to be encouraged to send their children between the ages of three and six years. Social experience rather than formal instruction is the object of the Nursery School. This is a step forward in the area of mass education, and rural-urban imbalance.

#### High School.

High Schools should be both academic and technical in pattern. The objective of each would be to provide a good all-round development with preparation for future careers. The curriculum should be as varied as possible and not restricted by requirements of University and examining bodies. There should be a system of liberal stipends, scholarships and free places throughout the course, so that no able child may suffer due to want of finances. Teachers of capability are required: hence salaries need to be reorganized according to C.A.B.E. recommendations, as mentioned earlier. Again there is stress on equality of educational opportunity

and relevance, in that scholarships in the one case and technical education in the other are recommended.

Technical and Commercial Education.

*In view of the prospective needs of post-war industry and commerce for skilled technicians and in order to cater for the aptitudes of those who will derive greater benefit from a practical course, the establishment of an efficient system of technical education at all stages, on the lines set out in the Report of the Technical Education Committee, is a matter of great urgency.[69].*

Due regard should be had for the recommendations of the Abbott-Wood Report in respect of the scope and content of technical instruction. The attention given to technical and commercial education is evidence of the British Government's new awareness and concern for national development and personal needs.

Adult Education.

Towards the nation's social progress the Sargeant Commission has effectively commented on Adult Education in the following manner. The expansion of adult education on the widest scale possible is essential to solving India's educational problems. Adult Education should be treated as complementary to free and compulsory primary education. Both are equally essential.

Both literacy and then continuation of education is important. The literate adult must stay literate. Local investigations on methods for adult education is necessary. Consideration may be given to the occupation in which the adults are engaged, their personal interests, and social/economic conditions of life.

This is evidence of socialistic concern - equality, relevance and balance in education. It indicates the changed policy of the British Government on the eve of its departure from the country. The recommendations are of an enlightened nature.

The Report explains further that adult education is a branch of social reconstruction. All universities should become interested in this field, with the possibility of making a period of social service obligatory on all students in universities and high schools. Further each State should be responsible for adult education in its area.

#### Recreative and Social Activities.

In regard to recreative and social activities the Sargeant Commission has recommended a Youth Movement on an all India basis to be set up. This should serve the needs of boys and girls between the ages of fourteen and twenty who no longer attend school. The Youth Movement should aim at co-ordinating and supplementing rather than superseding the work of organizations already dealing with this problem. The provision of social and recreative facilities for adults also should form an important part of any Social Service scheme.

#### Employment Bureaux.

Towards making education relevant to the employment market the Sargeant Commission has commented -

*Employment Bureaux form an essential part of educational administration: they are especially necessary in India in view of the restricted openings at the moment for progressive employment.[70].*

This comment still holds true for Indian society.



The Report continues that these Bureaux should be staffed by trained experts with practical experience in teaching about industrial conditions.

While education departments should maintain contact with Employment Exchanges, Labour Tribunals, etc., established by other Departments, Employment Bureaux which deal with the output of educational institutions should specifically remain under the control of the Education Department.

#### Educational Administration.

In regard to educational administration, the Report has recommended that the provinces i.e. the States should remain the main units for educational administration, except in regard to University and higher technical education. The activities of these higher levels of education should be co-ordinated on an All-India basis. Further, a national system of education will require much closer co-operation, financial and otherwise, between the Central and 'Provincial' i.e. the State governments.

#### Health and the Handicapped.

Recommendations are proposed for the health of the school child. Hence stress is laid on nutrition, environmental hygiene and physical education as part of the curriculum.

In regard to education for the handicapped, the Report has proposed that such education should form an essential part of a national system of education administered by the Education Department. Wherever possible, handicapped children should not be segregated from normal children.

Thus far all the proposals of the Sargeant Commission indicate that equality, relevance, and even urban-rural imbalance have been given due attention at all stages of education. The Sargeant Commission is the first effort of the British Government in India to investigate Indian Education at all levels, in an enlightened spirit.

Concluding Comment on the Sargeant Commission Report.

By 1944 the British Government in India projected itself as liberal and socialist in nature, because of the investigations in the field of education and recommendations for an enlightened system of education. In essence it accepted Gandhiji's proposals for the Wardha Scheme of Education for the entire country, however it also pointed out some of the difficulties of implementing the system in less than a period of forty years. Unfortunately the sincerity of the Report was overlooked and the document was shelved by a suspicious national administration.

On calm analysis of the Sargeant Commission Report, one notes the changed outlook on education by the British Government in India. It commented upon a wide range of important issues and through these comments emerged as liberal, forward-looking and socialist in aims. Although national socio-economic progress has not been listed among these aims it does emerge as an issue of consideration in that vocational and technical education has been stressed, even according to the Abbott-Wood Report of an earlier date. The important issues of well-paid, well-trained Teachers, the need for pre-primary education, of scholarships in academic and technical highschool, are discussed in a spirit of concern for the needs of the people and the nation. Adult Education and a Youth Movement offer social reconstruction for the

people and the nation, and indeed both plans are currently in operation in India. Socialistic concern, equality, relevance and balance are in evidence in the recommendations of this Report.

Health among school children and education for the handicapped are recommended. Rural and urban needs became matters of concern. In fact the whole indigenous pattern of Basic Education was accepted for implementation, it being socialist in nature and in total opposition to the imperialist 'dependent' design in operation.

Whether the Sargeant Commission seriously believed in the Wardha Education model or not, the general nature of its educational recommendations are enlightened and liberal. Equality, relevance and balance inform its proposals which indicate concern for the needs of the people and the nation.

Whether the many years of Indian reaction to a 'dependent' system of education brought about this change or not, the fact remains that the Sargeant Commission on education in India shows a new enlightened thinking on the part of the British Government.

The Secondary Education or Mudalier Commission 1952-'53.  
General Recommendations.

Later in 1952-'53 the Secondary Education Commission or the Mudalier Commission was organized by the Indian National Government in India. A progressive step forward is noted in its aims of education and proposals which follow below. Stress is laid on patriotism, training in Democracy, economic progress and social reconstruction. Specific mention is made of socio-economic progress as the need of a developing nation. It is recommended that individual interests should be

subordinated to broader national needs, and a sense of social justice be kindled in the minds of children at school level.

Further a democratic citizen should have the intellectual integrity to sift truth from falsehood and reject the dangerous appeal of fanaticism<sup>c)</sup> and prejudice. A scientific attitude of mind and objective thinking are to be developed, a mind receptive to new ideas and not confined to outmoded customs, traditions and beliefs. Good citizenship and competence in social reconstruction and economic development of the country are to be encouraged. A balanced education is stressed in which social virtues, intellectual development and practical skills are given equal consideration.

Suggested measures for the reorganization and improvement of Secondary Education focus on the content of education at this level; its relationship to Primary, Basic and Higher Education; and the inter-relation between Secondary Schools of different types so that a reasonably uniform system of Secondary Education suited to the needs and resources of the country could evolve.

Further, Secondary Education must stress character building through action i.e. every kind of action - academic, social, manual and moral. It is recommended that Teachers could present to students an effective example of personal integrity and a social sense of discipline. The Secondary School should be an 'activity school' - a small community within a larger community. It must be related to real life and grow into a centre of social life and activities. Curriculum is not narrowed to book learning only, rather the student's social instincts must develop through other programmes. Specific mention is made of the Multipurpose School in Secondary Education. It would need

to provide varied types of courses for students with diverse aims, interests and abilities, so that all students could develop their capacities through the special courses of study chosen. The proposal is towards equality and relevance in education.

#### Curriculum.

In regard to Curriculum the Commission has commented -

*According to the best educational thought curriculum does not mean only the academic subjects traditionally taught in school but it includes totality of experiences that a child receives at school. [71].*

Therefore the whole life of the School becomes the curriculum.

Restructuring the curriculum would mean that school subjects and the varied activities of life are brought closer together - class-room, library, laboratory, workshop, playgrounds and numerous informal contacts between teachers and pupils.

The school needs to cater to the whole range of the pupil's interests and capacities - intellectual, physical, emotional, aesthetic and social. A narrow curriculum is to be avoided. Domination of the examination system over the curriculum is to be abhorred. Improvement is needed in the areas of teaching methods and salaries of Teachers.

The Commission also noted the purely academic nature of Indian educational curriculum and commented that the large number of students going to colleges were neither fitted for higher academic education nor were they desired and accepted by these institutions. Secondary Education should therefore be made terminal for such students by either equipping them for life or preparing them for entry to polytechnics and other vocational institutions. In this context it was suggested that multipurpose higher-secondary schools should be established. Further it

was recommendd to levy an 'Industrial Education Cess' on industries for the setting up of schools and colleges.

The Commission thus underlined the need for providing higher secondary education to children according to their individual abilities, aptitudes and interests, and in a way which would ensure adequate preparation for the various professions they might choose in their life.

In regard to education in the field of agriculture, although its importance at the secondary level has been stressed, particularly as a subject in rural schools, concrete suggestions for its introduction as a subject were not included in the proposals. In fact even the the introduction of core-subjects like crafts and general science in the curriculum of higher secondary education, created difficulties regarding staff requirements. Further the serious difficulties of implementing the proposal for multipurpose schools were not foreseen so schools continued to be stereo-type in character rather than change in the manner suggested.

#### Concluding Comment.

The Mudaliar Commission of 1952-'53 was a national Commission whose aim was to restructure secondary education towards relevance. The idealism of secondary education is stated to be patriotism, democracy, socio-economic progress. In theory it was recommended that multipurpose subjects should be included in the curriculum along with general science and agriculture, but in practice such measures were not achieved and secondary education remained stereotype at the time.

In structure too a change was recommended, that the secondary school should be an 'activity school' and a part of the community.

Further it should be terminal in character, so that students have the choice of entering vocational schools or entering life, after completion of the course, rather than continuing into Higher Education for which many of them did not possess the adequate capacity. Further it was hoped that secondary school would be character building, and students would be encouraged to develop their personal, social and academic qualities and capacities.

It is evident that the Mudaliar Commission recommendations were for relevance, equality and balance in secondary education. Both national and personal needs were investigated and recommendations were made with these in view. The Commission is imbued with the nationalistic spirit, and is a step forward in the socialist pattern of education. So it is apparent that Indian thinkers had reacted against a foreign model of education by initiating their own individual indigenous systems of education since the earlier part of the nineteenth century. As already noted reaction culminated in Gandhi's Wardha Scheme of Education in 1937. In 1947 after the withdrawal of the British government, Indian educationists persisted in their efforts to steer education in India away from a 'dependent' British model, and therefore made contact with other major leading nations of the world as well, at a cultural, scientific and economic level. India made strong links with the USA and the Soviet Union, with France, Germany and Japan and other European countries besides receiving aid from UNESCO as well.

However the two major influences on Indian education, culture, science and technology etc. have been the USA and the Soviet Union since the British withdrawal from India in 1947, with the accepted fact of

the two hundred year old British tradition being still in operation in the country, besides the British Council representation in modern India.

Further in order to make education relevant to the aspirations and needs of the people and for the socio-economic progress of the nation. India chose to invite the opinion of other leading nations on her national Education Commissions.

### SECTION C.

#### The Influence of the USA and the USSR on Education in India.

##### The USA and Education in India.

The USA has had a significant influence on education in India in the last thirty-seven years. The American influence in India has come through several agencies and channels of both direct and indirect assistance. It is a nation that has been very generous towards India's development needs and programmes by way of grants and loans. The PL480 Programme has reserved nearly three hundred crores of rupees for developmental programmes under the agreement, and NCERT- National Council for Educational Research and Training - a central and key body for school educational improvement, draws a large share from this amount.

Other significant uses of the PL480 funds are agricultural development and rural electrification; educational exchange programmes; production of low-cost text books; procurement of Indian books and periodicals for the US Library of Congress and eighteen other libraries of American universities; for American studies in India which provides opportunity to Americans to learn more about India; Research in Agriculture, Medicine, Education and the Social Sciences, the results of which have been beneficial to India, the United States and other



nations through-out the world. These funds have therefore aided the development of educational, social and economic projects in India, and intercultural programmes of an international character as well.

Further aid and influence comes from more than fifty American Foundations and non-profit organizations which have also been operating in India simultaneously. Their activities are in the fields of agriculture, medicine, public health, industrialization, education, housing, co-operatives, economic and social research and community development projects. The better known ones are the Ford Foundation, the Rockefeller Foundation, the Indo-American Fulbright Programme which have offered significant aid in the area of education. The Fulbright Act of 1940 together with the Executive Agreement of 1950 established the United States Education Foundation in India. *The aims of the USEF and its associated groups in India were to bring about better understanding and closer relations between the two countries through bilateral exchange of scholars, assist Indian universities in specific subjects, promote mutual educational cross-cultural and social values and to enable Americans to get a first hand knowledge of Indian culture and vice versa and to establish personal associations among students, scholars and scientists of the two countries and to help orienting the secondary education programme in India.*[72]. The aims of this organization are self-evident and self-explanatory.

*The Asia Foundation assists the All India Federation of Educational Associations, Indian Council of World Affairs, the India Institute of Public Administration and Indian Adult Association and a number of projects particularly interested in the advancements of Research and in social sciences and humanities.*[73].

In 1961, President Kennedy initiated the American Peace Corp Mission to assist developing countries according to the latter's needs and desires. American volunteers belonging to this Mission provided technical help and promoted a better understanding between Americans and the people of other countries as in India. In the field of education the work of the Peace Corp Mission was commendable. Groups of workers taught Mathematics, Science, English, and Home Science to school students and involved themselves in youth leadership and training activities. The Indian government provided necessary facilities to these groups, in the way of accommodation - house and simple furnishings - transportation e.g. bicycles etc. These are numerous examples of American co-operation with India in the fields of education and socio-economic progress. The aim apparently is friendship, co-operation and aid, rather than domination in the colonial sense.

Further the inclusion of American experts in the Indian Education Commissions in 1947-'48, 1952, and 1964-'66 produced a strong impact of the United States on Indian education after the advent of Independence.

An American Studies Research Centre was established at Hyderabad (Andhra Pradesh) in 1964, jointly sponsored by the governments of India and the United States. This centre offers awards to encourage better teaching and research in American Studies by Indian scholars. However the strong American impact on Indian education has come mainly through the NCERT and its principal body, the NIE - National Institute of Education which follows the model of the NIE in the USA itself. As mentioned earlier it is financed with PL 480 funds. The impact and influence in the field of education are in the areas of structure and

organization, curriculum, methods of teaching and in examination and evaluation techniques. It is interesting to note the comment of Dr. A. Lingajammani that *the impact of the United States of America on Indian education is only next to that of the United Kingdom. But, while the UK took more than a century to do what it has done in the field of Indian education, the USA has influenced it considerably within a short period of three decades.*[74].

However it must be noted that the influence of each nation on Indian education must be viewed within appropriate context, each being of a totally different nature. As has already been described imperialist Britain transferred her own British model of Higher Secondary education, almost entirely to then British India. The USA in the last thirty-seven years has proffered generous aid in the educational field to a democratic, independent India. Furthermore Indian educationists while open to innovation in education, with the intention of evolving a relevant, indigenous system, are yet in the process of research, discussion and evaluation. American advice is being researched upon in practice, as is also the Soviet style innovations in education.

#### The USSR and Education in India.

The other major foreign influence on Indian education is that of the Soviet Union. The relation between the two countries is based on equality, reciprocity, and mutual trust and is advantageous to both. It has grown steadily and is expected to become more stable. According to A. Lingammanni, *the Russian impact has been hardly as great as one would have expected, and inadequate in proportion to the influence of Russia in other segments of Indian life.*[75]. The main reason is that whereas the Indian system of education is democratic free and open,

having benefitted from private contribution and enterprise, the Soviet educational system is a closed and centralised one, in which individual initiative and experimentation would have no place.

However inspite of this major basic difference in the two educational systems, the USSR in a spirit friendship to India has influenced Indian education in the areas of curriculum content and the school structure of education. Its impact on Indian education has come in many ways - through the Indo-Russian cultural and educational delegations, economic aid and technical assistance, scholarships and assistanceships; through the Russian expert member on the Education Commission 1964-'66; through teaching of the Russian language in the Indian universities, publication of low-priced Russian books in India and the Indo-Soviet text-book programme.

Assimilation of foreign borrowings and transformation of the Indian system into an indigenous pattern of education continues and takes form.

#### CONCLUSION.

Evolution of educational curriculum over two and a half centuries in India has been the theme of this chapter. Its relevance to the socio-economic scene in the country, the ideals of equality in educational opportunity and rural-urban balance in education have been simultaneously investigated. It has been noted that in the late eighteenth century, the educational curriculum was too traditional and unsuited to the already changing needs of India. Later under imperial British rule, India officially received the British model of education in the early nineteenth century.

However this model of education was relevant mainly to the needs of the colonial government and power and not to the socio-economic needs of the country. Thus simultaneously with the initiation of this official British model of curriculum, several Indian thinkers in reaction, started their own indigenous pattern of institutions as well, which however only became established later in the the early twentieth century. Amid the various tensions which prevailed in the field of education during this time, Gandhiji initiated his Basic Education curriculum proposal for the entire people of the nation in 1937. It caught their imagination and for whatever reason, it was fully accepted by the Sargeant Commission in 1944, that is, by a still British government in India.

Educational curriculum in India therefore, over three subsequent centuries, changed from deeply traditional at both elementary and university level- the Madrassah and Maktab stage- to the variety offered in the early British period of Sankrit, Persian, Arabic, and English; to the two-tier model of education, where secondary and higher education followed the British model, which offered English, History, and Science at this higher level; whereas the majority of the masses and rural India were given elementary education in the mother-tongue. The Indian reactionaries simultaneously offered the study of Indian and Oriental Culture, History and Language along with English and Western Science.

Later the British curriculum also included Western science in an expanded programme at the Higher Education level. Then followed the concept of Basic Education for everybody, at elementary and secondary level. It was unique and offered a craft-centred education in indigenous

languages for all. The system though again accepted in 1956 by a national government, did not prove workable, though in theory it is sound, being equal, relevant and balanced in concept.

Since 1947 when India became free and independent, the evolution of curriculum has continued. Indian educationists research and experiment for an indigenous curriculum to suit the needs of the people and socio-economic development of the nation. Thus they have made contacts with several other countries for fresh ideas, notably the United States of America and the Soviet Union.

These two countries are in close and friendly collaboration with India, in the field of educational development and socio-economic progress. The British influence also continues though in a changed spirit from colonial days, in the presence of the British Council and in the British model of education retained in the country. These nations together with several others have participated in several national Commissions in education and most significantly in the Kothari Commission 1964-'66, on education.

In the evaluation of curriculum over a hundred and fifty years and more, the significant change is noted from a 'dependent' pattern of curriculum to one that is becoming more indigenous in character; the socio-economic scene has also changed from a 'dependent' one, to a more modernized and socialistic society. There has been a vast transformation from the era of colonial times down through to the era of a free and independent society.

The two chapters which follow will describe policy proposals, and then current innovative practices in progress.

Chapter V. Footnotes.

1. Bill Williamson, Education, Social Structure and Development, p.20
2. Op. cit., p.21.
3. Op. cit., p.16.
4. Op. cit., p.17.
5. Ibid., [The phrase taken from Peter Donaldson, 1971, p.124, is cited by Williamson as being from Donaldson, P., Worlds Apart. London: Penguin, 1971.
6. Op. cit., p.18.
7. Op. cit., p.40.
8. Martin Carnoy, Education and Cultural Imperialism, pp.51, 52. [The quotation from Dos Santos (translated) is cited by Martin Carnoy as being from Theotonio Dos Santos, Dependencia economica y cambio revolucionario, (Caracas) Venezuela: Nueva Izquierda, 1970, p.38, (translation Martin Carnoy).
9. Op. cit., p.78.
10. Ibid.
11. Op. cit., p.79.
12. Op. cit., p.80.
13. R.P. Singh, Education in an Imperial Colony, p. 87. [The phrase taken from H.G. Rawlinson, 1948, is cited by R.P. Singh as being from H.G. Rawlinson, The British Achievement in India, William Hodge & Co., 1948.
14. Ibid., [The quotation taken from Romesh Dutt, (no work cited) citing Henry St. George Tucker (1823): is cited by

R.P. Singh.

15. Op.cit., pp.87, 88. [The quotation taken from Marx, 1853, is cited by R.P. Singh, as being from Marx's article in Daily Tribune, New York, June 10th. 1853. (The degree of poverty may be imagined on reading the figures from Marx's article in Daily Tribune, New York, June 10th. 1853:

*From 1818 to 1836 the export of twist from Great Britain to India rose in the proportion of 1 to 5000. In 1824 exports of British muslins to India hardly amounted to 6,000,000 yards, while in 1837 it surpassed 64,000,000 yards. But at the same time the population of Dacca decreased from 150,000 inhabitants to 20,000. This decline of Indian towns celebrated for this fabric was by no means the worst consequence. British steam and science uprooted, over the whole surface of Hindoostan, the union between agricultural and manufacturing industry. )*

16. S.K. Saini, Development of Education in India, p.314.  
17. Martin Carnoy, Education as Cultural Imperialism, p.81.  
18. Op. cit., p.88.  
19. R.P.Singh, Education in an Imperial Colony, p.121.  
20. Op. cit., pp.121,122. (William Wilberforce - *Our religion is sublime, pure and beneficent. Theirs is mean, licentious and cruel.* (19).

*Down the ages the people who have fallen politically have been considered downgraded morally and intellectually and we must therefore find criticism of the Indians by Missionaries on this count alone both natural and inevitable.* (20).



21. Op. cit., p.122.
22. Op. cit., pp.122, 123.
23. Op. cit., p.125.
24. A.L. Lingajammanni, An Enquiry into the Impact of Foreign Countries on the System of Education in India since 1947. p.13.
25. Op. cit., p.14.
26. S.K. Saini, Development of Education in India. p.142.
27. Ibid.
28. A.L. Lingajammanni, An Enquiry Into the Impact of Foreign Countries on the System of Education in India since 1947. p.13.
29. S.K. Saini, Development of Education in India. p.42.
30. R.P. Singh Education in an Imperial Colony. p.115.

[This was a turning point in the history of Indian education.

*In fact the Charter Act was unclear about the type of education it intended to support, but education became an item of expenditure, however, only after other costs were met. (30). It empowered missionaries to go to India and spread education. Also one lakh of rupees was set aside for promotion of literature and knowledge of the sciences. The one lakh rupees were to be spent on -*

*1) the encouragement of the learned natives of India, 2) the revival and improvement of literature, and 3) the promotion of a knowledge of the science among the inhabitants of that country. (30).*

It meant to revive the Persian and Sanskrit languages and to offer encouragement to scholars, besides introducing western sciences to those who wanted it. Aroused to emulation, Indians also set up private educational organizations which grew in the country and a well-organized modern system of education came into being. (30B, S.K.Saini, Development of Education in India, p.37.). English education and western sciences made noteworthy progress. The financial allocation for education was increased from £10,000 to £100,000 which supported educational expansion.

31. Martin Carnoy, Education and Cultural Imperialism, p.100.

32. Op. cit., p.81.

33. Op. cit., p.83.

34. Irene A. Gilbert, Autonomy and Consensus under the Raj: Presidency (Calcutta); Muir (Allahabad); M.A.O. (Aligarh): from Rudolf & Rudolf, Education and (Politics in India, p.173.

35. Op. cit., 175.

36. S.K. Saini, Development of Education in India, p.40.

37. Op. cit., p.41.

38. Op. cit., pp. 41, 42.

39. Martin Carnoy, Education and Cultural Imperialism, p.102.

40. S.K. Saini, Development of Education in India, p.43.

[The quotation taken from Arthur Mayhew p.92, 1936, is cited by Saini as being from Arthur Mayhew, The Education in India, London, Faber & Gueyer, 1936.

41. Martin Carnoy, Education and Cultural Imperialism.

pp.104,105.

42. R.P. Singh, Education in an Imperial Colony, p.117.
43. Martin Carnoy, Education as Cultural Imperialism, p.107.
44. R.P. Singh, Education in an Imperial Colony, p.118.
45. Op. cit., p.75.
46. Op. cit., pp.90,91.
47. Op. cit., p.91.
48. Martin Carnoy, Education as Cultural Imperialism, p.109.
49. R.P. Singh, Education in an Imperial Colony, 103.  
[The quotation taken from K.S. Shelvakar The Problem of India, is a reference cited by R.P. Singh as being from K.S. Shelvakar, The Problem of India.
50. A.L. Lingajammanni, An Enquiry into the Impact of Foreign Countries on the System of Education in India since 1947, pp.20, 21.
51. R.P. Singh, Education in an Imperial Colony, p.126.
52. Op. cit., 127.
53. Ibid.
54. Op. cit., p.128.
55. Martin Carnoy, Education as Cultural Imperialism, p.83,84.
56. B.D. Bhatt and J.C. Aggarwal, Educational Documents in India (1813-1977), p.187.
57. Op. cit., p.43.
58. OP. cit., p.44.
59. Ibid.
60. Op. cit. p.45.
61. Op. cit., p.47.

62. Op. cit., p.185.
63. Op. cit., p.94.
64. Ibid.
65. Ibid.
66. Op. cit., p.65.
67. Op. cit., p.66.
68. Op. cit., p.74.
69. Op. cit., p.77.
70. Op. cit., p.91.
71. Op. cit., p.144.
72. A.L. Lingajammanni, An Enquiry into the impact of Foreign Countries on the System of Education in India since 1947.  
pp. 61,62.
73. Op. cit. p.64.
74. Op. cit., p.66.
75. Op. cit., p.90.

## CHAPTER VI.

### RELEVANCE OF CURRICULUM - CURRENT POLICIES.

The purpose of this chapter is to investigate current curriculum policies in India, with special reference to the themes within Williamson's argument namely: the relevance of curriculum to socio-economic growth and development; equality-inequality in education, and rural-urban imbalance. The final theme of the chapter will be the relevance of the analysis to the concept of dependency in view of the preceding discussion on curriculum.

Williamson's basic arguments on the irrelevance of curriculum, it will be recalled were, firstly, that education in a developing country is not relevant to the employment market. That is, in general such a society has produced educated personnel who cannot be assimilated by the economy.[1.] Secondly, there is the problem of the social attitudes of the qualified graduates, who consider manual tasks as inferior, thus widening the gulf between the privileged educated few and the under-educated population.[2.] Thirdly, Williamson stresses escalation of qualifications which gives a diminishing value to educational certificates, as education expands. [3.]

Williamson's conclusion is that there is need for innovation in the inegalitarian structures of resource distribution, and secondly, in the conceptions of what it means to be educated i.e. education must disassociate itself from *urban bias and disdain for the practical*. [4.]

There is a tight link between inequality and education:  
*inequality is maintained and legitimated through education.*

Urban upper-and middle-income groups are favoured in educational access against the urban and rural poor. In turn this lack of education diminishes the occupational opportunities of people, particularly so, in poorer societies.[5.] Educational expansion itself- growing student numbers- places a burden on the national economy in both under-developed and developed societies. To unlock these links is difficult. Among the important questions are what should be taught and to whom, - a theme which becomes a central theme in the equality-inequality debate in education.[6.]

It is these issues, with special reference to curriculum, which are considered in the following discussions. The core question is the problem of evolving a curriculum relevant for India.

The structure of the analysis is as follows. Firstly, the formal educational scene as of 1960-'75 is investigated, in terms of improvement in enrolments including female at all, levels of education. Some emphasis is then placed on literacy and education for the schedule castes and tribes; education in the different states; and graduate unemployment in the country. This information is biased toward an assessment of equality-inequality, rural-urban imbalances and the general question of relevance or irrelevance of curricula in the country currently.

#### Enrolments.

The table below shows the population for various age groups 1961-1978 in millions. The figures in brackets indicate the percentage of total population.[7.]

#### Population for Various Age Groups 1961-1978 in Millions.

Age/Year	Under 15 yrs.	6-11 yrs.	6-23 yrs.	Total.
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1961	180	67	168	439
	(41.0)	(15.1)	(38.3)	
1971	230	89	216	547
	(42.0)	(16.1)	(39.4)	
1978	257	100	260	672
(estimated)	(38.2)	(14.9)	(38.7)	

Such numbers in population are an indication to the scale of the problem of universal education in India.

The table below shows the distribution of primary enrolment by grade (grade 1 = 100). [8.]

Distribution of Primary Enrolment by Grade.

	1965			1970			1975		
Classes:	Male	Female	Median:	M.	F.	Md:	M.	F.	Md:
1	100	100	100	100	100	100	100	100	100
11	59	54	57;	61	60	61;	68	64	66
111	48	41	45;	49	46	48;	56	51	54
iv	39	32	36;	40	36	39;	45	39	43
v	32	23	29;	34	28	32;	38	32	35

In particular it can be seen that while all begin school, the drop-out rate as early as the second year was almost half in the mid-sixties. Also for the same period, there is not much difference between boys and girls. The largest dropout rate is in the mid sixties. Some improvement is visible in 1970, while 1975 shows an even higher degree of improvement.

These figures also indicate the magnitude of wastage and stagnation at various grades in the primary stage.

However, considering the trend over the period 1960-1975, the percentage of enrolment in Grade 1 has nevertheless shown a definite improvement, especially in the case of girls.

*...the enrolment increased at all three levels during the period 1960-'75. The growth was highest at the third level. The enrolment among girls also showed a similar trend. (Another noteworthy feature is better achievement at all three levels in the case of girls' education as compared to the boys.)*

*During 1960-'75 the enrolment of the first level increased from 34 million to 63 million showing an average annual growth rate of 10.7% as of 1965 and 3.1% during 1970-'75. As compared to this the population under the age group 6-11 years increased at an average annual growth rate of 3.0% during 1961-'71; and 1.8% during the period 1971-'76, indicating that the enrolment at the first level is increasing at a faster rate than the population.*

*The enrolment at the second level has increased more rapidly than at the first level. The enrolment went up from 11 million in 1960 to 26 million in 1975 making an average annual growth rate of 9.3%. At the third level, enrolment increased by around 350% during the period 1970-1975. It may also be noted that the percentage of female enrolment to total enrolment increased steadily over the period 1960-'75. The increase is more pronounced at the second and third levels than at the first.[9].*

The table below shows enrolment in Grades 1 to V for both sexes in 1960.

Table - India - Enrolment in Grades 1 to V by Grade and Sex-  
1965-1973.[10].



Enrolment in Grades 1 to V by Grade and Sex- 1965-1973.

Grade/	Girls-	Boys-	Both Sexes
1	8 258 889	12 620 174	20 889 063
11	5 272 128	8 538 322	13 810 450
111	4 056 071	6 880 995	10 937 066
iv	3 026 959	5 336 011	8 362 970
v	2 201 596	4 440 848	6 642 444

The table below shows enrolment for girls in 1973, at all stages of education, the % of increase, and then total enrolment.

Table - India - Enrolment of girls, and total enrolment, 1973, by stage of education, and percentage increases 1965-'73. [11].

Grades	Girls	%	Total	%
1-V	22 825 643	28.94	60 641 993	23.97
VI-V111	4 423 754	62.28	14 339 251	39.77
1X onwards	2 092 733	79.51	7 734 604	48.29
Total	29 342 130	30.60	82 715 848	24.18

An encouraging increase in the % of enrolment of girls at the middle and high school stages is to be noted.

With reference to expansion in education:-

These figures of primary and secondary school enrolment, which demonstrate gradual, and in some cases, rapid improvement, were of course coupled with investment in school buildings. In the period 1960 - 1975, the number of primary schools,

*...increased from 330,000 to 454,000 during the period 1960-'75, showing an increase of 37%. During 1970-'75 the position improved again and the number of institutions increased by 11%.*

The number of middle and secondary institutions showed an increase of 124% during the period of 1960-'75. [12].

Clearly such an expansion in student numbers at all levels of education necessitated an expansion of financial resources in education. Educational expenditure at the three levels of education increased almost proportionately as shown in the table below.

Expenditure by type of institution : (Rupees in million). [13].

Level	Primary	Secondary	Higher Education.
Yr. 1960	734	1118	545
1965	1287	2220	1270
1970	2346	4409	2602
1975	4463	8345	4674

The number of schools for both rural and urban areas showed an increase from 1965 to 1975, as shown in the table below.

Table on India.

Number of Schools in 1973 by stage of education and type of area; and percentage increase over 1965. [14].

Stage of Educ.	1965.		1973.		% of increase.
	Area-Rural	Urban:	R.	U:	
Primary School	419 -	651:	461-	864:	18.95
Middle "	73 -	844:	87-	702:	13.25
Secondary "	22 -	915:	32-	779:	57.86
Higher Secondary/ Pre/Univ. College	2 -	939:	6 -	805:	N.A.
Intermediate/ Junior College	1 -	379:	2 -	938:	N.A.
TOTAL	517 -	3728:	588 -	4088:	20.18.

The considerable increase in the number of schools at all stages of education must be noted. The overall increase in the number of Secondary Schools was almost 58%, compared to about 19% in the number of Primary Schools, and 13% in the number of Middle Schools. (See table, showing the number of schools in 1973 etc...[f.n.14]). In the bigger and more popular states, the increase was between 49% and 97%, with the greater growth in the rural areas. Also the percentage increase in the number of institutions of various categories in the Union Territories is comparatively higher than the corresponding increase in the States.

Thus far then there is clear evidence of the expansion in student numbers and an increased distribution of financial resources, in the building of more institutions at the different levels of education. Such improvements are a clear example that equality and rural-urban balance in education are being stressed.

However, this general improvement in the provision of education at school level needs supplementation by an analysis of rural-urban inequalities with special reference to two major obstacles in Indian education: namely, the literacy question and the scheduled caste problem. Further, it is important to note that while these are national problems, their regional distribution varies. First, then, a description of illiteracy in rural areas is provided, in relation to the scheduled class problem. Secondly some indication is given of the regional variation. Thirdly, the theme of illiteracy in general- and its regional variations- is analysed.

#### Illiteracy in Rural Areas And Among The Scheduled Classes.

On analysis is found that illiteracy is overwhelming in the rural areas and it is predominant among women in all areas of society.

*This is true whether for the entire population, or for the population excluding the age groups 0-4, 0-14 or for the population in the age group 15-35. It has also been observed that eight states in the country have the bulk of illiterates, and also that a majority of children in the age-group 6-14 are not enrolled in elementary schools. Another important dimension of the problem to be noted, is that of the total illiterate population of 387 million in 1971, 102 million belonged to scheduled castes (1) and scheduled tribes. This is shown in Table 1.19.[15].*

*The figures indicate that the population of scheduled castes and scheduled tribes rose from 94.29 million in 1961 to 118.02 (2) million in 1971; during this period their percentage to total population increased from 21.3% to 21.6%. The number of illiterates, among these, increased from 85.13 million in 1961 to 101.99 million in 1971.*

*The Depressed Classes and Areas. The scenario is depressing. In 1971 out of the illiterate population of 384 millions, 291 millions (26%) were in rural areas; the number of illiterate women were 215 million (56%); the number of illiterate scheduled caste and scheduled tribes - men and women - was 102 million (26%).[16].*

In relation to education for the scheduled castes and tribes the two tables below give the situation of literacy/illiteracy among them

and their distribution of population in the eight educationally backward States in 1971.

Table 1.19. Illiteracy among scheduled castes and scheduled tribes (all age-groups)- 1961-1971. (Absolute figures in millions.) [17].

Population	Illiterates			% of Illiterates.		
	Men	Women	Total	M:	W:	T:
1971						
Census						
Schd. castes	41.34:	38.66:	80.00:	32.10:	36.17:	68.27:
	77.6:	93.6:	85.3:			
Schd. tribes	19.18:	18.83:	38.01:	17.92:	15.80:	33.72:
	82.4:	95.1:	88.7:			
Total	60.52:	57.49:	118.01-50.02:	51.97:	101.99-82.7:	90.40:
						86.00-

Table 1.20. Scheduled Caste and Scheduled Tribe population in eight - 8 - educationally backward states - 1971. (Absolute figures in millions.) [18].

States	Schd. Caste	Schd. Tribe	Total
1 Andhra Pradesh -	5.78	1.66	7.44
2 Assam -	0.91	1.61	2.52
3 Bihar -	7.95	4.93	12.88
4 Jammu/Kashmir -	0.38	-	.38
5 Madhya Pradesh -	5.45	8.39	13.84
6 Orissa -	3.31	5.07	8.38
(cont.)			
7 Rajasthan -	4.08	3.13	7.21
8 Uttar Pradesh -	18.55	0.20	18.75
A Total 8 States -	46.41	24.99	71.40

B All India	-	80.00	-	38.02	-	118.02
C A as % of B	-	58.01	-	65.73	-	60.50

It is no wonder that these classes have not been able to take full advantage of opportunities for growth available under various developmental plans. An analysis of the data available indicates that 61% i.e. the bulk of the scheduled caste and scheduled tribe population are concentrated in the eight educationally backward states: scheduled tribes are about 66% and scheduled castes about 58%. This is clear from Table 1.20

Evidence thus far points to the highest illiteracy rate being centred in rural areas, particularly among women and again, among the scheduled castes and tribes in the country. Such a countrywide scene points to the existing imbalance and inequality in education, as related to sex, caste and region in the country.

Number of Schools (rural and urban) 1973, in the States/Union Territories, of the levels Primary, Middle, Secondary, Higher Secondary/PreUniversity, Intermediate/Junior College, in Education, in India. [19].

State/Un. T.	Prim.	Mid.	Sec.	H.Sec/PU.	Inter/JC.	Total
Andhra Prad.	37,169,	3714,	3154,	2,	247,	44,286,
Assam	20,065,	3163,	1388,	35,	0,	24,651,
Bihar	50,573,	9547,	2810,	14,	50,	62,994,
(cont.)						
Gujarat	22,373*	-	2535,	188**	0,	25,096
Haryana	5,283,	754,	1008,	113,	0,	7,158
Himachal Prad	3,808,	886,	416,	96,	0,	5,206

Jammu/Kashmir	5,560,	1784,	634,	56,	0,	8,034
Karnataka	21,976,	11082,	1960,	251,	153,	35,422
Kerala	7,048,	2575,	1404,	13,	27,	11,067
Madhya Prad	49,281,	8512,	-	1969,	0,	59,762
Maharashtra	35,030,	13534,	5583,	195,	126,	54,469
Manipur	3,180,	400,	166,	21,	5,	3,772
Meghalaya	3,026,	427,	134,	3,	14,	3,604
Nagaland	980,	272,	74,	4,	0,	1,330
Orissa	32,489,	4724,	1954,	41,	34,	39,241
Punjab	9,203,	1215,	1252,	272,	1,	11,943
Rajasthan	19,768,	4804,	790,	463,	4,	25,829
Tamil Nadu	26,820,	5790,	2796,	48,	0,	35,454
Tripura	1,479,	256,	36,	70,	0,	1,841
Uttar Prad	63,040,	10296,	1898,	31,	2,264,	77,529
West Bengal	39,741,	3003,	2385,	2316,	0,	47,445
And/Nic Isl	144,	25,	0,	15,	0,	184
Arunachal Prad	483,	59,	1,	18,	0,	561
Chandigarh	39,	24,	25,	16,	0,	104
Dadra & Nagar Haveli	157,	0,	4,	0,	0,	161
Delhi	1,533,	411,	0,	553,	0,	2,497
Goa Daman, Diu	834,	155,	209,	1,	8,	1,208
Lakhwadeep M &	20,	6,	6,	1,	0,	33
Andaman Isld. (cont.)						
Mizoram	477,	210,	98,	0,	0,	785
Pondicherry	286,	74,	59,	0,	4,	423
Total	461,864,	87,702,	32,779,	6,805,	2,938,	592,088

\* Schools with classes up to Class vii.

\*\* Pre. University Classes only.

Further Analysis of the Literacy Situation. In further analysis of the literacy/illiteracy scene in the country, the tables below endeavour to give a picture of the situation from the early 1960s to the mid 1970s.

The Table 1.8 shows the literacy rate statewise for the total population excluding the age group 0-4 years, in the early 1960s and 1970s; the Table 1.13 shows the literacy percentage for the age group 15-35 years, state-wise, for the early and mid 1970s; the Table 1.12 shows the literacy percentage position, for the same age group sex-wise, and the urban-rural distribution, for the decade 1961/1971.

Table 1.8. Literacy percentage rate - total population, excluding age group 0-4: State-wise and Ranking. [20].

Serl.no.	States:	1961 Lit. rate:	Rank:	1971 Lit. r:	Rank
1.	Kerala	55.08%	1	69.75%	1
2.	Tamil Nadu	36.38%	2	45.40%	2
(cont.)					
3.	Gujarat	36.19%	3	41.84%	4
4.	Maharashtra	35.08%	4	45.77%	2
5.	West Bengal	34.46%	5	38.86%	5
6.	Assam	32.98%	6	33.94%	9
7.	Karnataka	29.80%	7	36.83%	8
8.	Punjab	28.77%	8	38.69%	6
9.	Orissa	25.24%	9	30.53%	11
10.	Andhra Pradesh	24.62%	10	28.52%	12



11.	Bihar	21.75%	11	23.35%	15
12.	Uttar Pradesh	20.73%	12	25.44%	14
13.	Madhya Pradesh	20.48%	13	26.37%	13
14.	Himachal Pradesh	19.95%	14	37.30%	7
15.	Rajasthan	18.12%	15	22.57%	16
16.	Jammu/Kashmir	12.95%	16	21.71%	17
17.	Haryana (1)	-	-	31.91%	10

(1) included in Punjab.

The above Table 1.8 indicates the wide disparities in the percentage rate of literacy between the different regions (States) for the total population, excluding the 0-4 age group. While the state of Kerala shows a literacy rate of almost 70%, the states of Jammu/Kashmir, Rajasthan, and Bihar are around 22% and 23% only.

The Table 1.13 which follows indicates the differences in the rate of literacy for the 15-35 age group in 1971-'76, existing in the seventeen States again. Wide disparities are again noted between some regions (states). The highest is almost 86% literacy in the state of Kerala, and the lowest is about 30% in the state of Jammu/Kashmir. Government educational policy as given later has been built upon the facts which have emerged from these surveys.

Table 1.13 Literacy percentage in the age-group 15-35, for 1971 and 1976: State-wise Ranking. [21].

S. No.	States:	1971 Lit. rate:	Rank:	1976 Lit. r:	Rank
1.	Kerala	80.5%	1	85.8%	1
2.	Maharashtra	56.1%	2	64.8%	2
3.	Tamil Nadu	51.5%	3	56.2%	3
4.	Gujarat	50.1%	4	54.2%	5

5.	Punjab	47.7%	5	55.6%	4
6.	West Bengal	47.2%	6	52.7%	7
7.	Himachal Pradesh	45.2%	7	53.8%	6
8.	Karnataka	43.2%	8	49.8%	8
9.	Assam	42.3%	9	43.1%	10
10.	Haryana	39.9%	10	47.2%	9
11.	Orissa	37.3%	11	38.1%	11
12.	Andhra Pradesh	34.7%	12	35.5%	13
13.	Madhya Pradesh	34.0%	13	35.9%	12
14.	Uttar Pradesh	31.6%	14	36.0%	14
15.	Bihar	29.0%	15	30.6%	16
16.	Jammu/Kashmir	28.8%	16	30.2%	17
17.	Rajasthan	27.8%	17	31.8%	15
	All India	42.0%	-	46.5%	-

Table 1.12 Literacy position - Age-group 15-35: sex-wise and urban-rural situation, 1961-'71. (Absolute figures in millions.) [22].

Year	Area	No. of illiterates:			No. of literates:		
		Persons	Male	Female	Persons	Male	Female
1971	Total	97.14	36.99	60.15	70.44	48.46	21.97
		67.97%	43.29%	73.24%	40.03%	56.71%	26.76
	Urban	11.93	4.45	7.48	26.05	16.27	9.78
		31.40%	21.47%	43.33%	68.60%	78.53%	56.67
	Rural	85.21	32.54	52.67	44.39	32.19	12.19
		65.75%	50.27%	81.20%	34.25%	49.73%	18.80

This Table 1.12 supports the earlier statement that illiteracy is mainly rural-based and highest among the female population; while

the percentage of literates is highest in urban areas and among the male population.

The situation remains true in a survey in any age-group. The emerging picture up to the mid-seventies, is one of scarce educational provision in rural areas, of illiteracy and high drop-out rates, of wide disparities between the different States in the prevailing percentage of literate people. However, the fact that regular surveys are made point to the concern of government educational bodies. In fact the structure of financial resource distribution is changing in favour of the underprivileged groups of society as will be discussed further on. Increase in the number of schools to meet the expansion of school enrolment has already been noted. The elitist bias in education is giving way in planning and implementation of policies, to provision for the urban and rural poor. The integrated child-care services programme, universalization of elementary education, and the Nehru Yuvak Kendra programmes are aimed at overcoming illiteracy at every age level.

Graduate un<sup>p</sup><sub>1</sub>employment.

Graduate unemployment in the country as represented in the situation in the state of West Bengal in India, is recorded below. The author of the study has commented,

India is a very big country, both in terms of size and population. Moreover, Education in India is a state subject with limited federal intervention. Thus development and content of education may have different characteristics in different states in relating education to employment. Hence only one state in

India, viz. West Bengal, has been considered throughout this paper...[23.]

This study is noted here as representing the Indian scene in relation to graduate unemployment.

According to the study - the percentage of distribution of unemployed graduates by sex and area of residence.

Table X. showing the % of distribution of unemployed graduates by sex and area of residence. [24.]

Country	Sex			Area of Residence		
	Male	Female	Total:	Rural	Urban	Total
India	86%	14%	100%:	47%	53%	100%

According to average world phenomenon, educated unemployment is more frequent in urban areas, as is evident from the above given figures.

Further the study has pointed out, in the table which follows, a striking factor; the incidence of about 50% unemployment among the graduates with illiterate guardians. This shows that the educational background of the guardians influence the employability of the wards, and those with illiterate guardians have less chance of obtaining employment. Family connections, availability of labour-market information etc. are factors which depend to a great extent on the educational background of the family.

Table Y. India - Distribution of Unemployed Graduates by Guardians Level of Education. [25.]

Yrs. of School	No. of Grads.	N. of Grads.	% Unemployed
	Respondents	Unemployed	
0	99	48	48.5%

1-5	477	48	10.1%
6-10	269	184	68.4%
11-14	360	22	6.0%
15 & above	589	178	30.3%
Total	1,793	450	26.8%

Below is given the percentage distribution of job seekers according to reasons for failure to get a job.

Table A. India.- The % distribution of job seekers according to reasons for failure to get a job. [26.]

Reasons:

1. Academic	...	19.7%
2. Labour market is too competitive, or poor performance in interview	...	11.7%
3. No help from guardians, relations, friends and others	...	53.3%
4. Others	....	15.3%

Finally the study had given the Percentage Distribution of Employed Graduates by Waiting Period.

Table B. India - The % Distribution of Employed Graduates by Waiting Period. [27.]

Waiting Period	India
Less than one month	Not available
1 month - less than 3 months	"
3 months - less than 6 months	"
6 months- Less than 12 months	20.5%
More than 1 year	79.5%
Total	100%

An analysis of graduate unemployment in the state of West Bengal (representing a case study of India) points up several features. The Table X indicates a higher rate of unemployment in the urban areas as compared to rural areas and particularly a higher rate of unemployment among males. The Table Y, indicates the percentage of unemployed graduates in relation to guardians level of education.

The high rate of unemployment at the school-leaving level and University level among job seekers, has implications for both the irrelevance of curriculum to the employment market, and to the problem of qualification inflation, as the numbers in secondary and higher education is considered. This education given to increasing numbers of students is not job-oriented.

Tables A and B., which show reasons for failure in procuring a job, and the waiting period before graduates are employed, also point to the irrelevance of curriculum for the employment market. No doubt the attitudes of qualified graduates to the world of work, should also be considered as an important deciding factor in their achieving employment, or failing to do so.

These issues are enumerated by Williamson as being unnoticed by governments in developing countries. But the government and educationists in India are keenly aware of them. The major policy changes in educational curriculum are stressing the importance of making education relevant to the employment market, and of changing the attitude of educated graduates to the world of work. Hence much of education at every level is being vocationalized, and work experience is included in the school curriculum. The intention is to break down attitudes prejudicial to certain kinds of manual work.

### Policy Solutions.

The evidence for the assertion that a closer link between education and development and the employment market is of concern to policy makers in education, is in the fifth and sixth Five Year Plans. The stress is on education for employability.

In the fifth Five Year Plan four problem areas which are identified are 1. equality of educational opportunity; 2. a closer link between education and development and the employment market; 3. improvement in standards of education; 4. The involvement of the academic community in social and economic development. [28.]

These four areas are regarded as interdependent and inter-related. The educational policies which are adopted as solutions to these problems are considered under the following eight programmes:-

1. integrated child-care services programme;
2. universalization of elementary education;
3. Nehru Yuvak Kendras (Nehru Youth Centres), a programme of nonformal education for the age-group 14 to 23 years;
4. work-experience and vocationalization of secondary education; (as discussed in chpt. iv):
5. examination reform;
6. Centres of Advanced Study in Indian universities;
7. National Staff College for Educational Planners and Administrators; (as given in chp. iv.)
8. National Service Scheme.

Programmes 1, 2, and 3 are organized towards solutions for equality of educational opportunity; programme 4 relates to a closer

link between education and development and the employment market; programmes 5, 6, and 7 are proposals for the improvement of the quality of education in the country, towards relevance. Programme 8 is a scheme to involve the academic community in social and economic development. Together with programme 4, work experience and vocationalization, it is designed to destroy educated and graduate prejudice to the world of work.

These issues are supported by the educational policy and planning in the sixth Five Year Plan as well, and therefore before enlarging upon them, a brief statement from the sixth Five Year Plan, as given by the Annual Report 1983/'84, [29] is presented below.

According to this Report, the most important problems in the field of education in India are:- i) the spread of literacy and ii) universalization of elementary education. The Sixth Plan lays emphasis on minimum essential education to all citizens, irrespective of their age, sex, and residence. Highest priority has therefore been assigned to the programme of universalization of elementary education for the children of age group 6-14 and literacy for adults in the age groups 15-35. *These programmes are included in the New 20-Point Programme, which sets a target date of 1990 for the realization of these objectives. Though the Programmes are operated basically through State Governments, the Education Ministry is in close touch with them. In pursuit of these programmes, a Scheme of Awards to States for Excellence in enrolment of girls and adult women has been started.* [29.]



In addition, the system of non-formal education is being developed, and elementary education is being improved. In regard to education and the employment market,

*at the secondary level the programme of Vocationalization at the +2 stage is being strengthened. In the field of higher education, the first degree courses are being restructured to make education more relevant to the needs of the people, to increase the employability of graduates and to instil in their minds a spirit of service to the community.*

*In the technical education sector, schemes like Sandwich Diploma courses, Apprenticeship training, Community Polytechnics are expected to bring technical education and industry together and to increase beneficial linkages between them. [30.]*

Such policies would necessarily involve the redistribution of financial resources for the weaker sections of society: non-formal education alone involves large financial expenditure. Furthermore Secondary Education is to be vocationalized and graduates are to be more employable and of service to the society. Technical education is also planned with a view to linkage with industry. These are practical measures towards building a relevant system of education for socio-economic development in the country.

Amid this general range of reform, it is useful to clarify in detail what is being done, in two main areas - education and the employment market; and, secondly, school-level vocationalization.

#### EDUCATION DEVELOPMENT AND THE EMPLOYMENT MARKET.

A closer link between education, development and the employment market has been stressed in the Draft of the fifth Five Year Plan as

an important area. The inclusion of work experience in the curriculum and the vocationalization of secondary education have been recommended.

#### Work Experience in the Curriculum.

In order to increase relevance and productivity in the educational system the inclusion of work experience in the curriculum, and vocationalization of secondary education has been proposed in the KCR and discussed in the Five Year Plans and other documents. The fifth Five Year Plan provides for work experience as an important curricular reform at the elementary stages of education. The aim is *to maximise returns from education in terms of individual and social gain through effective linkages with development needs and employment opportunities.*[31.].

To this end schools need to inculcate in students, through suitable curricular and teaching methodology, qualities that are applicable to every kind of occupation. The intention is to improve their adjustability and employability, and even their capacity to settle into self-employment. Through this programme of work experience in the curriculum, students would also be introduced to India's Basic Education institutions, the 'Co-operative', and the 'Panchayat' and to improved practices in agriculture, and other rural occupations, all of which must form an integral part of the curriculum. *The resources available in the community in the form of land, skilled craftsmen and their work-shops, local raw material etc., should be drawn upon.* Work experience may also be provided through *projects calculated to improve the campus and locality surrounding the school;* work experience could also help increasing

*institutional assets in the form of buildings, furniture equipment, etc. with the added help and co-operation of the local community. [32.]*

Work experience is a well known concept and central to the system of Basic Education associated with Mahatma Gandhi, which designed productive work to be the very foundation of schooling. The KCR recommended that work experience should become an integral part of the educational curriculum at all levels of education in school. These policies of including work experience in the educational curriculum and the vocationalization of secondary education, have been debated discussed and now experimentally implemented.

However from past experience in India and elsewhere it may be noted that a number of conditions must be met before work experience can take its place in school curriculum. The normal difficulties include issues of syllabus formulation, preparation of instructional material and guides, provision of workshop facilities wherever necessary, and systematic evaluation among others. But the two most critical needs are the supply of competent teachers and availability of worthwhile projects and work opportunities.[33.]

However as a solution to shortage in competent teachers, work-experience classes may be taught by trained teachers and skilled craftsmen as well. They may be appointed on a full-time or part-time basis depending upon the individual circumstances of the case. Wherever necessary, such teachers could be given a minimum education programme after their respective appointments. However, the suggestion is yet to be established on the scale necessary for it to make its impact in the work experience programme.[34.]

The other critical need besides that of the shortage of competent teachers is that of suitable projects and worthwhile work opportunities. Most often children see through 'fake' activities and lose interest.[35.] The NCERT is currently engaged in making a detailed study of the different problems faced when implementing the work experience programme. A separate Work Experience Cell in the NCERT has been erected to provide leadership in organizing and developing programmes in work experience at a national level; to develop current material in the form of work books, Teachers' Guides, supplementary reading material, and laboratory kits; and also to serve as a clearing house of information and ideas.[36.]

However the preparation of a work experience curriculum, for the first ten years of school, has already been completed, and the NCERT is now working in collaboration with a number of States and the 'Kendriya Vidyalaya Sangathan' (Central Schools Organization) to promote and diffuse this innovation.[37.] This stress on work experience in the curriculum is aimed at linking education to development; and is also aimed at creating a work-oriented curriculum at various levels of education, - theory linking the system to the employment market.

#### Vocationalization of Secondary Education.

Much the same aims inform the vocationalization of Secondary Education. The present curriculum at the secondary level is mainly academic and preparation for university. Ninety-one per cent of secondary school students enter academic courses at the higher education level, which means pressure on the academic higher education system. [38.] Partly as a consequence, in the past, a

number of commissions and committees have recommended a major programme for the vocationalization of secondary education in order to reduce expansion of higher academic education. For example the KCR suggested a diversion of at least 20% of enrolments in classes ix and x (age group 14 and 15 years), and about 50% of the enrolments in xi and xii (age group 16 and 17) into vocational courses.[39.] Similarly the theme is pursued more contemporaneously:

*the emphasis in the fifth Five-Year Plan would be on relating secondary education more intimately to the economic and social needs of the country. Efforts will be made to restructure the educational pattern so that secondary education does not, as hitherto prepare students only for entering a University but also fit them for diverse occupations.[40.]*

The implementation of such a reform would meet with a number of practical difficulties. Some of these are indicated in the words of the Union Minister for Education 1973, in his general inaugural speech at the meeting of the Standing Committee of the CABE, 13th. June, 1973:

*We have hardly any data on manpower needs or employment opportunities. We also do not know enough about the best forms of vocational education to be provided at this stage. There is hardly any organization at the district level where the programme will have to be developed. There are no adequate agencies to look after the programme, either at the State or at the National level.[41.]*

Furthermore any effort towards the vocationalization of secondary education must consider the lessons from past experience.

It is important to recall the limited success of the multipurpose schools that were started in the mid-fifties, according to the recommendations of the Mudaliar Commission.[42.] The curriculum of these multipurpose schools consisted of two parts; a core curriculum consisting of languages, social studies, general science and a craft, and electives. The electives covered a wide range but essentially fell into seven groups - humanities, science, technical, commercial, agriculture, fine arts and home science. The new courses were to be terminal and to prevent secondary school leavers from drifting into academic, university courses.

However these goals have not yet been achieved. On-the-job training continues to be vastly more popular and the pressure on higher education continues as before:

*the Indian experience - essentially close to the experience of vocationalization of secondary education in so many other developing countries of the world - has been, that if such a programme is to succeed, two basic conditions must be satisfied; first, there has to be proper articulation of vocational programmes with the rest of the educational system, and second there must be available a sufficient number of job opportunities for those who complete such courses.[43.]*

However, despite these practical difficulties, the first central point to be made, is the continuous effort of Indian policy makers to bring schooling closer to work, and at some levels of the schooling system, to vocationalize curricula. The intentions have, historically and contemporaneously, been clear. There has been a

sharp alertness to the question of solving some of the problems identified by Williamson.

In similar fashion, very detailed proposals for particular programmes - designed to improve equality of educational opportunities - have been made. These detailed programmes cover a number of crucial areas where equality of educational opportunity is weak. In particular, the programmes place a stress on what happens before school, and on the early years of schooling. Thus the programmes cover basic child care services, preschool education, play centres and their links with the commitment to universal elementary education. In addition the programmes extend as far as nonformal education for young people via the Nehru Yuvak Kendras.

#### TOWARDS EQUALITY OF EDUCATIONAL OPPORTUNITY.

For equalization of educational opportunity three programmes have been proposed at the national level - the integrated child care services programme for the pre-school (primary) level of education; the universalization of the elementary education programme for the primary level of education, and the Nehru Yuvak Kendra (Youth Centre) programme of non-formal education for youth between the ages of 14 and 23 years.

#### The Integrated Child Care Services Programme.

In many developing countries there exists the problem of wastage at the primary stage; hence in India a programme of pre-school experience for the child is being recommended. This programme is buttressed by a concern for the provision of adequate nutrition in the early years of life.[44.]

The progress of pre-school or pre primary education in India is still in its developmental stage. In spite of CABE's recommendations for postwar educational development in India -1944- and the KCR's favourable outlook on the pre-school education plan, progress in this area is extremely slow.

The estimate of children attending pre-school institutions in 1971 was probably not more than one million, i.e. 2.1% of the age group 3-5 years. The different kinds of institutions are 'Balwadis' and 'Anganwadis', [45.] i.e. pre-primary schools and centres recognized and unrecognized. The total expenditure on this project was estimated to be only 0.2% of the total expenditure on education. Apart from limited resources, other drawbacks to the success of this plan are that most of these centres operate in urban areas, are fee-paying, and run by private management. Due to the slender resources allocated to this area of education and other high priority demands on public funds, particularly for the expansion of elementary education, the situation is not likely to change in the near future. [46.]

Government support in the Fifth Plan is to be limited to teacher-training for this level of education; to the promotion of research for evolving methods of pre-school education suited to Indian conditions; and towards the encouragement of private agencies which run pre-primary institutions. [47.]

There is one scheme for the provision of integrated child-care services in the Fifth Plan which deserves special mention. The services to be provided include pre-school education and recreation; special nutrition, i.e. feeding and immunization; health-care which



includes referral services; education of mothers in regard to nursing, as well as family planning; and provision of safe drinking water. This package service programme, will constitute an essential part of the national 'programme of minimum needs' included in the Plan.[48.]

The plan aims to benefit both mother and child. More generally it is aimed at providing education together with the minimum needs services for rural areas, and underprivileged urban areas and thus gives evidence of the changing concept of education in India, and a start in the inegalitarian distribution of resources. It is a break with the traditional elitist bias in education, where the urban upper, and middle income groups were favoured against the urban and rural poor.

The concern with mother and child is supplemented by other institutions, most notably play centres where the emphasis in pre-school education is on play, not learning, that is, on the promotion of socialization, and the development of desirable attitudes and behavioural patterns.

The play centres will be of an indigenous character - 'Balwadis' and 'Anganwadis' etc. Teachers here will be given freedom and encouragement to develop programmes according to local needs. The programmes involving 1000 projects, will be located in both rural and urban areas, and some tribal areas as well. Attention is mainly focussed on the most backward areas - drought-prone and nutritionally deficient, and the areas poor in development of social services. Within urban areas - the urban slum-dwellings and areas

inhabited by scheduled castes, are given priority of attention. This emphasis is clearly on the underprivileged section of society. [49.]

This scheme is centrally sponsored but implemented by the State governments. Financial support is from the Centre. The scheme has a provision of Rs.1,400 million. [50.] The Department of Social Welfare in the Union Ministry of Education is responsible for the administration and budgetary control of the scheme, while advisory groups at the State, District, and Block level co-ordinate and assist in the effective implementation of the scheme.

In spite of its small coverage initially, its significance lies in its adoption of an integrated approach to child-care, nutrition and pre-schooling, and its attention to health needs of both child and mother where necessary.

#### Universalization of Elementary Education.

This strategy for pre-schol education, and mother-child care is continued within elementary education. The goals here are exceptionally clear. India is committed to this policy by the Constitution itself. Article 45 of the Indian Constitution reads, *The State shall endeavour to provide, within a period of 10 years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of 14 years.* [51.] The Constitution was adopted in 1950, hence universal elementary education should have been reached in 1960. But this goal has not been achieved yet. (See Tables given on Primary School Enrolment.)

There is slow progress in the field of universal primary education, but the major hurdles in the path to achievement have

long been identified, and include briefly, the poverty of the people, particularly in the rural areas; social prejudice against the education of girls; and the dull instructional material that is offered.

The fifth Five Year Plan addressed itself to the progress of elementary education in different States and Districts where the socio-economic characteristics of the people living there vary sharply. Seven of the big States which need to give special attention to overcoming these imbalances are Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh.[52.]

In order to enable these States to expand elementary education, the fifth Plan has made larger allocations to help them. The fifth Finance Commission of 1973 recommended that five of these States should again receive additional Grants to redress the present imbalances in primary education. [53.] These Grants are the first ever of their kind, to be given for this purpose, and are given over and above the Plan allocations: they are earmarked specifically for primary education. Such efforts aim directly at educational balance between various regions and states.

Also the Plan gives evidence of awareness that the major thrust in elementary education must be in the backward areas and in the under-privileged sections of the population.[54.] Further programmes that were successful in the past are recommended for continuation and augmentation; i.e. free mid-day meals, distribution of free text books and stationery, free distribution of uniforms particularly to girls, and attendance scholarships.

More Ashram schools in tribal areas, where both education and maintenance is the responsibility of the State, is also clearly forseen. These programmes point to an egalitarian distribution of resources in the area of education, for both rural and underpriveleged urban sections of the population.

Also the fifth Plan lists a number of provisions against the prevailling rates of wastage - i.e. better organization of admissions into classes, by preventing children from entering at mid-term, to fail consequently the promotion exams at the academic end-of -year: to secure a more homogenous age composition, and abolish detention in the first two or three classes in school; changing vacations to suit local needs; improving Parent-Teacher contacts; and improving instruction methods in Schools.[55.] These measures are towards providing an educational system that is suited to people's needs, i.e. a relevant system.

Two new programmes of significance are <sup>0</sup>proposed: the Part-Time Facilities Programme and the National Programme of Minimum Needs. [56.] The Plan realizes that full time facilities alone will not achieve universal primary education, so a net-work of part-time facilities will be necessary for children who cannot benefit from full-time education. Part-time facilities are of two types - 1) continuation classes for children who have completed five years of Primary School and intend to continue education but find it impossible on a full-time basis; 2) literacy classes for drop-outs from classes i & ii and for those who have never attended school. The duration and time of these classes will be determined within the context of local conditions.

Such a programme of part-time education is expected to overcome two shortcomings of the present system; firstly its single-point entry and secondly its exclusive full-time character. These measures introduce flexibility into the educational system, and thus makes it more relevant to the needs of the people. These measures are designed as solutions to the drop-out and literacy problems.

It is hoped that participation rates will rise, on the implementation of this new system and that literacy will be promoted. The expectation is that it will *soften the present rigidities of the system and make it more functional and open.*[57.] This marks a change from the past traditional and dependent structure of education, to one that is more relevant to existing needs.

The second Programme is concerned with Minimum Needs. The main components of the National Programme of Minimum Needs include public health facilities, safe drinking water, developed housing sites for landless labour, improvement of slums, provision of electricity to cover approximately 30% to 40% of the total rural areas, and provision of facilities for elementary education for children as near to their homes as possible.[58.]

The important feature of this programme is that it is a package programme. Hence villages where Schools and Primary Health Centres are located will also be provided with water supply arrangements, electricity and link roads. As a result of these various measures old and new, it is hoped that 97% of the children within the 6-10 years age group, and 47% of children within the 11-13 years age group will be enrolled in full-time schools by the end of the Fifth

Plan. Also 78 lakh children within the 11-13 years age group are expected to come under part-time education.[59.]

Fulfilment of such targets by the end of the sixth Five Year Plan, would mean fulfilment of the Constitutional obligation, i.e. the universalization of elementary education.

The importance given to elementary education is further reflected in the Plan outlays. The fourth Plan provided Rs.237 crores for this purpose which equalled 30% of the total for education in the fourth Plan. The provision in the fifth Plan is Rs.743 crores, plus Rs.112 crores for school feeding programmes, under nutrition, which raises the total outlay for elementary education to Rs.855 crores, 47% of the total outlay for education in this Plan. [60.]

In conclusion, the efforts towards universalization of elementary education are many and varied. Flexibility has been introduced into the educational system to cope with the problem of illiteracy and dropouts, and larger allocations in finance are made towards achieving this goal. Also, the underprivileged sections of society have received the focus of attention as a result of these new measures. These programmes aim at equality, and balance in education towards development.

#### The 'Nehru Yuvak Kendras' or Youth Centres.

These have been organized to provide a programme of non-formal education for the age group 14-23 years, who are neglected by the formal educational system, which cannot accommodate the needs of more than 10% of this age group at present. Hence their needs remain

unmet, though for social transformation and economic growth it is important that provision is made for them.

The neglected population in this age group comprises three sub-groups namely, unschooled youth and drop-outs from primary schools; drop-outs from secondary schools; and youth who have finished their formal education but remain unemployed or under-employed. Their basic needs include vocational skills, training for citizenship, and an understanding of problems which face society and the nation. Educationally, they need general education, games and sports, hobbies and other recreation, health and family planning, and participation in community programmes.

The Fifth Plan seeks to respond to the needs of this group through the establishment of a special institution known as 'Nehru Yuvak Kendra' under the charge of a Youth Co-ordinator. The present target is to have at least one such centre in each district. The concept of this Youth Centre was first raised in the Sargeant Commission. About a hundred such centres have already been established. [61.] The activities organized by such centres include:

- a) Informal education for all categories of youth within the age group 14-23 years, youth participation in the literacy campaign, organization of adult education programmes; establishment of science museums, library services, and hobby workshops for science;
- b) Organization of competitive sports and games, and physical education; a search for talent in the rural areas in co-operation with the appropriate authorities at the district and state levels, and with voluntary organizations;
- c) Programmes of social and

community service involving both student and non-student youth; d) Cultural activities through participation in the performing arts, i.e. community singing, the theatre, and other activities conducive to the promotion of national integration.

The establishment of a 'Nehru Yuvak Kendra' is estimated to cost about Rs.0.1 million for capital costs, and Rs. 40,000 on a recurring basis. The scheme is fully financed and implemented by the Central Government. The total provision for this scheme in the Plan is Rs.60 million. Apart from other anticipated gains this non-formal educational project is also expected to make at least 10 million adults functionally literate. [62.]

The three programmes, integrated child-care services, universalization of elementary education, and the Nehru Yuvak Kendras are expected to affect access to education, to improve education in the rural areas, and to provide a more relevant, equal and balanced curriculum. The Nehru Yuvak Kendras in particular are an indigenous innovative measure.

#### INVOLVING THE ACADEMIC COMMUNITY IN SOCIAL AND ECONOMIC DEVELOPMENT.

The articulation of school and work, and a greater sense of social responsibility is also expected to follow from schemes designed to alter the attitudes of those in higher education. One such scheme is 'The National Service Scheme' (NSS) which was established in September 1969. This NSS requires a university undergraduate student to participate in programmes of national development and social service over a period of two years, engaging in a minimum of 120 hours of work each year. "You not me" is the



motto of the scheme, and some of the main programmes for student participation fall into the following categories:-

a) institutional work, in which the students are placed in selected welfare agencies, outside the campus, to work as volunteers: b) institutional projects in which improvement of campuses, construction of playfields, and swimming pools etc. are listed; c) rural projects which include the eradication of illiteracy, minor irrigation work, agricultural operations, aids to better health, hygiene and sanitation, development of rural co-operatives, saving drives, and construction of rural roads, etc. (preferably by adopting villages within the easy reach of colleges); d) urban projects which include adult education, the welfare of slum dwellers, training in civil defence, and setting up first aid posts, hospital work etc. Camping has been an important part of this programme.

Students and teachers are recommended to organize their own programmes according to interest, needs and circumstances. The Centre and the State contributes towards the financial requirement of each participant. Advisory Committees at the National, State, and university levels, advise and co-ordinate the programmes. The Scheme is originally based in the recommendation of the KCR. [64.]

The concept of labour and social service as part of the curriculum was introduced by Pandit Nehru as early as 1949 and incorporated in the first Five Year Plan. In 1959 a compulsory period of National Social Service for nine to twelve months was confirmed for every secondary school graduate seeking admission to the university.

However the finance involved prevented the scheme from being implemented at that time. In the fourth Plan there was a provision of Rs.50 million for this scheme. In the fifth Plan the provision was for Rs.95 million, to implement the following aims;.

*The fifth Plan intends to orient the whole scheme and make national service an essential part of the curriculum; effort will be made to link every subject with practical problems and socially useful work, generally in the vicinity of each institution. The University Grants Commission has already set up different subject panels to effect the desired orientation. Voluntary organizations will be assisted to conduct experiments like Youth Against Famine, and the involvement of youth in development work. [65.]*

However these National Plans prepared at the Centre in New Delhi, or in the state capitals, need breaking down into relevant details to suit local needs before implementation. The proposals already noted, indicate national concern for social needs - equality, and therefore social work for a more egalitarian society. In relation to the distribution of financial resources as well, a more egalitarian trend is noted. The NSS is an innovative step in changing the non-formal educational curriculum and it is an indigenous approach in education, which is undergoing change and development.

#### IMPROVEMENT OF STANDARDS IN EDUCATION.

Parallel changes within the formal system of education are also being attempted. Many of these policies have the explicit goal of improving the qualitative provision of education. Such policies are

effecting or implementing examination reform, the creation of Centres of Advanced Study in Indian Universities and the establishment of a National Staff College for Educational Planners and Administrators. These measures make a contribution to making education relevant to the social and economic development of the nation by qualitative improvement.

a) Examination Reform.

The Indian education system is geared to the passing of examinations. Hence the syllabus, teaching methods, and learning methods are all influenced by examinations at each level of formal education. The situation has not changed in two decades since the publication of the KCR.

However the NCERT has done much to improve the present examination practices at the secondary stage. The NCERT works in close co-operation with State Governments and Boards of Secondary Education and tries to help them develop programmes of examination reform according to their special needs and circumstances. The concentration so far has been on improving the School Leaving Certificate examination and finding a place for internal assessment parallel to external assessment. But it is reform of the examination system at the University level that has become a matter of the greatest urgency. Thus from suggestions of the various study groups appointed to report on the subject at timely intervals the UGC launched a programme of examination reform in the Fourth Plan. [66.]

The general principles governing this reform are set out in a short paper released by the UGC in 1973. [67.] Internal assessment

and the grading system are two suggested methods towards creating a balance in final assessment of a candidate. Further recommendations are a national examination at the Bachelor's level, in various subjects, by a central authority; "Open University" examinations for candidates who study through correspondence courses; entrance examinations to all institutions; and a requirement by UGC that all colleges and universities supply them with complete information on examination question papers and question banks. In the latter case, analysis would then be supplied to concerned institutions for remedial action, if necessary. [68.] These programmes received further impetus in the Fifth Plan period, when universities were invited to participate and submit proposals in support of the various issues. [69.]

The restructuring of the examination system intended to serve several needs in the prevailing examination system. Internal assessment and a more careful marking pattern are aimed at improving the standard of students. The careful examination system, and the requirement of an entrance test into any area of study are intended to control the expansion of numbers in higher education, with students being directed into different branches of study, better suited to the needs of the job market. The UGC has accordingly taken responsibility for the examination improvement programme, on an all-India basis at the higher education level.

#### b) Centres of Advanced Study In Indian Universities.

In 1963, the UGC initiated a programme to strengthen post-graduate teaching and research in Indian Universities. [70.] The intention was to develop a number of university departments for

advanced training and research in selected areas of study. The programme offers active support and financial assistance to meritorious departments in universities, after careful selection on the basis of achievement in the quality and extent of work already done by them. The departments concerned would be expected to have a large staff of Professors, Readers and Research Associates or Fellows of outstanding ability and qualifications who are actively engaged in research and advanced training. A good proportion of the department would make up a 'floating staff' who would come for short or long periods to these departments, on deputation from their universities or institutions and possibly from abroad. Properly organized, these departments are expected to make an appreciable impact on raising the standards of teaching and research in Indian universities.

On the basis of advice of a Committee consisting of eminent educationists and scientists, the UGC began by inviting thirty University Departments to function as Centres of Advanced Study. [71.] There are a number of departments in the subjects areas of Physics, Chemistry, Botany, Zoology, Geology, Mathematics, Astronomy, Bio-chemistry, Economics, History, Philosophy, Sanskrit, Linguistics, Education, Sociology, in the Universities of Delhi, Calcutta Madras, Bombay, Annamalinagar, Punjab, Sagar, Osmania, the Indian Institute of Science in Bangalore, Poona, Aligarh, Banaras, Visva-Bharati and Baroda. [72.] These Centres are intended to function as All-India Centres for Training and Research. Apart from their function of improving the general quality of academic work, it was expected that they would participate in the creation of further

centres of excellence. Valuable support has been given them by UNESCO, the USSR, and the United Kingdom.[73.]

Such an effort towards raising the quality of education is aimed at national development, both social and economic. The measures taken for research and improvement in the various areas of knowledge are expected to result in the progress of practical fields of study and to create a body of better qualified personnel to enter the economy.

c) National Staff College for Educational Planners and Administrators.

An important problem of educational planning, and plan implementation, is the initiation and development of training facilities for Planners and Administrators in education. Therefore the KCR recommended the establishment of a national staff college to undertake this responsibility. Thus the National Staff College for Educational Planners and Administrators was established in December, 1970, with five basic functions -

- 1) training of educational planners and administrators at the school level;
- 2) training of educational planners and administrators at the university level;
- 3) research and study in educational planning and administration;
- 4) consultancy and provision of extension services in the field;
- 5) development of international programmes for the training and orientation of educational planners and administrators from Asian and other countries.[74.]

The training activities of the Staff College include summer courses and three-week courses for Educational Planners at all levels, Administrators, College and University Teachers, and students as well; top level seminars for University Vice Chancellors and Policy Formulators; Research Projects were also to be identified and considered.

The National Staff College began its preparatory work - training and research projects for Indian Educational Administrators - with the Asian Institute of Educational Planning and Administration. In 1969 an 'Indian Programme' was developed. Programmes were organized by staff members in both institutions, under a common Director until 1972, when the ten-year agreement governing the establishment and maintenance of the Asian Institute between the Government of India and UNESCO came to an end. Since then the regional programmes of the Asian Institute have been taken over by the National Staff College and are now located in its International Division which continues to bear the name - Asian Institute of Educational Planners and Administrators.[75.]

The National staff College for Educational Planners is intended to produce educational administrators who can build a system of education to suit the needs of the economy, a system that is non-elitist and equal. Their task is to produce a changed concept of education, one that would disassociate itself from *urban bias and disdain for the practical*[76] otherwise *inequality is maintained and legitimated through education*. [77.]

The specific programmes described earlier are, of course, located in a social context which is affected not only by local

specific circumstances, but also by international influences - historical and contemporary.

#### INFLUENCE OF THE USA AND USSR ON INDIAN EDUCATION \_ CURRICULUM AND STRUCTURE.

Changes in current curriculum policies in Indian education are influenced through the aid received from the two major leading nations, the USA and the USSR. Their influence is felt in the many areas of curriculum content, methodology, and structure of education; and in research and innovation. The influences from both countries are egalitarian in nature, and Indian educationists are in the process of experimentation with a view to evolving a truly indigenous system of education that would suit the needs of the people and the socio-economic progress of the nation.

#### INFLUENCE OF THE USA ON THE INDIAN SYSTEM OF EDUCATION.

To assist in the qualitative improvement of Indian education, the USA has given considerable aid both in finance and in personnel. One significant result of aid from the USA has been the creation of the topmost organization for school education, namely the National Council of Educational Research and Training (NCERT): its principal body is known as the NIE and both are located in New Delhi. The major impact from the USA has come through these educational organizations.

The NIE was financed by the PL 480 funds of the USA.[78.] It is an autonomous All-India organization, engaged in improving the programmes and practices of primary, secondary and teacher education; methods of teaching, and techniques of examination and evaluation.



The impact of the USA at the school is felt through the varied activities of the NCERT in the field of curriculum, in improved instructional material, improvement of reading in primary classes; in science education, the formation of science clubs, fairs, science talent search schemes; and mathematics education including the teaching of new mathematics. Further efforts and activities are in programmed learning, guidance, audio-visual education, extension service programmes, action research, and examination reform.[79.]

American impact on higher education has been through Indians educated in America. A contract between the Government of India and the USAID of the American Government, in September 1958, was established to provide training and higher studies, for selected Indian students at the Teachers College, Columbia University, New York, from 1958 to 1967.[80.] The purpose was to provide technical assistance to the Ministry of Education and also for the development of the National Centre for Leadership Training in education, which was intended to make a contribution to the economic development of India.

The NCERT built and developed with American financial aid has contributed to both applied and fundamental research as well. To improve the teaching of science, Summer Science Institutes were organized and conducted. Teachers of mathematics in secondary schools and training colleges were introduced to the new mathematics, modern methods of teaching, the preparation of text books and teaching materials. For the teaching of the English language, a Language Laboratory project was set up, through which English Language Teachers were trained to prepare programmed

learning materials. Similar material was prepared for the subjects of mathematics and science as well.

The American influence is noted in the training of Teachers for Guidance classes, they were trained to counsel students for various careers through the use of psychological tests and devices. Further, Teachers were trained for audio-visual education, thus making use of devices like the radio, T.V., tape-recorders, projectors and film strips etc., In reference to Field Services, Extension Services were organized in the training colleges throughout India with the co-operation of state governments and other authorities.[81.]

With reference to exam reform and evaluation a Central Examination Unit was established in the National Institute of Education, directly financed by funds from the USA and an evaluation unit attached to it. Teachers were trained in the internal assessment system, so that both internal and external opinion was given due credit in an examination. This system is now in operation at post-graduate levels of education and in professional education like medical, engineering, and Teacher education. It has also been adopted into Schools and colleges at every level of education.[82.]

Further, Research is one of the three major functions of the National Institute of Education. It promotes and organizes research in all branches of education and acts as a clearing house for ideas and information. Co-operative research between NIE and other colleges and universities in India have been in progress. A number of projects were undertaken in Basic Education, Adult Education, Audio-Visual Education, Field Services, Science Education, Curriculum and Evaluation.[83.]

*In order to publish and disseminate the educational information, a Publication Unit was set up along with a Central Laboratory to collect and process data.[84.] This unit serves as a Clearing House for useful educational information, throughout India and outside the country as well. The publication programme covers a wide range of work like text-books, student-teacher manuals,.... periodicals, year books of the NCERT, Educational Encyclopaedia, research reports, surveys,... journals, NIE Newsletter etc.[85.]*

*The NIE at Delhi is primarily concerned with school education at the national level. But the State Institutes of Education were established in 1964 and attached to the Director of Education. The aim was to bring about a qualitative improvement in school education, but thus far due to lack of funds, activity has been limited to the primary level only. These Institutes also co-ordinate and supplement the work of the extension services in undergraduate training colleges, which arrange refresher courses and workshops, plus they are involved in preparing guide-books, teaching aids, teachers manuals etc.*

*In the field of other developments in Indian education, as a result of the American impact,[86] Remedial Teaching has become a popular educational programme. There exist several types of remedial programmes in the different schools. Remedial teaching is a method of providing extra coaching for slow learners, who are designated as below average in intelligence. It was already well-known in India and other countries, but enthusiasm in identifying slow learners with the purpose of providing remedial coaching, is due to the American influence in education.[87.]*

The method of team teaching is also of American implementation but it is neither suitable nor relevant to the present Indian situation.[88.] The method requires two or more teachers as responsible for one group of students. In a country with a large population and an insufficient number of trained teachers, the method is impractical and irrelevant.

However the Junior college concept of the American system of education seemed to be a popular one. It consisted of a two-year period between high school and higher education, which provided the students opportunity to identify their own abilities and capacity for higher education. Thus the pressure on higher education was considerably reduced. In order to improve the Junior College system in India there would need to be practical courses like commercial, industrial, and technical included, which would be terminal in nature and conclude with the award of certificates to successful candidates of the two-year course.[89.]

The semester system was yet another experiment already adopted by colleges of engineering and medicine, and by science departments in higher education. The advantage to students was that mental pressure was reduced, since the whole academic years course was not included in any one examination. However it is difficult to conclude on its merits, in reference to the existing syllabus in colleges and universities. Yet the UGC has taken steps to introduce the semester system into some Indian universities for the near future.[90.]

The impact and influence of the USA has been widespread, and has percolated through every level of education, and its branches in the country. America provided heavy financial aid at the time of Indian

Independence to carry through plans and programmes, but this was not free of American counsel. India accepted the influence of America along with her economic assistance.

This influence has however been criticized:

*informed opinion in the country has been critical and even suspicious of American intentions and actions in the field of Indian education as in other fields. And their arguments and grounds appear sensible. The American friendship and close associations with several countries in the world, particularly with South Vietnam, Thailand, Phillipines, etc. have ended in disappointment and disillusionment. The American credibility is at its lowest ebb in Asia and Africa and even elsewhere. It has been argued with cogent and convincing reasoning that the United States of America has voluntarily stepped into the vacuum created by the British withdrawal from Asia and Africa. The United States of America wanted to keep under its political thralldom these newly liberated countries under the pretense of giving all kinds of aid and services of technical personnel, etc. [91.]*

*Later the Americans wanted to utilize P.L.480 funds for establishing an Educational Foundation in India, with Americans being in the majority and controlling the Indian system of education. There were strong and loud protests from teachers of some universities, and members of the Indian parliament against such a proposal of the U.S. government. They were strongly suspicious about the Central Intelligence Agency (CIA) behind their educational programmes and activities. [92.]*

A similarly critical argument points out that the work of the NCERT and NIE has not been completely relevant and significant for India's present educational needs. Although research work has been given priority for a long period of time, a large part of India's educational problems have remained unsolved. Further, *due to the strained relations between America and India in foreign affairs, there has been growing resistance to the American influences on Indian education.*[93.]

In conclusion, the impact of the USA and its influence on the Indian educational system has been strong in the areas of curriculum change and methods in teaching, in fundamental and applied research, and in the structure of education as well. The USA has been generous in financial aid, in advice, and in working personnel. The NCERT and the NIE both affected by the Americans remain the two main bodies at the Centre, for change and development, in school education particularly. The influence is towards an egalitarian system, organized for relevance, equality, and rural-urban balance in education.

#### INFLUENCE OF THE USSR ON THE INDIAN SYSTEM OF EDUCATION.

The second major foreign influence on policy and planning in Indian education is that of the Soviet Union.

The many channels through which Soviet influence has made its impact on Indian education are the Indo-Russian cultural and educational delegations, economic aid and technical assistance, scholarships and assistantships, the presence of the Russian member on the Education Commission of 1964-'66; the teaching of the Russian language in the Indian universities, the publication of low-priced

Russian books in India, through the Indo-Soviet text- book programmes etc.[94.]

In 1950 India established the Indian Council of Cultural Relations, and since then two cultural and scientific delegations have visited the USSR with the specific intent of studying the system of education there. The first delegation in September-October 1961 commented on the importance given to Teacher-Education in the Soviet Union, both the pre-service and in-service programmes. Such programmes are now given importance in India too, particularly the in-service programme, which is a recent one in education. The delegation was further impressed with student behaviour, and the youth of the Soviet educational system. There was clear evidence that manual and productive labour was held in respect. The delegation also made note of the importance given to extra-curricular programmes, of the provision of educational opportunities for talented students, and of the importance given to experimental research in education. The impact of these aspects of Soviet education *on similar aspects of Indian education can be easily traced.*[95.]

The delegation recorded their impressions on several other issues as well, with results for Indian education. Firstly, *in the provision for equipment, the first priority is given to science laboratories, technical workshops and teaching aids.*[96.] A similar priority is now in operation in Indian schools. However in relation to rural schools in India, science laboratories and workshops are yet to be developed.

Secondly, an important place in the Soviet curriculum is given to the teaching of foreign languages, music, and physical education, apart from the traditional academic studies and polytechnic subjects. A similar practice was usual throughout the private school system in India. However it has now been widely accepted by all educational institutions in the country. Hence languages like French and German are now available in the curriculum, and physical education and games are in high favour throughout. Most of the colleges of Physical Education in the country, are of recent origin.[97.]

Further the Parent-Teacher and School-Community relationship, much discussed and tentatively implemented into the Indian school system has had a firm position in the scheme of Soviet Education since long back. The Indian Delegation members in the Soviet Union, were impressed by Soviet efforts to bring the school and community into a co-operate relationship and their impressions have made an impact on similar aspects of Indian education.[98.]

Work-experience as part of the school curriculum, the concept proposed by Mahatma Gandhi, finds support in the Soviet educational system. *The work-experience programme which is now considered as an integral part of General Education in India is influence by the Soviet educational system.*[99.] Work experience in the school curriculum is promoted through manual and productive labour.

Of significant note, is that the Soviet System considers Pedagogy to be a scientific discipline. The urge for education seemed tremendous in the USSR. The Delegation reported on Correspondence Courses for Teachers in India, and recommended the



programme for the backlog of untrained Teachers already in service, rather than more provision of pre-service training. Further the programme could offer higher qualifications within the profession, to in-service Teachers.

The USSR also influenced Indian education indirectly through the economic and technical aid offered in various fields, according to an Agreement signed between the USSR and India in 1952.[100.] The USSR has awarded scholarships and assistantships to Indian scholars which have enabled them to undergo specialized training in advanced science and technology at different Soviet universities.[101.]

Recommendations made by the Indian Education Commission 1964-'66 to improve the system of education in India have been influenced by Russian educational thought. *Prof. S.A.Shumousky Director Methodological Division, Ministry of Higher and Special Secondary Education, RSFSR, and Prof. of Physics, Moscow University, Moscow, was invited to serve as a member of the Indian Education Commission of 1964-1966.*[102.] The introduction of work-experience as an integral part of general education, the ten-year pattern of schooling, the introduction of a Common School system, the importance of Science Education etc. can be traced to the influence of the Russian expert serving on the Indian Commission 1964-1966.

The Russian language is now taught at University level in India and at the "Institute of Russian Studies" in New Delhi. Russian language Teachers have been invited to Indian Universities and the Indian Institutes of Technology, according to Indo-USSR Cultural Exchange programmes.[104.]

Since the developments in science and technology in the USSR can be read in the Russian language only, these works required translation into English or Indian languages, in order to be read in India. Therefore an Indo-Russian Scheme was initiated in 1965 which enabled the standard works in different fields, in higher education of the USSR, to be translated and published in English, for Indian students at a low cost.[105.] Further, according to a joint Indo-Soviet Text Book Programme, scholarships are offered for training in translation and methodology techniques.[106.] These cheap book production programmes are the result of the KCR's recommendation that the Ministry of Education should produce low-priced and subsidized books for the University stage, in collaboration with appropriate authorities in the USA, USSR, and the UK.[107.]

The impact of the USSR on the school structure of education in India is seen in the general pattern which now prevails and dominates in this country.[108.] The ten-year school is now in operation according to which there are seven or eight years of primary level classes, and three or two years of lower secondary schooling without any specialization. A pre-primary level of one to three years is an important need as well.

The age of admission to Class 1 has been fixed at, not less than 6+. At the end of the primary about 20% of students are expected to leave the school system and enter working life; another 20% are expected to leave the system of general education and enter into different vocational courses of one to three years duration. The remaining 60% of students are expected to continue in the general stream of education and complete the public examination.

At the end of the ten-year general education in school, about 40% of students are expected to enter working life, another 30% to join different vocational courses, while the remaining 30% are expected to continue in the general stream of education, for a duration of one and ultimately two years.

Such a pattern of education is found prevailing in the USSR, and *one of the most important impacts of the USSR on Indian education has been on the structure of school education in India.*[109.]

Further the stress laid on work-experience in the educational curriculum, by the KCR, found strong support in the Soviet educational system. The KCR commented that the prevailing educational system was over academic and too bookish and therefore unrelated to life. There was a gap between curriculum content and societal needs for national development. The KCR commented that -

*No reform is more important or more urgent than to transform education, to endeavour to relate it to the life, needs and aspirations of the people and thereby make it a powerful instrument of social, economic and cultural transformation, necessary for the realization of our national goals. This can be done if education is related to productivity.*[110.]

It is in Russia that education is production-oriented, and that the national system is dominated by the cultural and occupational interests of the working class proletariat. The dignity of work has been established there and education for leisure of the aristocracy was ended.

The KCR has commented that *Work-experience is nothing but participation in productive work in school, in the home, in a work-*

*shop, on a farm, in a factory, or in any other productive situation.*[111.] The barrier between the educated elite and the illiterate masses is broken, through the inclusion of work experience in the curriculum. Hence the importance attributed to it in Basic education.

In regard to science, the effort to raise the standard of science in the curriculum is also influenced by Soviet education. The Soviet nation has made its impact on Science Education in India through the Soviet Academy of Sciences and the Academy of Pedagogical Sciences, institutions that are pioneering a revolutionary change in the teaching of science and mathematics in India.[112.]

A significant impact of the Russian system of education was the establishment of Russian-style Agricultural Polytechnics in India, as recommended by the KCR. Some of the special features of these agricultural polytechnics are - special institutions to provide vocational education in agriculture at the post matriculation level; these institutions train non-professional specialists, required as farm mechanics, laboratory assistants, craftsmen and technicians in agro-industries, and assistants for extension services etc. Intensive courses for farmers in subjects like bee-keeping, seed-production, have also been recommended.

In due course these Polytechnics are expected to develop into multipurpose institutions, providing industrial and vocational courses. Each Polytechnic will have an attached farm with well-equipped laboratories for science-teaching, demonstrations on mixed farming and other agricultural operations. When these Polytechnics are well-established, they will offer condensed courses for young

farmers, as well as tailoring, handicrafts, etc., of special interest to girls and women in rural areas.

Bright students will be provided with facilities for higher education, and diplomas or certificates; their services will also be engaged by both private and public employers in farms, firms and factories.[113.]

The Russian impact on Policy changes in Indian education is significant, and is fairly widespread.

*All the recommendations made by the Indian Education to improve the system of education in India like the introduction of work experience as an integral part of general education, the ten-year pattern of schooling, the introduction of a common school system, Science-Education etc., can be traced to the influence of the Russian expert serving on the Indian Education Commission of 1964-'66.[114.]*

Such is the comment of an Indian researcher, but the influence of the USSR on the current educational pattern in India is true to an extent only and not to such an extreme. Representative members of many nations sat on the Education Commission 1964-'66, and American influence on the Indian educational system through the NCERT and the NIE is considerable. Further the Indian educational pattern is still embedded in the British tradition of education.

#### GENERAL CONCLUSION.

This chapter opened with a survey of the educational scene 1960-1975 with statistics, with the aim of identifying problems in Indian education, and recommending solutions. Literacy-illiteracy, disparities between States, in regard to education, and increase in

educational facilities, are surveyed. The Statistics showed a 'dependent' pattern of society, where illiteracy prevailed in a large way, but current major reforms in education are noted as being socialist and indigenous in nature. Further a survey was made of the link between education and employment; of graduate unemployment and note was made of the Five-Year Plans which concentrated on education for employability, for transforming graduate attitude to the world of work, and for discouraging the system of qualification-escalation. The stress changed towards a more relevant system of education for national development.

Further much of the discussion in this chapter on current educational policy was based on the well-known national Draft of the fifth Five-year Plan and related documents, which in turn are closely related to the recommendations for educational development as embodied in the most significant of educational documents, the Kothari or Education Commission 1964-'66. Reference was also made to the NCERT studies of educational problems, solutions and implementation of Plans towards development of education in India.

Four problem areas were identified and focused upon in the Draft Fifth Five Year Plan. These were the area of equality in educational opportunity; area of necessity for closer links between education and development and the employment market; area of educational standard and improvement required; area of social and economic development and the need to involve the academic community in it. These four problem areas are inter-related. Solutions related to them, in the form of recommended educational policies, follow next.

It is both interesting and significant to note that the four problem areas in education include the main issues discussed by Williamson, as being neglected in developing countries. In fact the policy solutions named and discussed are clearly solutions to Williamson's named problems as well; i.e. that education in developing countries is not relevant to the employment market; that educated graduates cannot be assimilated into the economy; that the social attitudes of these graduates are not conducive to manual work; these are attitudes which increase the distance between the educated and the less privileged section of the population. Equality and rural-urban balance in education are constantly in focus as well.

These issues are of current interest as is evidenced by their inclusion in the Fifth and Sixth Five Year Plans. They were also matters of concern in the earlier Five Year Plans. But the Fifth and Sixth Plans have discussed these problems with the aim of resolving them. The KCR showed the same concern.

Lastly the influence and support from two major nations the USA and the USSR, in implementing innovations in the many significant areas of education, as already described, gives evidence of a similar concern, and a new egalitarian approach to education.

Such concern in regard to these educational problems point to the fact that significant inroads into the once 'dependent' model of education in India, are now in progress. There is a transformation in educational thought, innovation in proposal and progress, and a growing indigenous concept of education, which is expected to prove relevant to national socio-economic growth and development. Thus it

may be concluded that Indian education cannot correctly be considered within the 'dependent' framework of society, as given by Williamson, although in many ways the Indian pattern is akin to the traditional British model.

The discussions reveal that the concept of education is given new meaning. Education is to be linked to the live environment at every social level and for all age groups. Policies are designed towards the educated person being made employable and suited to the economy of the country. The rural scene together with the under-priveleged urban scene is given close consideration. Equality of educational opportunities is stressed throughout.

When the proposals outlined and discussed thus far, are fully implemented to the extent that they produce an impact on the national environment, the structure of education in India will no longer show vestiges of a 'dependent' pattern, rather a transformed relevant and indigenious model which suits the needs of the country.



Chapter VI. Footnotes.

1. Bill Williamson, Education, Social Structure and Development, pp. 19, 20.
2. Op. cit., p.19.
3. Op. cit., p.20.
4. Op. cit., pp.16- 18. [The quotation from Peter Donaldson p.124, is cited by Bill Williamson as being from Donaldson, P., Worlds Apart. London: Penguin, 1971 ].
5. Op. cit. pp. 20,21.
6. Op. cit. p. 23.
7. BULLETIN of the Unesco Regional Office for Education in Asia and Oceania, No. 20, June 1979.  
Education in Asia and Oceania. p.56.
8. Op. cit. p.58.
9. Op. cit. p.57.
10. BULLETIN of the Unesco Regional Office for Education in Asia. No. 17, June,1976, educational building and facilities in the region. p.58.
11. Op. cit. p. 58.
12. BULLETIN of the Unesco Regional Office for Education in Asia and Oceania, No. 20. June, 1979.  
Education in Asia and Oceania. p.57.
13. Op. cit. p.59.
14. BULLETIN of the Unesco Regional Office for Education in Asia. No. 17. June 1976.  
educational building and facilities in the asian region. p.58.

15. IIEP Research Report: No. 36.

Literacy in a Non-Literacy Milieu: The Indian Scenario. p.26.

The Report defines the general situation in its footnote 1 contained inside the quoted text:

*[1.They are socially underprivileged classes in India and form about 22% of the population. The Indian Constitution prescribes protection and safeguards for these classes either specially or by way of general rights of citizens, with the object of promoting their educational and economic interests and of removing social disabilities to which they are subjected. Almost all the States and Union Territories, excepting Nagaland, Andaman & Nicobar Islands and Lakshadweep have scheduled castes; scheduled tribes do not exist in Haryana, Jammu & Kashmir, Punjab, Sikkim, Chandigarh, Delhi and Pondicherry.]*

16. Ibid. p.26. The Report in its footnote 2 has noted:

*[2.Subsequent to the Scheduled Castes and Scheduled Tribes (Amendment) 1976, the population of these communities has been revised for the 1971 Census by the Office of the Registrar-General, India as 123.6 million, (82.4 million scheduled castes and 41.2 million scheduled tribes.)]*

17. Op. cit. p.17.

18. Op. cit. p.28.

19. BULLETIN of the Unesco Regional Office for Education in Asia.  
No.17. June 1976.

educational building and facilities in the asian region.p.57.

20. IIEP Research Report: No. 36.

Literacy in a Non-Literacy Milieu: The Indian Scenario. p.11.

21. Op. cit. p.17.
22. Op. cit. p.15.
23. IIEP occasional papers, no.60.  
Unemployment of educated youth in Asia.  
a comparative analysis of the situation in India, Bangladesh and  
the Philippines. p. title page.
24. Op. cit. p.18.
25. Op. cit. p.19.
26. Op. cit. p.26.
27. Op. cit. p. 16.
28. Ghose S.C., (editor), Educational Strategies in Developing  
Countries. Essay on India by Veda Prakash. p. 78.
29. Ministry of Education and Culture, Government of India.  
Annual Report 1983-'84: Department of Education and Department  
of Culture. p. (vii).
30. Ibid. p. (vii).
31. Ghose, S.C. (editor), Educational Strategies in Developing  
Countries. Essay on India by Veda Prakash p.90.  
[The quotation is cited by Veda Prakash in his article India  
as being from the Draft Fifth Five Year Plan, Part II, p.195.
32. Op. cit. p.91. [The quotations are cited by Veda Prakash in his  
article India as being taken from the Draft Fifth Five Year  
Plan, Part II, p.195.
33. Ibid. p.91.
34. Ibid. p. 91.
35. Op. cit. p.92.
36. Ibid. p.92.

37. Ibid. p.92.
38. Ibid. p.92.
39. Op. cit. p. 93.
40. Ibid. p.93. [This quotation by Veda Prakash in his article India, p. 93, is without reference.]
41. Ibid. p.93. [The quotation by Veda Prakash in his article India, p.93, is cited as being from the general inaugural speech of the Union Minister for Education 1973, at the meeting of the Standing Committee of the (CABE) Central Advisory Board of Education, 13th. June 1973.]
42. Ibid. p. 93.
43. Op. cit. p.94.
44. Op. cit. p. 82. [The quotation is cited from the International Education Commission, Learning To Be, Paris 1972, p.107.  
*[Undernourishment in the mother can make the new born baby's nervous system more fragile, and may lead to serious damage later on ... The critical period for the brain's physical growth being between the fifth and tenth month following birth, malnutrition at this time may reduce the number of cells in the brain, which has virtually finished growing by the end of the second year. Longitudinal development studies carried out in various countries, especially in Central Africa and Central America, show that malnutrition during the first four years of life leads to mediocre intellectual performance when children reach a school age.]*
45. Op. cit. p.83. [From Veda Prakash- India foot notes 8 & 9,

p.109; Indian (Marathi) names for pre-primary centres.]

46. Ibid. p.83.
47. Ibid. p.83.
48. Ibid. p.83.
49. Op. cit. p.84.
50. Op. cit. pp.84 & 85.
51. Op. cit. p.85.
52. Op. cit. p.86.
53. Op. cit. pp.86 & 87.
54. Op. cit. p.87.
55. Ibid. p.87.
56. Ibid. p.87.
57. Op. cit. p.88.
58. Ibid. p. 88.
59. Ibid. p. 88.
60. Op. cit. pp.88, 89.
61. Op. cit. p.90.
62. Ibid. p.90.
63. Op. cit. p.104.
64. Op. cit. p.105. [Veda Prakash India has quoted from the Draft Fifth Five Year Plan, Part II, p.201.]
65. Op. cit. 106.
66. Op. cit. p.95.
67. Ibid. p.95. [Veda Prakash in his article India cites in footnote 19, Exam Reform, A Plan of Action, University Grants Commission, New Delhi, 1973, p.2.]
68. Op. cit. p.97.

69. Op. cit. pp.97 & 98.
70. Op. cit. p.98.
71. Ibid. p. 98.
72. Op. cit. pp.98 & 99.
73. Op. cit. p.99. [Professor P.M.S. Blackett, as President of the Royal Society, London, indicated, at the March 1971 Conference of Scientists sponsored jointly by the Indian National Science Academy and the Royal Society London, that the Indian Government and the University Grants Commission had been successful in formulating and implementing the programmes for Centres of Advanced Study, and discussed why it was important for developing countries to establish their own special centres for higher degree work. Good students could take their degrees in their home countries. The research programmes in these Centres are expected to reflect the research requirements of the economy. Therefore the programmes in these Centres would need to be reviewed at timely intervals, in order to have new direction to their development.] Veda Prakash in his article India, has cited Prof. Blackett's comments as being from Centres of Advanced Study in Indian Universities, University Grants Commission, New Delhi, 1973, p.1.
74. Op. cit. pp.100 & 101. [The Staff College is autonomous but financed by the Central Government. The overall authority lies in a Council at the head of which is the Union Minister of Education. The Director of the Staff College is its Chief Executive Officer who is advised by two committees, one for training and the other for research. With the commencement of the

Fifth Plan, the N.S. College was expected to bear an increasing burden of responsibility towards the training of senior educational planners and administrators in the country.]

75. Op. cit. pp.103 & 104.

76. Bill Williamson, Education, Social Structure and Development, p.17. [Bill Williamson has quoted Peter Donaldson, in Worlds Apart, London: Penguin, 1971. p.124.]

77. Op. cit. p.20.

78. A. Lingajammanni, An Enquiry into the Impact of Foreign Countries on the System of Education in India since 1947. p.66.

79. Op. cit. p.71.

80. Op. cit. p.67.

81. Op. cit. p. 71.

82. Op. cit. pp. 71, 72.

83. Op. cit. p.72.

84. Ibid. p.72.

85. Op. cit. p.73.

86. Op. cit. p.74.

87. Ibid. p.74.

88. Op. cit. p.75.

89. Op. cit. pp.75-78.

90. Op. cit. pp.79, 80.

91. Op. cit. p.82, 83.

92. Op. cit. p.83.

93. Op. cit. p.84.

94. Op. cit. pp.90, 91.

95. Op. cit. pp.91, 92.

96. Op. cit. p.92.
97. Ibid. p.92.
98. Op. cit. p.93.
99. Ibid. p.93.
100. Op. cit. p.94.
101. Ibid. p.94.
102. Op. cit. p.96.
103. Ibid. p.96.
104. Op. cit. p.97.
105. Op. cit. p.98.
106. Ibid. p.98.
107. Ibid. 98.
108. Op. cit. p.100.
109. Ibid. p.100.
110. Ibid. p.100.
111. Op. cit. p.101. [A. Lingajammanni has quoted from  
The Education Commission 1964 - 1966, Government of India,  
Ministry of Education, p.7.]
112. Op. cit. pp.103. [A. Lingajammanni has cited  
Education in the USSR, Ministry of Education, Government of  
India, New Delhi, 1962, p.396.]
113. Op. cit. pp.103, 104.
114. Op. cit. p.96.



## CHAPTER VII.

### THE RELEVANCE OF CURRICULUM - CURRENT EXPERIMENTAL INNOVATIONS AND PRACTICES.

Curriculum development since the Kothari Commission 1964-'66 has taken place through a wide-ranging participation of people at all levels. It is concerned with four important aspects of education, which include the issues thus far under discussion. Firstly, its linkage with tradition: ever since western education was introduced in India in the nineteenth century, there has been a discontinuity in the history of traditional education in the country, and therefore attempts are now being made to recover the Indian identity. Secondly, the modernization of the curriculum is necessary in order to link education to productivity and development. Thirdly, the curriculum needs to be work-centred, but traditional attitudes to manual labour hinder such an approach, and this situation needs changing through policy planning. Lastly, there is need for a value orientation in keeping with the development of a secular democratic State.

These are issues which lie at the heart of curriculum planning and change in India currently, and since the Kothari Commission on education, and indeed since the Wardha Commission of 1937-'38 inspired by Gandhi.

Current innovations and practices in the field of education in India are, surveyed within the context of Williamson's observations on relevance of curriculum, equality-inequality, and rural-urban imbalance in education. Again the Williamson model for

classification of world societies is tested in the case study of the Dependency of Indian society.

This chapter will focus on various accounts of experimental innovation and practice in Indian education, as examples of implementation of the above policy proposals. There are numerous examples of the community and even individual private efforts at solving educational problems in the country; there is government implementation of new schemes, particularly through the NCERT, or with UNESCO aid, as well as collaboration between government and community.

Non-formal education is much stressed at all levels of education in the belief that universalization of education will thus be achieved and the system become more relevant to the life, needs and aspirations of the people. The ideals of Basic Education are being incorporated into the system of non-formal education, so that work experience forms the basis. Through such a system, literacy and numeracy are taught, as will be seen in the examples which follow.

Work-experience is an important feature of both non-formal education and Basic Education. In expansion of the work-experience theme as an innovation in education, it has been noted that for the harmonious development of the child's personality, it is important to expose him not only to scholastic endeavour, but to manual work. There is an urgent need to bridge the world of school and the world of work. The areas of work chosen should have local significance and should develop the competence of students in locally needed

skills. *Various activities of work experience must necessarily be related to the community needs and its services.*[1.]

A well-directed work-experience programme would help discover student aptitudes for certain types of vocations which require particular skills, physical ability, attitudes towards fellow-workers and responsibilities in discharging their duties:

*At the primary stage, work-experience should begin with simple, creative, self-expressional activities performed with locally available material and simple tools.... In the upper primary or middle and secondary classes, the use of tools should be introduced in a scientific manner.*[2.]

Appropriate fields for work-experience classes need to be located through community surveys and the expertise of local artisans and mechanics could be utilized in this programme. Work-experience should be aimed at providing experiences which are not otherwise provided in the curriculum. It is an innovation in the formal pattern of school. It is vocation oriented at the different levels of education, and probes the non-employment problem in the country. It contributes to national development, and to relevance, equality and balance in education.

In general, social changes in every country invite innovations in the structure and curriculum of education. India, in the last thirty years, has seen rapid social change; the government therefore set up the National Council of Educational Research and Training (NCERT), as noted, a special body to look after the development of education.

One of the recent projects, undertaken by the NCERT was the collection of reports on innovation in the field of education in different parts of the country, at various levels and in varied fields: in non-formal education; in rural and urban areas for the weaker sections of society; in Science at every grade, and in work-experience; in the area of national integration, through interstate camps and changes in the school curriculum content; in new concepts in education, as evidenced in the Free Progress System, [3] and the Ungraded School System; [4] innovation in content e.g. Population Education, and Social Studies; Civics and Economics at the school level; educational technology in subjects as diverse as Maths, Science and Language. Experimental innovations in these areas again illustrate, in practice, that the government and educationists are fully aware of the irrelevance, imbalance and inequality in education.

The NCERT has further received encouragement and aid from UNESCO, and thus initiated the Asian Programme of Educational Innovation for Development (APEID) and granted financial help for the dissemination and inter-country exchange of experience. Such efforts are expected to increase interest in experimental innovation in education on a widespread basis within the country, and also encourage innovations for socio-economic development.

In the collection of experimental innovative practices and ideas, the NCERT consulted the Directors of Education in the States, Vice Chancellors of Universities, Heads of a large number of educational institutions and Community Centres. Also some published documents like the 'Educational Innovations in India' [5]

by the National Staff College for Educational Planners and Administrators were consulted.

The many experiments in innovations also clearly illustrate concern for bringing the school and the community into closer proximity with one another, and mobilizing community resources for educational purposes. The dominant feature, of these innovative practices, is the effort to bring education to the weaker sections of society, both rural and urban.

In regard to the existing schools in the formal system of education, the local State Boards of Education and the Private Schools are introducing innovation towards the qualitative improvement of educational curriculum, along with changes in curriculum content. These changes, towards an indigenous system of formal and non-formal education, are geared towards national progress and economic development. The aim is to structure education towards relevance, equality and urban-rural balance.

#### UNIVERSALIZATION OF PRIMARY EDUCATION.

Towards equality in education the maximum effort is being put into the universalization of Primary Education, which is known to be one of the major educational problems in India. Article 45 of the Constitution of India orders Primary Education for all children in the age group six to fourteen years. Increases in the percentage of children attending at this level were <sup>6</sup>st<sub>^</sub>atically noted in the last chapter vi. This increase is an encouraging change, but further and more intensive efforts are required, if universal primary education is to be a reality in India. At present the large

number of dropouts, even at this level of education, are a cause for concern to educational planners in the country.

Therefore non-formal education has been chosen as the answer to the problems involved in Universal Primary Education and equality of education. The Central Advisory Board of Education has suggested non-formal schooling for drop-outs within the age group six to fourteen years, to enable them to complete their education to Class v or Class viii, in order to enrol for Class vi or Class ix respectively.[6.] Such a system is known as the multiple point entry system. It enables drop-outs to continue with their education, in spite of the prevailing rigidities of the formal educational system, which, in their circumstances, they cannot otherwise re-enter. One reason is that their level of achievement does not co-incide with any formal class-room programme. Another reason is that their parents will consider further education, only if they are convinced that it will help towards the socio-economic needs of the families concerned in the near future.

Work-Experience and Community Development Programmes within the curriculum is viewed favourably by such families. Children from such home situations cannot attend formal school, because of the hours of school work. They are required for domestic and other duties by their parents, and are free when formal schools close for the day. A non-formal system of education, plus the multiple-point entry system into formal education, is therefore a positive need if universal primary education is to be achieved in India.

Such programmes focus on equality and balance in education, and also change the concept of education, in order to pattern it toward

relevance to the life, needs and aspirations of the people. The main objectives of such programmes are varied, numerous, and of great importance to the socio-economic development in the country.

Non-formal education seeks to relate education to community development. It is hoped that Community Development will enable children to develop further skills in relation to the work they are pursuing within the community; and will help to develop in them the skills, habits and attitudes necessary for healthful living together in a spirit of citizenship. It is of course expected to give them functional numeracy and to help them understand and appreciate the scientific phenomenon in everyday life, and develop mastery in linguistic skills which would enable them to listen, speak, read and write well.[7.] Finally it is hoped that such programmes will help both drop outs and those who have not received education at all to enter the formal schools in existence.

An example of non-formal education related to community development, is the Bhumiadhar Project experiment, for children of the primary school level living in the northern hill region of the country.

Non-formal Education - The Bhumiadhar Project Experiment.

Non-formal education is needed at every level in India considering the conditions and circumstances in the country. However priority has been given to the age group six to fourteen years. The choice of area for the pilot experimental project was in the State of Uttar Pradesh, where the highest drop-out rate was noted particularly in the mountains.[8.] Finally Bhumiadhar in the District of Nainital was selected for the start of the work. The

selection of village was finalized in a meeting of community members, Teachers, Education Officers, agriculture experts, of the village and several others.[9.]

The community members were of the strong opinion that the high rate of drop-outs, at the primary level, was due to the fact that education is not related to the life and needs of the people and socio-economic community development. [10.] Every village does possess a primary school within walking distance of every child, but the parents of these children want domestic aid at home, so the latter do not attend school regularly. They belong to the Scheduled Caste community; their fathers are daily-wage earners, who travel into nearby towns every day while the families depend otherwise on small plots of land, growing wheat, potatoes, vegetables, etc.[11.]

Hence it was decided to initiate education afresh in this village through Community Development work and Work-Experience, which would slowly lead to literacy, numeracy, environmental studies, science and art, ending in the formal system of education, when a certain percentage of children would take the standard examination for Class v and beyond.[12.] Thus multiple entry would need to be introduced into the formal educational system.

The Programme began in 1974 with varied forms of agriculture, village hygiene and village crafts. Within six months the community was enthused, and dropout children were encouraged to join the evening non-formal education centre; forty percent of these children were enrolled within the first two months of the programme. The village soon gave evidence of improvement in every



area. [13.] This is an example of an indigenous approach to education in which work is the centre of education.

Several other community development programmes were also started. Meetings were held in which community members and experts in various fields elected to draw up plans and prepare instructional material related to the environment. Small units of lessons were prepared for children as well as for their Teachers. Material is now ready for Grades 1 to V, and work is in progress for Grades VI - VIII. [14.] Teachers keep a constant check on the progress of every child and they remain in close contact with the families of children. These children who attend the non-formal centre for education are given Reading Tests prepared by the NCERT, and they are then divided into three homogenous groups. [15.]

More experiment is needed, more innovation required, but it is encouraging to note that the project is progressing. Community involvement increases. A Women's Society - 'Mahila Mandal' and Youth Forum have joined the project. [16.] Roads have been constructed; social welfare groups have been organized for women and girls. They are being educated in regard to the value of small families, health and nutrition for mothers and their children. [17.] Functional literacy programmes for youth are being organized in this area. [18.] Furthermore, a few community members have considered undertaking certain major projects, so that self-employment opportunities may be created for all children and adults. Efforts are in progress to involve the State Bank of India in the granting of loans for such projects.[19.]

An adult literacy programme is to be launched, and the community can look forward to a brighter future, if concerted efforts, along the lines begun, continue and progress well. The project has brought about a changed outlook in community members, and all others engaged in this work.

#### Conclusions From The Experimental Project.

Conclusions noted from the investigations [20] thus far are that the high concentration of drop-outs is in poverty-stricken areas. It may therefore be necessary to link education to Community Development Programmes and Work-Experience in these areas as described above.

Secondly, the community leaders play a vital role in developing confidence among the community members, so it is necessary to win their support at the outset. Further the level of attainment decreases in pupils who drop-out. Reading tests, in Bhumiadhar proved that children who dropped out at Class IV or V could only pass the Grade II tests. Children who had left after Grades I and II had relapsed into illiteracy. It has been found that reading ability is linked to the ability in mastering other school subjects as well. [21.]

Hence it may be noted that the primary pupil drop-out problem is seriously linked to the problem of the high illiteracy rate in India, and requires further attention from educational planners and innovators, if universalization of primary education and a higher rate of literacy in the country is to be achieved.

The Teacher is an important personality in the success of the whole programme, and must necessarily be a dedicated person,

willing to enthuse the community in the development projects first, which lead to the educational programmes. The Teacher's attention must extend to children who sometimes need to be escorted home at nights otherwise their attendance is irregular. This is an example where a Teacher's dedication to service is important and necessary. [22.]

The training of Teachers for such a project may be conducted only on the spot. Theoretical lectures will not help. An important feature of the programme is that the teaching-learning process needs modifications according to the needs and conditions of the local environment. The same holds true for instructional material. Although this may include content that is common for several environments, the material needs to be readapted and reorganized for each particular environment concerned, as non-formal education is centred in work-experience which is related to a local craft.[23.]

Further the content of non-formal education might not be similar to that which is provided in formal school, in terms of concepts and knowledge. The stress is on work-experience and therefore students of the non-formal system may possibly possess better functional knowledge rather than the literary knowledge possessed by their contemporaries of the formal system. Nonetheless autonomy must be granted to Non-Formal Centres and to Education Officers enabling them to award certificates for Grades V and VIII. 24.]

In India, formal primary schools are located one kilometer from the homes of children. [25.] In order to effect multiple entry

successfully into these formal schools, the Non-Formal Education Centres depend on the initiative and participation of the community and voluntary organizations. Further the co-operation of several government agencies like Education, Agriculture, Health and Social Welfare is absolutely necessary. Also, commitment and devotion are important in all persons involved in such projects. [26.]

The aims of Non-Formal Education are mainly universal primary education, adult education, and education for dropout youths. The innovations recommended are towards a relevant, equal and balanced education.

Several efforts, voluntary, community, individual, and government projects, operate in various States. Case studies and Reports have been produced of projects in the States of Madhya Pradesh, Tamil Nadu and Maharashtra. These non-formal and community projects are centred in the Gandhian ideal of Basic Education which was primarily organized for the rural areas of India, as are the innovative projects given below. Other non-formal projects initiated by collaboration of government and community effort, are also included in this research into experimental innovations in Indian Education.

The Kishore Bharati Case Study is another example of non-formal education in this instance at a higher level of education in which vocationalization is stressed.

Case Study - Kishore Bharati.

The 'Kishore Bharati' is a 1977 voluntary organization working for rural development in the village of Palia Piparia in the State of Madhya Pradesh. They attempted to combine academic and

vocational training, for which purpose the government of Madhya Pradesh granted them 150 acres of land. With community aid they have constructed two halls on this land.[27.]

The main objectives of the 'Kishore Bharati' Project are to create self-confidence in the village youth and faith in the possibilities of agro-based activities, to increase their confidence in co-operative effort towards solving their local community problems, and to prevent the drifting of village youth to cities, in search of scarce unskilled work opportunities.[28.] Both farming and technical work has been started in this village - better irrigation methods, hygienic conditions of living, cattle development, technological skills, have been organized side by side. The second phase is to offer a vocation-based education to the dropouts of the surrounding villages.

This is an example of educational activities being centred in productive activities. The economic development projects will be the most suitable training-ground for the youth of this village and will test the success of the system of Basic Education in rural areas. Also the teaching of science has received a big impetus because of this programme.[29.] The 'Kishore Bharati' has made efforts to improve the method of science teaching in the surrounding schools. It stresses the teaching of science through experiments and has received encouragements from the State Governments, in that the latter has allowed the Programme the freedom to experiment with text books, syllabi, learning methods, examination system and teacher-training techniques in the surrounding sixteen middle schools. *Within a few years the*

*programme has been able to make an appreciable contribution to the economic and educational uplift of the village community.[30.]*

The above is another example of a voluntary organization based in the idealism of Basic Education as a significant factor of development in the country. The government of Madhya Pradesh is considering the extension of the Programme to all the one hundred and fifty Middle Schools of a whole district, aiming at the universalization of relevant education.

An example of non-formal education in the rural areas through government effort with foreign collaboration was the experiment in Andhra Pradesh which began with mother-and-child care. This experiment expected to lead on to education at the higher level including even teacher education. Further, it expected to incorporate the assistance of several other government bodies as well.

Government & Foreign Collaboration in Non-Formal Education -  
Andhra Pradesh.

An experimental effort is to be found in the State of Andhra Pradesh initiated in 1969 when the State Government collaborated with the Netherlands Foundation for Child Welfare, and a project for the overall development of children in the age group three to five years was put into operation just forty-two kilometers from the main city of Hyderabad.[31.]

The activities mainly involved the general, all round development of children who fell into this particular age group of three to five years. The project concerned itself largely with non-formal education to the mothers of these children. They were

educated in to health, nutrition, hygiene, and economically oriented work-activity.

The many activities of the programme received attention from several agencies. An Advisory Board was set up consisting of representatives from the National Nutrition Institute, Indian Council of Child Welfare, Social Welfare Board, Ministry of Health, 'Bharatiya Grameen Mahila Sangh,' i.e. Indian Women's Association of Pre-School Child Education, along with still other social agencies. They advised on policy and technical matters.[32.]

Thus far the activities of the Project involve welfare work mainly. Plans for the future education of the age group six years to eighteen years have concentrated on a fresh curriculum relevant to rural youth.

In collaboration with the NCERT and the SCERT, the State Council of Educational Research and Training, a committee of specialists investigated the present curriculum in operation in the area, with the view to innovation. [34.] The new curriculum visualizes a stress on work-experience, i.e. vocation-based curriculum in Grades 1 to VII, in the fields of Agriculture, Industries, Co-operation, and Animal Husbandry. Some simplified aspects of these subjects, along with health and nutrition would be included in the curriculum for the first five years of primary education. Half the superfluous load of the existing curriculum would be removed and replaced by subjects reflecting local and vocational needs. This is an innovative experimentation towards a highly relevant education for a rural area.

The particular Project further visualizes the training of teachers, not more than fifty in a group at one time, improving library facilities for both Primary and Upper Primary Classes, and the establishment of 'Vigyan Mandirs' - library-cum-museums, for the education of youth and adults as well.[34.]

The financial aspects of these projects will be taken care of by the Indo-Dutch Project, and if they produce fine results, the Andhra State Government will continue this project into other areas as well. Thus far the Project has resulted in better health and nutrition for seven thousand children and has bettered the economic prosperity of the rural population. It is an example of non-formal education made relevant to the socio-economic needs and progress of the people and nation.

Another aspect of non-formal education is when existing schools are helped in every possible way by Community effort, to the extent that children are provided mid-day meals, and educational establishments are gifted expensive furniture and technical equipment, for the improvement of schools and society in both village and town.

#### A Community Project.

A fine example of community support for the school-improvement programme was shown by the State of Tamil Nadu. Community aid began in 1956, when free mid-day meals were provided to the children of the underprivileged in the community.[35.] In 1957 the State Government offered aid and the project continued on a wider scale. In 1958, communities made themselves responsible for entire Blocks [36] of residential flats and houses and provided the basic needs



to Elementary Schools, for example teaching material and other school equipment.

The main objectives of such a self-help movement are the creation of an activity-interested, self-confident, self-reliant and self-sufficient rural society, and an active participation of the community in providing educational activities for the schools.

The Project includes informal meetings, where school needs are investigated, conferences at district level and exhibitions where donations are exhibited, are arranged and finally a follow-up programme organized, where registers are checked and maintained.[37.]

The leadership in such activity is taken by the Education Department, with full support from the Teachers' Organizations. There is the State Award for Teachers in different districts.

An evaluation of the programme shows progress in a number of departments. For example, school buildings are better maintained, and modern methods of teaching are adopted in them, which have stimulated an increase in the enrolment of pupils. Some schools have even received donations toward school building and construction. A notable feature is the donation of furniture in some schools, consisting of class-room and office furniture, including wall clocks, steel cupboards, radios and typewriters. A few high schools have been given microphones, amplifier sets, epidiascopes and duplicating machines. The cost of electrical wiring and tube lights in some schools, have been covered by individual donors. In order to boost the teaching of science,

laboratories have been given better equipment and science books have been supplied free of cost.

Such an example of the TamilNadu community involvement may be followed in other States as well, and government administration can collaborate with it, to give better education to young people. The quality of rural-based education has been improved and the education facilities in this area have increased.

Thus far community development and non-formal education experiments have been discussed, only in relation to rural areas. Now follows an example of community development, tied up with non-formal education for children, which was initiated in 1969 for the urban slum areas of Delhi.[38.]

Non-Formal Education And Community Development - The Delhi Urban Slum Area.

The experiment of mobile creches on work-sites, for children of working mothers, began in the huts of casual labour in the semi-permanent slum areas of Delhi. This experiment catered for 'Harijans' (literally 'children of God'), otherwise members of the untouchable castes of India, contract labour, and others who are seriously disadvantaged. In broad outline, this programme includes creches, 'balwadi' or pre-school nurseries, tutorial facility for older children, creative activities, health care, nutrition, adult literacy, technical training and community work.[39.] Small donations came from people outside the area, from building contractors of the various worksites, from organizations like Brothers To All Man, and UNICEF. Next the Government sanctioned grants to meet specific types of expenditure.[40.] However, such

sources of finance are occasional and non-recurring, and therefore the Project depends on fund-raising ventures, like sales of greeting cards and spices, and the manufacture and sale of squashes, pickles and jams.

The objectives of the experiment are to provide basic facilities to nomadic labour, who set up their homes in the capital; to provide care, medical aid, functional literacy, and recreational activities to the children living in slum areas; to arrange literacy classes and vocational training for adults; and to secure a more rational and practical approach on the part of the Government departments, towards the existing rules and laws that pertain to the living conditions on work sites and slum areas.[41.]

The pattern of schooling involves the teaching and practice of the principles of hygiene; recognition and treatment of simple infections; and infant bathing, feeding and dressing of wounds. General medical follow-up is taught by doctors who visit the site in occasional work-shops. Otherwise, girls of higher secondary school act as helpers and teachers, in units of eighty to one hundred children, in the zero to twelve years age group. An improvement is that the medical programme has expanded its scope, and there now exists immunization against polio, T.B., small pox, DPT. etc. A further improvement is the distribution of milk and protein-rich biscuits to children in a nutrition drive.[42.]

Teachers involved in this Programme are exposed to the stimulation of working with resource people on the problems of the migrant labour child. Results of the experiment show steady if slow improvement in involving the migrant labour community in the

programme. Newspapers and other reading material are gaining in interest for them. Carpentry classes operate for young adults, and literacy classes for women give education in nutrition, health and family planning. The initiation of the Arts and Crafts Programme has shown the existing creative imagination of children, while some older ones have enrolled in Corporation Schools, where they have proved successful.

Prior to the initiation of such a social welfare programme, children of nomadic labour remained outside the pale of any educational programme. It is an example of non-formal relevant education to a section of society which could remain illiterate and ignorant of any social privilege. It is a worthwhile experiment in offering social welfare aid to a non-privileged section of society, along with literacy and primary education. A wide-spread adoption of the experiment is highly recommended.

Thus far, the non-formal system of education at the pre-primary, primary and highschool level of education has been noted for both rural and urban areas. Now there is an example of the non-formal system of education which may be practiced at the higher level of education.

A totally novel innovation in non-formal education is this Indian experience with an Open Learning System for rural development and refers to the rural university as explained and described by Ravi J. Matthai.[43.]

An Open Learning System for Rural Development.

*The rural university is not a structured organization, it is an idea. It has no campus. It does not grant degrees. Its*

*membership is not confined to those who have passed through specified required sequences of formal education. It has no formal curriculum. It requires no direct institutional funding either from the Central or State Governments. It has no overall blue-print plan nor has it a budget. It requires no rules, procedures, sanctions nor controls except the self-discipline of the individual that comes with a real desire to learn. [44.]*

The 'rural university' assumes that the development of rural India will occur, not only through target-oriented plans, but through the development of people. Development activities without the deep involvement of people are without foundation. People must learn to help themselves, to help others, to help their community and to help other communities. Self-reliance and mutuality are basic to the idea of the 'rural university'. [45.]

*The role of the 'rural university' is that of a locator, enabler, provider and organizer of 'learning spaces' wherever the opportunities for learning might exist or be created. These spaces might be at a villager's hut, round a well, round a tanning pit, in a tea-shop, or a school room, along a roadside, in a government office or a field, at a co-operative society, a bank counter or a market place, in a shop, at a truck driver's 'dhaba' (roadside eating-house for travellers) or a village meeting place, in a vehicle or at a government bungalow. Learning in this university can occur anywhere.[46.]*

The 'university' is concerned with people of all ages, professions and vocations, but its main effort is directed at the disadvantaged. Learning can be the base from which to extricate

themselves from their circumstances, which hold them economically and socially captive.

There are no teachers- and- taught as in the traditional roles of formal education. All members of the university are involved in learning, and helping others learn. The boundary of membership is indistinct, but this university community grows organically by sharing the experience of learning. Its growth depends on whether one villager will help another, or one village help another. It will depend on the desire to learn and the sense of mutuality that can be developed with members of organized institutions, and between them and the rural communities. The effective growth of the idea will depend on whether the shared learning develops a basis, for helping relationships within groups, between groups, or within and between a variety of institutions.

*So the membership of the 'university' consists of farmers, labourers both agricultural and industrial, government servants, teachers in the formal system, independent volunteers, school children, bankers, industrialists and business-men, educationists, researchers, technologists. The community of members does not have a formal identity. If a sense of identity developed it will emerge from the realization that a common bond exists through having shared 'learning spaces' which they helped to create.[47.]*

This is an interesting if idealistic plan of non-formal education. Members of this open rural university may learn and act in community, but it is necessary for them to be constantly aware that they are members of this university, otherwise the education

taking place in every area will remain unrelated and the concept of the 'open rural university' may become unreal.

*The idea of the 'rural university sounds ephemeral. This description of its working might not adequately convey its reality. At this stage no one can say how fast it will grow, or what shape it will take. It belongs to everyone and must evolve. It is an experiment in educational innovation, but it is a reality. Maybe the only understanding of the reality is to take part in it.[48.]*

Conclusion to Non-Formal Education.

The non-formal projects in education described above, make apparent that the ideals recommended by Williamson as the required needs in education in developing societies, are in fact operating in India. The ideals, equality of educational opportunity, relevance to socio-economic needs in the nation, and rural-urban balance as identified by him in Education, Social Structure and Development are precisely similar to the ideals recommended by the KCR and earlier by the Wardha Commission 1937-'38 on Basic Education. More recent and current documents on the restructuring of education in India refer to these important ideals as well. These ideas are spelled out in terms of action to be taken.

Further, Williamson has discussed education in relation to socio-economic development with some skepticism as noted earlier. He has pointed to the negative attitude of the educated to manual labour, and suggested this was a weakness of the prevailing pattern in developing countries. The KCR on the other hand recommended education for productivity. The experiments in the non-formal

system given above, highlight the features of work-experience, and vocation-based activity. Indian educationists and planners have shown keen awareness of these deficiencies in Indian education. The ideal recommended presently is education for development.

Further, the pattern of non-formal education adopted in India is indigenous in design, and a break with the formal 'dependent' British model which prevailed in the country.

The experimental projects recounted above, it may be noted, are work-oriented and work-based; community involvement is sought, or in some cases has initiated a project. Literacy and future employment for the learners is the aim. Social welfare work is mainly stressed in many of the projects which operate for the least-privileged sections of society. The members of this society have little access to the existing formal pattern of education.

These projects emphasize not only education for development but aim at the same time, for universalization of primary education. They are examples of the qualities of relevance, equality and balance in action, as seen in the activity- programme of the Bhumiadhar Project, The Kishore Bharati Project, and the 'Rural University' Project mainly. The Community Development project in the Delhi urban slum area, is a city project which has basically the same aims.

Further, the non-formal education project in Andhra Pradesh is a large rural one, beginning with welfare work and continuing into work-experience, vocationalized education, for six to eighteen year olds in agriculture, industry, co-operation, and animal husbandry. The project was initiated with government and foreign



collaboration; but it hopes to continue with local aid when outside help stops. Next the local-based and initiated rural project is the Tamil Nadu community support for a school improvement programme. It stresses donation to school needs, i.e. mid-day meals, text books, and sometimes uniforms to children.

There is need of a wider network of such activity, if the impact on education and social uplift is to be felt and seen, but the current efforts are in the right direction. It is the argument of this thesis that non-formal education is an indigenous concept of education and a reaction to the highly academic British model which catered only to the few, and had in the past, ignored universal primary education, equal opportunity in education, relevance to the socio-economic needs of the people, and development of the nation. However the current evidence of non-formal education points to the fact that Indian education is no longer 'dependent' in nature, and does not fall within the category 'dependent society' pattern as given in Williamson's classificatory model of world societies.

Another kind of social transformation recognized as a social need by the KCR, is National Integration. It is hoped that education will play a major role in bringing this about, by devising a school curriculum which introduces this concept to the young student.

The Ministry of Education and Social Welfare entrusted the project of National Integration to the NCERT in 1970. Consequently, a National Integration Unit was organized by the NCERT. This Unit

recommended a number of objectives towards achieving National Integration:

1. To help youth appreciate the diversity inherent in Indian culture and different patterns of living;
2. to encourage contributions from the Indian people belonging to diverse religions and languages, to the building of national unity and thought;
3. to help all people in India to realize that the country's social and economic progress depends upon the co-operation of all people;
4. to encourage respect for other individuals and their beliefs, irrespective of their place of birth, religion and language;
5. to stimulate appreciation of the economic interdependence of the different parts of the country, and several common problems that ought to be shared;
6. to develop jointly a national perspective for strengthening the forces of national unity.[49.]

#### Educational Projects for National Integration.

With these objectives in focus several major programmes have been developed by the NCERT Unit, namely the organization of inter-state camps for students, both boys and girls, and for teachers and principals; the 'Our India' project; and preparation of instrumental material.

The Inter-State Camps for Boys and Girls have been in operation for more than ten years and are currently operating as well. Camps in all parts of India have been organized. In every one of these, seventy-five students and fifteen teachers from five different States participated.[50.] The schools and venues of these camps are

selected by the departments of education, in various states. The selection of students and teachers is such, that several religions and communities are represented. It is hoped that such a programme will promote social living among children. The activities in the camp programme are geared towards introducing children to different Indian languages; towards literacy, and cultural activities; exhibitions, excursions and surveys; and games and sports.

In the literary activities programme, participants are invited to give talks in their mother-tongue, which are translated into English and Hindi by other teachers and appropriate fellow-students. Debates and discussions are a regular feature of the programme, and such topics as 'The Message of Gandhi', 'Our Country Ten Years Hence', 'The Influence of Science and Technology on Our Daily Lives' are popularized.[51.] The 'Cultural Activities Programme' is a popular one too. It emphasizes the underlying cultural unity of India. Campers engage in harvest songs folk dances, skits, fancy dress and one-act plays, etc. Excursions and surveys of the surrounding environment are undertaken and enjoyed by students. Games like football and volley-ball, flag hoisting, and physical training are a daily feature of the camp. Inter-state matches are very popular with students. Visits to local homes are arranged through the local students of the school where the camp is organized.

The varied activities of the Inter-State Camps illustrate the intensive effort of Indian educationists to achieve national integration.

Several Teacher's Camps and a few Principal's Camps have also been organized. These were geared to national integration programmes at a higher level. The main objectives of such camps are to improve inter-state camps of students and teachers combined; to improve class-room teaching from the national integration point of view; to develop follow-up programmes, and to develop appropriate reading material for children.

Within the NCERT National Integration Unit programme the Our India Project is a follow-up programme to the student camps. It aims to reinforce the experience gained by the students at inter-state camps, and to widen the area of impact made by inter-state camps, involving schools in this project for the development of a national perspective among the student community.[53.] Financial help is given to schools for this purpose, which then works towards the national exhibition entitled 'Our India.'

Preparation of instruction material is also in progress as part of the NCERT National Integration Unit. Topics are in two main languages Hindi and English.

The objectives of this programme are to gear the teaching of subjects like social studies, history, geography and civics in schools, towards a sense of national integration, and to prepare hand-books, supplementary reading material, and audio-visual material like films, film strips, and colour slides, etc. for schools.[54.] These many and varied projects have created an awareness that such programmes must become more widespread, and practiced on a larger scale in educational institutions, at all

levels. They have proved highly successful thus far, in achieving the main aim and objective - national integration.

An important step in the direction of national integration is the three-language formula which has been accepted as the national policy. A child, at the completion of ten years of school, should be competent to a degree, of 'good', 'medium', 'fair', in all three languages, in the order of, any one unit of languages, i.e. mother-tongue, Hindi and English, or English, Hindi, Mother-tongue, or again Hindi, English, mother-tongue.

In rural and urban underprivileged areas either mother-tongue i.e. state language or Hindi is spoken and understood. It is reasonable therefore, that these languages should be the medium of instruction - one of the requirements of Basic Education, which may also be regarded as the alternative system to the British model of education. The use of an indigenous language as the medium of instruction is also aimed at egalitarianism in education.

#### Conclusion.

National Integration is a more recent concept in Indian education, and educational plans and projects towards achieving this ideal are examples of innovation in education. Such efforts create a more relevant system of education for a large country with diverse peoples and cultures. The ideal of national integration is important to the social stability of the nation. The projects described above involve the ideals of equality and balance in education for all members of society. They are designed to promote understanding, tolerance and unity among the various peoples in Indian society. The topic of 'national integration' is included in

the formal school curriculum through the teaching of History, Geography and Civics in an inter-disciplinary approach. Next the three-language formula adopted in every state, is an important step in the direction of national integration.

It is the argument of this thesis that the formal curriculum is made more relevant to current national needs with the inclusion of 'national integration' as an ideal. It is a significant move away from the 'dependent' British model which prevailed extensively in the country.

#### INNOVATIONS IN FORMAL EDUCATION - SYSTEMS.

A totally different form of educational innovation is now described in the 'Free Progress System' and the 'Ungraded System' which belong with the formal pattern of Indian education, but are each different in structure of education and method of teaching, and content as well.

#### The Free Progress System.

A unique educational establishment is the Aurobindo International Centre of Education which is an integral part of the Sri Aurobindo Ashram, established in December 1943. It has since been developing into a significant centre of educational research.

*Sri Aurobindo and the Mother visualized a new future in which there will be a meeting of the East and the West, the ancient and the modern, the knowledge of man, the knowledge of matter, and the 'technology of the spirit'. They affirmed that human nature can be changed and transformed, and this is inevitable for the future evolution of man.[55.]*

Such ideals form the context within which research and experiment at the International Centre of Education is conducted.

*It was realized that a limitation arises from the rigid and fixed inter-locking of lectures, syllabi and examinations. A detailed analysis of the problems involved in this inter-locking was undertaken, and a series of experiments were made during which, for short and long durations lectures were completely suspended (except in the language classes), examinations were eliminated and pursuit of syllabi was also dropped. After a period of ten years of an intensive experimentation, a new system of education was evolved. It has come to be called 'Free Progress System'. [56.]*

There exists a high idealism in the objectives of this system. In the experimentation that was conducted at the International Centre of Education, a special stress was given to individual work. There are several situations for group activity as well. Some group projects require division of labour. There are educational games involving team work, while experiments are sometimes conducted in groups and there are joint discussions on particular subjects as well. However, prime importance is given to the development of the individual. This is never sacrificed to considerations of the economy of collective work. [57.]

At the start of the Course, students are given ample opportunities through explanatory lectures to make a suitable choice. Then they work on projects under specialized teachers. While guiding a student, teachers are expected to widen and intensify the area of exploration so as to avoid narrow

specialization or superficiality. The students' programme of study should be flexible, supple and evolutionary. In the selection of topics, students are not restricted to any single faculty of arts, science or technology. Tests are conducted when necessary and students submit reports every two to three months on their respective topics of study. The quality of the work is considered more important than its quantity, and if students' progress is slow they are encouraged to achieve their goals at a faster pace.[58.]

Physical education holds a central place in the scheme of this system of education. Students participate daily in gymnastics, aesthetics, combatives, aquatics, yogic asanas, judo and games, both Eastern and Western. There is no distinction between curricular and co-curricular activities. Art, music, dance and drama are interwoven in the central programme of education. Hobbies are also part of the mainstream. As many as seventeen technical courses have been organized with the purpose of encouraging technical skills among students.[59.]

A further important feature of the Centre, is that a series of experiments are in progress, in relation to the content of education. The aim is to exclude no field of knowledge, except for the want of Teachers and material. And most important, is the constant effort to arrive at the unity of knowledge. Several subjects are conceived of, in new ways. These are now known as 'common subjects'. Special attention is given to an interdisciplinary approach. Special attention is given to every student particularly in the following three areas: unity of knowledge, relation between knowledge and life, and the aspiration to build a



new world. This is the highest ideal to be achieved in education, and recommended as the uniquely Indian contribution to international society by the KCR.

Languages taught at the Centre are, English, French, German, Spanish, Italian, Sanskrit, Bengali, Oriya, Telegu, Tamil, Kannada, Marathi and Gujrati.

Language, literature and dramatics constitute one unit. Dramatics is used as a medium for learning language. Various forms of dramatic art are being experimented with and beautiful symbolic drama that stresses music and dance, has emerged. Every year there are twentyfive dramatic presentations, with one grand exposition on Annual Day.

Another creative project has been the preparation of anthologies of poems, essays, stories and plays for various levels of study, in different languages, with a view to presenting in a novel manner, the themes of truth, beauty and goodness. An anthology of stories has also been prepared. The criterion for selection among them was that the story should possess deep human interest; it should inspire the deeper qualities of courage, heroism, sincerity, truth and self-sacrifice for the highest ideals, and it should liberate students from the slavery of the past and inspire them to build a new world of harmony.[60.]

A further innovative feature of this centre is that, in a sense it has no walls.

*It is located in the centre of the social milieu which is itself educational in character. There exists, work shops, manufacturing firms, bakeries, departments of tailoring, shoe-*

*making, leather work, perfumery, embroidery, cottage industries, exhibition halls and theatres, from which the students learn through work-experience. It is a natural setting for the vocationalizing of education. Students learn vocations by the nourishment of hobbies, and interest in manual work.*

[61.]

Teachers at this Centre of Education receive no salary, but are maintained on a domestic basis. They are expected to be examples of the higher life, since instruction plays such a minor role in every day teaching. Outer authority in any form is to be deplored, rather the psychological influence over the student's mind, and nearness of soul between Teacher and student, is what is expected and encouraged.

Being a centre of comprehensive and fundamental research, the Centre includes education at all levels, beginning with the nursery and pre-primary levels, and continuing into higher, university, and advanced courses. At present it possesses the five faculties of humanities, science, language, engineering, technology and physical education. The new faculties of agriculture and medicine are in the process of formation.[62.]

Also there are the results of experimentation over the last ten years in the field of lectures and their importance, syllabi and their usefulness, and the examination in relation to its place in the system of education.

The Free Progress System is an experiment in education for the future - in content, methods of teaching, and the structure or organization of the institution. The Free Progress System is a

unique contribution to the uplift and improvement of the quality of education. Ongoing experimentation in several areas of education is an important feature of the system, which begins at the early primary level and continues on into higher education. Learning takes place in the midst of life itself. The Centre does not remain aloof from the working life of the environment. Rather, work experience is a central feature of the system, and two new departments - agriculture and medicine, have been added to the institution.

The Free Progress System which is innovative in structure and methodology of teaching, is a concept of education different from the formal British model which generally prevails in India. It is vocation oriented, relevant and balanced, towards the socio-economic needs of the people, in that, no discipline is excluded from the teaching curriculum, if possible. The Free Progress System has contributed great service to education in India.

#### The Ungraded School System.

Another important innovation in the methodology of teaching is the Ungraded School System. This experiment has been conducted in the State of Uttar Pradesh, the most densely populated state in the country. The project was an experiment towards improving the drop-out situation, and the stagnation rate in the primary classes, as thus far examinations resulted in a large number of drop-outs and repeaters in these classes.[63.]

The Project was initiated by the NCERT in collaboration with the State Education department and State Institute of Education. The effort to produce the Ungraded School System was the result of

the suggestion by the KCR, that such a system of non-examination should prevail in the first two classes, and wherever possible, in the first three classes, in order to prevent wastage and stagnation.

Hence, ten experimental and ten group control schools were chosen. In each group three schools were connected by all-weather roads, and four by foot only, which had no other direct link with the outside world. Investigations were conducted on these various groups of schools.[64.]

Parents were informed of the change in methodology, that is, there were to be no examinations until the school leaving examination.

In this system, after enrolments, a child is provided with graded and sequential teaching-learning units, and assignments suited to his capacity. He moves from one unit to another only after completion of the first. The child's speed of progress is according to his/her physical, mental, cultural and other capacities.

This progress is carefully recorded by the teacher. There is no class repetition in the conventional sense. The child may leave school as and when required by his circumstances, and rejoin, when able to continue without waiting for the beginning of the academic year. The system is thus flexible and non-formal.[65.] Children are taught in small groups, formed according to capacity, speed of progress and achievement levels in different subjects. The Ungraded School System project has developed and provided its own special sequential and graded teaching units, assignments and evaluation

programme. Parents are informed about the progress of their wards, on a quarterly basis.

The project received a warm welcome from both pupils and Teachers. It was begun in 1971 in the Project Schools under routine conditions, by the usual school staff, who had already been oriented to the Project work in concept and operational details. Difficulties did arise during this pilot project, because of the usual transfer of teachers. Another great problem was the delay in production of the teaching-learning material for the next stage, that is the next three classes. But in spite of these difficulties results proved positive.[66.]

Individualized instructional arrangement, and pace progress, continued, and the overall drop-out rate for Classes 1 to 11 for the project period was 31.7% as against 57% at normal periods. Further, 9.1% pupils in Group A, and 14.9% pupils in Group B secured accelerated progress. The attendance rate was higher in the project Schools as against the non-project schools in the previous years. The level of achievement in all subjects was higher for Project Pupils as against pupils from the conventional graded schools.[67.]

The system stressed the need for moving from one learning unit to the next, only when the previous one had been fully understood, completed and evaluated by the Teachers and pupils; hence the question of the minimum pass mark did not arise, and there were minimum gaps in the learning of pupils.

Such results recommend the adoption of such a system in States where the drop-out rate is high, so long as the expenditure on the project is reasonable.

On analysis it will be noted that the experiment of the Ungraded System of education, is aimed eventually towards the universalization of education, in that it has improved the 'dropout' situation in the state of Uttar Pradesh.[68.] Further, it is a method which has improved the quality of education given. The pattern is flexible and designed to cope with the broken time periods in attendance of students, which is a feature of rural life.

The Ungraded System is a novel feature within the formal structure of Indian Education. It is organized for relevance to rural people's needs, and therefore caters to rural-urban balance and equality in education. These are Williamson's three recommended ideals, for developing societies, which he has suspected, has gone unnoticed in such environments.

Of further note, is that the concept of the Ungraded System is alien to the 'dependent' British model of education, which generally prevailed in the country; as it is an innovation in the formal system of education in India.

Innovations In Curriculum Content Within The Formal System of Education.

As already noted, changes in curriculum content have led to inclusion of the concept of national integration in school subjects and to the introduction of the three-language formula. Further, it led to the unique effort to convey to students, the unity of

different kinds of knowledge, relationship between knowledge and life, and the will to build a new and better world.

Many new aspects of life and environment are now included in the subjects which already exist in school. Again the NCERT is at the helm of the project to introduce these new features into the different subjects. They collaborated with the State Education Departments, and in this case, with the Ministry of Health and Family Planning as well. Thus a project on Population Education was started which sought to educate the citizen of tomorrow in population dynamics, and social, political and economic implications of various population trends.

*Population education is a relatively new innovation in education. Population education programmes in Asia and Oceania are the response of the education system to the national concern for population issues. [69.]*

Topics in population education are integrated with other subjects in the school curriculum, rather than being included together as a separate subject in the curriculum. This is so because of a misunderstanding which exists that Population Education equates with Sex-Education and Family-Planning education. [70.]

So far as the approach to Population Education is concerned, there are no clearly marked content boundaries. The study is interdisciplinary in nature and related to various subjects. Also because of the overcrowding of curriculum, it has been difficult to introduce population education as a separate subject, and therefore the interdisciplinary approach has been adopted. However the topic

becomes too diffused in this manner and therefore some countries have now thought of introducing population education as a separate course at the secondary and tertiary levels.

The same view was expressed by the participants in the UNESCO Regional Consultative Seminar on Future Directions of Population Education held in Manila in August, 1978.

*In India Population Education is taught in Grades I to IX through Social Studies, Natural Science, Geography, Economics, Languages and Sociology. The curriculum for Population Education in India includes 'population growth', 'economic development and population', 'social development and population', 'health, nutrition, and population. [71.]*

The Population Unit of the NCERT in India developed a draft syllabus on Population Education for classes 1 to XI so that State syllabus-framing agencies may consult these and incorporate relevant topics into their own syllabi. The Unit collaborated with some of the States which incorporated ideas of Population Education into their school curriculum.[72.]

The orientation of Teachers and State Institute of Education Staff in Population Education is another dimension of its work. Further the NCERT text books, in the Social Sciences and Biology, have set an example to States writing their own text books, and the work done by NCERT in this small Unit has helped other countries with their Population Education programmes as well.[73.]

The country has now evolved a system acceptable to the States and Schools and therefore sample literature has been prepared, and training of Teachers has been outlined. Further this material must



be adapted to the needs of each State and translated into all the languages of instruction; financial assistance is therefore necessary if the subject of population Education is to help a million schools in the country.[74.] The inclusion of Population Education is a step in the direction of a relevant education system.

Innovations in the subjects of science and mathematics follow.

Science And Mathematics.

In the field of Science and Mathematics, much stress has been laid on the development of curriculum in schools. UNESCO Planning Mission visited India as far back as 1963 as part of the technical aid programme, for improving secondary school teaching in India.

*It was requested to make recommendations on the objectives and tasks of science and mathematics; education in general types of schools in India; the content of science and mathematics education; the philosophy for preparation of syllabi and text books, methods and organization of education; teaching equipment for science education in schools; training and refresher courses for science teachers; development of research in science and mathematics education, so as to improve considerably, science and mathematics education in the country.[75.]*

The project envisages that this school generation will be provided with the knowledge of the fundamentals of science and mathematics i.e. the major facts, laws and theories, and with the knowledge of the major applications of science and mathematics in industry, agriculture, civil engineering, transport and communications, health services, culture and every day life,

together with knowledge of the role and importance of these sciences in modern life. The hope of the Project is that the habits of observation, logical thinking and inquisitiveness of mind will be encouraged and that students will base their norms and conduct on scientific principles and conclusions, and develop a modern scientific world outlook.

Work on the project of curriculum development began in 1965, and UNESCO assisted with experts in the fields of science and mathematics. The project aimed at the development of a 'total package of curriculum material'. The syllabus was to be defined and text books prepared. One important feature of the programme was the development of equipment kits for different subjects, which could be packed into small portable boxes. Kit guides were to be developed for the use of these 'kits of equipment'. Films and filmstrips were developed to bring science into the class room. Along with curriculum material, the development of instructional material was considered, and study groups were started in university centres, and research organizations.

State Governments were free to change and adapt the given material according to the socio-economic background of each State. Flexibility in using this curriculum material is also necessary because of the different patterns of school systems prevalent in the States.

The UNESCO Planning Mission laid emphasis on observation, experimentation and discovery techniques in science. Hence, the books prepared in this project, provided a large number of activities on the discovery approach to teaching.

Also to facilitate experimentation and demonstration, complete demonstration kits were planned. The responsibility of the development of low cost equipment, known as 'science kits' was given to the Central Science Workshop - NCERT - in New Delhi. The subject experts collaborated with the work-shop experts in developing these science kits. Curriculum specialists provided ideas on class-room activities and collaborated with the above two groups of specialists as well.[76.]

These kits were first tried out in thirty selected middle schools and fifty primary schools with a view to collect feed-back, for the purpose of revision and modification.[77.]

Such innovations in science-teaching methods were expected to revolutionize the teaching of science particularly for rural areas.

#### Science In Rural Areas.

To strengthen further the updating of science, the idea of 'Laboratory on Wheels' emerged, to benefit children in rural villages, but in fact it proved beneficial in the extension services to Teachers in rural areas as well.[78.]

It was not possible to give formal training to the enormous number of Teachers who were to teach science in villages, but with the mobile science laboratory, a lecturer could travel through the rural areas, and look into the problems of local Teachers. Thus the 'Laboratory on Wheels' proved useful as a follow-up guidance service to groups of Teachers who already had some basic training in the science education project, plus as a preliminary in-service

education to Teachers working in the schools of non-project areas as well.[79.]

The output of this Programme, in practical terms is as follows: syllabus in Science and Mathematics for the middle stage; twenty-eight textbooks - fourteen in English and fourteen in Hindi - in the areas of physics, chemistry, biology, arithmetic, algebra and geometry; twelve Teacher's Guides in the same areas; demonstration kits in the same subjects for the middle classes, along with kit guides.[80.]

In 1967 the Project covered the entire school stage. By the mid-'70's material was used in nine hundred middle schools and five hundred and fifty middle departments of higher secondary schools in the Union Territory of Delhi. The Central School Organization, which runs one hundred and eighty Central Schools all over the country adopted this material in their schools too. So did a number of States and Union Territories, on a pilot scheme basis.[81.]

A special institution for the encouragement of science education within the NCERT is the Centre of Educational Technology. It is engaged in preparing material for the teaching of sciences at school levels, and in the training of Teachers. The training material is provided through a multi-media package of television programmes, radio programmes, activity guides and enrichment tutorials. The result now is that the teaching of science has been revolutionized, popularized, and upgraded in quality and standard.

The Sciences at School Levels.

According to the ten-year-school curriculum, an NCERT initiated programme, in the primary classes, the sciences should be taught as

Environmental Studies; as an integrated course of both the natural and social environment, in classes I and II, and after this as two separate subjects - Environmental Studies I dealing with Natural Science and Environmental Studies II dealing with Social Science. The courses could be flexible; children want only a certain amount of facts and information. Rather the teaching of science should sharpen their senses, enable them to observe the environment and enrich their experience. The connected activities to these courses should vary with local environment and experiences of children; they should not be based in abstract concepts alone. Therefore it is not possible to draw up an inflexible syllabus for all schools.

There has been criticism of the NCERT that science text books have an urban bias. However the NCERT text book writers recommend that Teachers should follow Guide Books and develop their own local instructional material at this primary stage.[82.] Reading material for children should be motivational to study.

In classes VI to VIII for the age group 11+ to 14+ some States have already introduced the subjects of Physics, Chemistry and Biology. Other States could introduce integrated courses up to class VIII, or experiment with groups of subjects, like Physical Sciences including Physics and Chemistry; and Life Sciences including Botany, Zoology and Human Physiology. This Unit procedure is more logical and economical, possessing much potential.[83.]

The same procedure according to the ten-year-school curriculum experts, could be adopted for classes IX and X as well. At this level, laws and theories must be gradually introduced, but not as

if they were dogmas. Open-mindedness and scepticism should be encouraged.

The stress on the study of science is geared towards building a highly relevant system of education suited to current needs.

In the area of voluntary science organizations the 'Vigyan Shiksha Kendra' or Centre of Science Education [84] is noteworthy. Developments in science and technology are noted to be undertaken by such voluntary organizations as well. The main activities of the Centre revolve round a number of programmes, directed at community development, through integrated services of science, technology, health and social work. It is a unique Centre where a team of workers from various disciplines of science, engineering, medicine, industry, education, youth organizations and welfare associations, unite towards the goal of local community uplift and development.

The Centre of Science Education also co-operates with the NCERT in New Delhi. Its ideal has been that the fusion of the plans for science and industry would raise the socio-economic level of the community. It has opened the avenues of employment to youth, instructed in the programmes of science by setting up cottage industry units in the villages. Such efforts are towards alleviating the employment problem in the country.

Another example, of encouragement to the study of science, is the Vikram Sarabai Science Centre which opened in 1966 to commemorate the memory of Pandit Jawaharlal Nehru.[85.] It is dedicated to the cause of promoting social and educational development, through an intensive use of science and technology. The Centre provides facilities to Scientists, Teachers and Pupils

to try out new ideas, in science-learning through the enquiry method. The programme runs purely on enthusiasm, interest and involvement of the participants.

The methodology of teaching -the enquiry method- at this Centre is noteworthy. Towards the use of this methodology three volumes comprising enquiry topics, in bio-chemistry, physics and audio-visual education, have been produced by the Centre.

#### Mathematics.

*In a society which is rapidly transforming itself into an industrial and technological society mathematical literacy is essential for every citizen.[86.]*

The current objectives of the mathematics curriculum at the school stage are;

- 1, to encourage students in a mathematical way of thinking, i.e. in terms of conducting experiments with numbers and geometric forms, forming hypotheses, verifying them with further observation and experiment, generalizing them, finding proofs and making abstractions;
- 2, to enable students to apply mathematics to real life problems;
- 3, to facilitate the learning of basic structures and concepts in mathematics, particularly through applications and concrete situations.
- 4, to stimulate students to self-learning of mathematics and an appreciation of the subject.[87.]

The first ten years of schooling provides a general maths education for all students, without diversification of subjects in the last two classes IX and X. Therefore maths education should be

compulsory for all students up to Class X. The level of the general course should enable students to enter higher studies in the maths discipline if they so desire, and at the same time, equip all students to cope with necessary daily mathematical problems. Some Units of a higher level of study, may be offered to those students talented in mathematics.

The discipline of Mathematics at the school level is designed for relevance to daily living, while at the same time offering a firm foundation for higher studies in the area.[88.] Equality and balance is aimed at, through the effort to spread mathematics in the rural areas as well.

Conclusion - Science and Mathematics Education.

The account thus far of efforts in the field of science and mathematics education in India is indicative of the importance given to the role of these two disciplines in the curriculum.

Innovation and experimentation in science and maths teaching, and learning, has been seriously conducted by the NCERT in New Delhi, with collaboration from UNESCO. The stress on science education by the government and educationists is of keen significance. Voluntary organizations also exhibit a similar keen interest in the study and spread of science -learning in India, and the above-described Vigyan Shiksha Kendra and the Vikram Sarabhai Community Centre are examples of this enthusiasm for, and faith in Science, by the people.

The stress on maths and science in the curriculum, for both urban and rural areas, by both government educational bodies and the people alike, is towards organizing an education system for



national development. It is believed that a strong and currently valid maths and science programme will create a more relevant educational system where students will grasp the application of science and mathematics to industry, agriculture, health services, culture and daily life, together with an understanding of their role and importance in modern living.

The effort and experimentation to carry the maths and science programme into the rural areas indicates the intention to achieve rural-urban balance in education, and equality of opportunity. Further the quality of maths and science programmes in education has improved with the changes made in the curriculum.

Next follows the objectives for the study of the social sciences as laid down by the ten-year-school curriculum.

The Social Sciences.

*The major objective of the study of the social sciences is to acquaint the child with his past and present geographical and social environment.*[89.] An effective programme of the social sciences in schools would encourage children to learn how people live and function through various socio-economic and political institutions. It would also help children to develop some understanding of human relationships, social values and attitudes. Such learning is essential to the citizen of tomorrow, to participate in the affairs of the community, state, country and world at large. Through the social sciences, children would learn to appreciate India's rich cultural heritage as well as to recognize and eradicate what is obsolete and antiquated, especially in the context of social change.

*The study of the social sciences in classes I to X should include the study of history, geography, civics and Economics.[90.]*

In view of the limited time available in the classes, these subjects could be integrated so that students learn the facts and problems in each area without causing damage to the totality of the individual disciplines. This would require identifying the essential units in each of the subjects and then unifying them into an integrated syllabus for the social sciences.[91.]

Since classes V, VIII, and X are terminal classes for large numbers of students, it is advisable to develop complete units of study for each stage, which would also lead on to the next stage quite comfortably.[92.]

At the Primary stage, in classes I and II the social sciences could be included within Environmental Studies, which include both natural and social environments. Thereafter the terms Social Studies rather than Social Sciences may be used, as representing a broader instructional area. Information drawn from the areas of geography, history, civics and economics, gradually unfolds the total environment to the child with special reference to the physical, social, and cultural elements. Such study would enable students to develop the necessary social skills, values and attitudes required, to contribute to, and enrich society in time.[93.]

*During the five years of primary school the child's mental horizon would be gradually widened from the home, the school and the local community to the world. [94.]* The child would learn how nature's gifts are processed for the use of man, about the social

and cultural life in different parts of the country and in some parts of the world. Stories and narratives of national personalities and events, and international figures that have contributed to human heritage, would be included in the Social Studies discipline.

According to the ten-year-school curriculum in the next two stages of school education, the middle and lower secondary stages, one of three different approaches may be adopted to the study of Social Sciences, which include the subjects History, Geography, Civics and Economics. The approaches are :

- 1. History, Geography and Civics may be introduced as separate disciplines in the Middle classes and carried over as such to high school classes, while Economics may be introduced at the High School stage as a separate discipline.*
- 2. History and Civics may form one group and Geography and Economics another group. These two groups may be introduced in class VI and carried up to class X.*
- 3. The content of History, Geography, Civics and Economics may be identified in an integrated manner for all the five years taken together. [95.]*

The first two approaches are in current operation. The third approach if implemented, would require that units of study be identified and integrated in two cycles of three years, then two years, the first forming the base to the second.

The scope of the different subject areas as visualized for the middle and lower secondary stages is now given below.

At the 'middle' stage History should-

*acquaint the pupils with the growth of Indian society from prehistoric times to the present. It is necessary to change the emphasis from dynastic history and political details to social and economic conditions and the growth of various aspects of culture in different parts of the country. At the same time a broad perspective of the history of mankind as a whole, should be provided. [96.]*

*The organization of the syllabus and the selection of the content may be based on what is known as the 'patch' approach.[97.]* Representative periods in chronological order highlighting the important aspects of areas named above, may be stressed. This may be combined with the 'topical approach, which refers to detailed and depth study of certain chosen aspects over others.[98.]

According to the ten-year-school curriculum, the distribution of the Indian History syllabus should be as follows: Class VI - Ancient India; Class VII - Medieval India; Class VIII - Modern India. Along with each of these major periods in Indian History, a broad perspective of the contemporary history of mankind should be provided.[99.]

In classes IX and X, a systematic course in the history of mankind from prehistoric times to the present day should be introduced. Again the 'patch' approach is recommended. The main basis of the selection may be -

*the successive stages of distinct social formations that existed, in different parts of the world in specific chronological periods. The main focus of this course should be on the study of social systems, in their rise and growth, and*

*their replacement of new forms; and on scientific and cultural development. The historical development of all the major areas of the world, including pre-colonial Africa and the Americas should be covered. The selection of the content should be based on the specific histories of individual countries only where these histories have a significant bearing on the general history of mankind and represent new trends which became relevant to the history of mankind as a whole.[100.]*

Together with the above content there should be included a course in depth study of specific aspects of Indian History, particularly the social, economic and cultural development and issues that bear on the understanding of contemporary India.

With reference to Civics, the aim is to impart training in the civic life, rather than scholarship. The course includes the study of local government, and the Indian Constitution in classes VI and VII respectively, and in class VIII the student should study the actual problems facing India today. Some practical aspects of citizenship, and some elements of economics, would be incorporated with the aim of adopting a functional and integrated approach. Students may also be taken out of the class-room with the aim of involving themselves in real life situations within the context of study. [101.]

In class IX and X two major objectives in teaching Civics would be the encouragement of an active and intelligent citizenship, and an intelligent understanding of the social and political institutions. In addition the role of the UNO in promoting world peace and co-operation, should be learned and understood. [102.]

With reference to Geography, at the middle stages, this discipline should concentrate on India in the context of a world which is to be shared by people of diverse patterns of living; and secondly on the interdependence of the various regions, in the country and the world. The students should learn that the produce of the earth must be shared in order to be enjoyed. Further in view of the integrated approach, some rudimentary concept of the economic forces that influence the citizen's daily life, need to be introduced in the form of elementary knowledge in consumer economics, such as earning and spending, controls, price rise and the effects of increasing population, in a very simplified form. [103.]

At the secondary or terminal stage of school education, Geography would shift its emphasis from the descriptive to the analytical and conceptual, in its presentation. A few detailed studies from World Geography and the Economic Geography of India should also be undertaken, stressing the analytical approach in the study. [104.]

Economics at the school secondary stage would need to lay emphasis on the current problems and issues that affect the everyday life of the common man, along with some study of the principles of economics. Such a foundation will encourage students to study the more systematic and rigorous courses in Economics for classes XI and XII. [105.]

Social Studies thus consists of the four disciplines of History, Geography, Civics, and at the higher levels Economics as described above. The restructuring of the content material itself, and the teaching method is innovative and reorganized with a view

to creating a highly relevant curriculum pattern for Indian Education. Of significant note is that throughout, the study is on India, the student as a citizen of this country, and India in relation to the world. Social Studies is designed to create awareness in children of the immediate world around them, of their present and future responsibility in it, and pride in their national heritage.

Thus four traditional disciplines history, geography, civics and economics are transformed into an indigenous learning pattern in the area of the Social Sciences which would include Environmental Studies in classes I and II and the discipline of Social Studies at the middle and lower secondary levels of school education, as described above. The formal system of education is being transformed into an indigenous Indian pattern of education.

#### GENERAL CONCLUSION.

From the above case studies in educational innovation projects, there emerges the fact that curriculum change is in progress, in concept and structure, method, content and evaluation. The major problems identified by NCERT are the need for universalization of primary education, and reduction of the wastage and stagnation that occurs at this level. At the secondary level of education, there is detected a need for a vocationalized and work-oriented curriculum. In general, there is a need for more education on a larger and wider scale for the weaker sections of society both rural and urban, and for improvement of standards in education towards relevance, equality and balance.

Non-formal education has been stressed as a break with the traditional past and western model of education, in structure, content, method and evaluation. The approach is suited to local needs and is indigenous in character. Apart from being work-oriented this system gives importance to education and community involvement in both recent and earlier projects.

Experimentation in linking the formal and non-formal system is now in operation, through the multiple-entry system in education, and emphasis is laid on the role of non-formal education in socio-economic and socio-cultural development in the country, and its overall regenerative influence on the prevailing educational system. The NCERT has already prepared and is engaged in preparing further literature for both pupil and teacher in the non-formal system of education.

Within the formal system, two innovative approaches to education described are the Free Progress System of the 'Aurobindo Ashram' and the Ungraded School System initiated by the NCERT on the basis of recommendations in the KCR. These are worth noting for their experimental character in methodology, structure and even content of education. They raise and improve the existing standard of education. The Aurobindo Ashram is unique in its idealism and the Ungraded System is designed to be flexible time-wise, to diminish the number of examinations in primary education, and thus to minimize the drop-out and stagnation rate.

With regard to relevance in education, it must be noted that work-experience and vocationalization of education has been stressed at every level of education, in the innovative approaches



which have been discussed. In the secondary level of education the curriculum is designed to encourage students to undertake studies in vocation-based subjects - and these studies are likely to be extended into other geographical areas. Work-experience is introduced with the prospect of making this level of education terminal.

New subjects have been introduced into the general ten-year school curriculum content. Population and Environment Education, Nutrition and Health, are now included in an integrated programme of instruction. The approach to the study of the Social Sciences, at school level has undergone a transformation. Civics and even Economics have been introduced into the school curriculum, and an integrated approach to teaching them along with History and Geography is recommended. At the Primary level, these subjects are integrated into the teaching of the one discipline, Social Studies. The NCERT and the State Institutes of Education, in collaboration with the State Departments of Education, have produced new text books in all subjects, for the formal school, at both the primary and the secondary level.

In the fields of science and maths teaching, there has been significant innovation in method and content. The UNESCO Planning Mission has given important aid in the areas of these disciplines. A new feature is the development and use of special low cost science equipment and 'science kits'. 'Laboratory on Wheels' is an important innovation for rural schools and Science Teachers in rural areas.

Further, apart from efforts at the government planning level, effective voluntary efforts exist elsewhere in the country, e.g. the 'Vigyan Shiksha Kendra' and 'Vikram Sarabhai Community Centre' for science and technology.

One of the main ideals of Indian nationalism, - National Integration - has been tackled in education under the guidance of the NCERT. The National Integration Unit, has organized inter-state camps and activities for students, and for Teachers and Principals, together with other activities recounted above. Further, the 'three language formula' adopted into the educational pattern is a significant step in national integration.

These innovations in the field of education illustrate the fact that India is keenly aware of deficiencies in the prevailing system and is experimenting in the creation of a new concept of education. These innovations are already in implementation in several areas of the country. In order to show marked results however, expansion of these measures is imperative. Nevertheless, it is clear from the accounts above that enthusiasm among the people at all levels is growing. Equally the government is making a powerful national effort in the innovative projects of the NCERT.

Finally the innovations in progress cater to the needs outlined in the introduction to the chapter. Thus solutions are biased towards achieving equality of educational opportunity, a closer link between education and the employment market for development, improvement in the standard of education, and involvement of the academic community in social and economic development, as

recommended by the KCR as main issues for educational innovation, in the fifth and sixth Five Year Plans.

These innovations in current practice in India directly coincide with the educational needs in developing countries as discussed by Williamson. Further the traditional pattern of education is changing into one in which the life, needs and aspirations of the people are kept in focus. The once 'dependent' pattern of education in India has been shaken and transformed by innovative practice, and when the relevant changes are implemented more widely and take firm hold in the country, a more indigenous pattern of education will replace the traditional one.

The changing concept of education and changing current educational practices as described and discussed takes India out of the 'dependent' group of societies, in the area of education, where Williamson's model for world societies places it. In more specific terms the 'dependent' British model of education prevalent in Imperial India up to the fourth decade of this twentieth century is being transformed into a relevant system of education through experiments and innovations to suit the needs, hopes and aspirations of the people, and for national socio-economic progress and development.

The final confirmation of these propositions is offered by the last major education reform of the Indian Government in the period under review. This major reform effort goes under the name of the New Education Policy 1986.

The New National Policy on Education.

The New Education Policy 1986, [106] in India, was initiated by the Prime Minister Rajiv Gandhi personally, and it is significant that he has changed the Union Ministry of Education to the Ministry of Human Resource Development. The aim of the new education policy is to prepare the individual for the changes in the twenty-first century. The new policy has emphasized the total development of the personality; the new citizen would be educated to be physically, morally, and mentally healthy and adjusted to cope with scientific and technological change. hitherto the vast human resources of the nation had been neglected in favour of pressing priorities, like the development of science and technology, industry and agriculture, and other material aspects of life. But the new focus in education would be on human resource development, which cannot be neglected any longer without disastrous results to the nation.

There are several paths toward human resource development, the most obvious one being formal education in schools and colleges. On-the-spot training during employment is another much-used method. There are also adult education programmes and membership of various social, religious, scientific, cultural, political and other groups. Self-development is an important method, that is, reading books, journals and other literature and the use of mass media, i.e. radio and television. Human resource development also means better medical and public health facilities and improvement in nutrition and living conditions of the people. The tools of education again become important. Self-learning, on a continuous basis, should constitute the most important objective of the new

education policy, particularly in view of the knowledge explosion, and the changing technology of the twenty-first century.

The new education policy, in fact, is not new in the light of facts and findings of the 1964-1966 Indian Education Report. But it is a good comprehensive review of the 1966 education policy, and the 10+2+3 structure of school and college education.

What is important is that the Prime Minister himself has initiated the New education policy and so for the first time since Independence, it has the strong political support needed. A commitment has been made for the availability of the required funds during the current Plan, and this will be raised to 6% of the national income from the next Plan onwards. This is a very encouraging aspect of the policy, as all previous efforts to allocate 6% of the national income have failed, though the 1966 Commission had recommended such funding. Another recommended source of income is fees at the higher education level, no doubt, coupled with an increase in scholarships and half free scholarships for deserving students who cannot afford high fees.

In order to implement the new education policy, an efficient administrative machinery is required. Administrators in Education should be serious educationists and specialists, not retired politicians and administrators. Hence there could be a revival of the Indian Education Service on par with other all-India services.

The 10+2+3 structure of education in the New Education Policy.

The 10+2+3 structure in education is to be the means of most of the reforms in formal education, though it is not to be treated as a magic formula. It is expected to bring uniformity in the pattern of

education for the whole country. Many of the States have changed over to the 10+2+3 pattern.

The 10+2+3 structure for school and college classes was in fact recommended in 1919 by the Calcutta University Commission. In 1949, the University Education Commission, under the chairmanship of Dr. S. Radhakrishnan, again concluded in favour of the 10+2+3 pattern for school and college. However, in 1953 the Secondary Education Commission under Dr. A.L. Mudaliar recommended the 8+3+3 pattern as outlined in the Sargeant Report, and therefore an eleven-year higher secondary school was followed by a three-year under-graduate course. This was done mainly for financial reasons.

Then in 1966 the Kothari or Indian Education Commission again having reviewed the position from all aspects, concluded in favour of the 10+2+3 structure for school and college education, this being the most suitable for introducing the new pattern of education. A flexible educational structure was visualized, the pattern being:

- a pre-school stage of one to three years;
- a primary stage of seven or eight years divided into two sub-stages, with a lower primary stage of four or five years and a higher primary stage of three years;
- a lower secondary or high school stage of two or three years providing general education or one to three years of vocational education.
- a higher secondary stage having a course of three years or more for the first degree (the courses taking more than three years apparently refer to the first degrees in Engineering and

*Medicine, and followed by courses for the second or research degrees of varying durations. [107.]*

In 1972, the CABE, under the Chairmanship of Professor Nurul Hasan, Union Minister of Education, Social Welfare and Culture, resolved in favour of the 10+2+3 pattern for education. Vocationalization at the secondary stage was the important reform here. Man-power estimates were considered, and therefore district surveys were recommended. It was noted that the latest teaching methods, and educational technology in vocational training, would be required. Vocationalization at the secondary stage would mean that programmes should be developed in collaboration with the Ministries of Education, Health and Labour, Agriculture, Industrial Development etc. A co-ordinating machinery at the Centre, State and District levels would be required.

The Emotional Integration Committee of 1962 under Dr. Sampurnanand, for national integration also favoured the 10+2+3 pattern for education. However in 1977 the pattern was reviewed by the Janata government and came under attack for its heavy and increased academic content which left no time for games, sports and manual activity. Math and science being compulsory for all students irrespective of capacity, was criticized. There was complaint against the +2 stage, that vocationalization was not adequately implemented, and that it should be done by the end of the Vth and not the Vth Plan period. A smooth switch-over was recommended by developing links with the Departments of industry, commerce, agriculture etc.

Next, the Congress I government did not make a major policy statement on the pattern of education, but opposed the approach to education by the Janata government. Education was to be transferred from the State to the Concurrent List, but without affecting the existing initiative and autonomy of State governments. The 10+2+3 pattern was to be reintroduced to bring about all-India uniformity.[108.]

The Academic considerations on which the 10+2+3 pattern was chosen.

It was decided that the age of young people entering University should be eighteen years. In India, students of fourteen and fifteen enter universities when they cannot really profit by the method of teaching there, as they are not mature enough. Thus, university standards are diminished, and schools lose out as well as there is a cut in the duration of school years.

Further, it was thought advisable that the secondary education course of four years should be broken into lower secondary and higher secondary otherwise students necessarily continued the four years instead of leaving at class X and joining a vocational course if desired. Also, class IX, when students are aged fourteen and fifteen years, is too early for a choice of vocation, which is necessary if the secondary course is a continuous four years one.

At age sixteen years in class X, the decision to enter vocation or University may not be a final one, and there may be a change of mind in the young student. Therefore CABE recommended the possibility of a transfer of streams. Vertical mobility is also



thus ensured, to manual workers, whether in agriculture or industry.

Secondly, in the old days, science and maths was not compulsory after class VIII and many students opted out, particularly as many schools did not have the facilities. 50% of the students at the secondary stage were deprived of basic education in science and maths. According to the Kothari Commission, science and maths is obligatory till class X. It is necessary in the modern world of science and technology. Further there is the danger of a dichotomy - of the "two cultures" of science and the humanities.

Regarding undergraduate study, a minimum of three years rather than two years is considered important if a student is to prepare for a complex society, through inter-disciplinary courses. Further, emphasis has been laid on practical experience through field work and project work which means involvement with the community.

The new 10+2+3 pattern is one of great educational significance and expected to bring about several advantages, at school and college levels.

The new national pattern of education will include a common national curriculum which-

*contains a common core together with other components which are flexible. The common core will include the history of India's freedom movement, the constitutional obligations and other contents essential to nurture national identity. These elements will cut across subject areas and will be designed to promote values such as India's common cultural heritage, egalitarianism, democracy and secularism, equality of the*

*sexes, protection of the environment, removal of social barriers, observance of the small family norm and inculcation of the scientific temper.[109.]*

Minimum levels, at each stage of learning, will be laid down. Students will be given an opportunity to learn of the diversity of culture in the country. Besides the promotion of link languages, programmes will be introduced to translate books from one language to another and to publish multilingual dictionaries and glossaries. Students will be encouraged to rediscover India.

Inter-regional mobility in higher education and technical education will be encouraged. In the areas of research and development, and education in science and technology, different institutions in the country will be encouraged to pool their resources and participate in projects of national importance.

A uniform pattern of education in the country will facilitate movement of students and teachers and strengthen national integration.

The new structure will rationalize and strengthen school education. Maturer and more knowledgeable students will enter university, and the pressure for admission into higher education and university will diminish.

The +2 stage will be a distinct one, to introduce appropriate vocationalization of secondary education. School and college curricula can be modernized and structured on more scientific lines, to better help the needs of youth.

The nation will undertake the *responsibility of providing resource support for implementing programmes of educational*

*transformation, reducing disparities, universalization of elementary education, adult literacy, scientific and technological research etc. [110.]*

Life-long education will be encouraged, and therefore universal literacy. *Opportunities will be provided to the youth, housewives, agricultural and industrial workers, professionals and others to continue the education of their choice, at the pace suited to them. The future thrust will be in the direction of open and distance learning. [111.]*

Further the New Education Policy has laid stress on partnership between States and Centre in promoting educational standards. While the 1976 constitutional amendment put education in the Concurrent List, the responsibilities of the States will continue as before. However, the Centre will enforce a national character and integration in education, will enquire into man-power needs, nation-wide, cater to the needs of research and advanced study; and care for the international aspect and human resource development in education. The aim is to maintain a true partnership between Centre and State and provide for excellence at all levels of education.

Education for Equality.

Disparities are to be removed. There will be a change in the status of women through education. The distortions of the past are to be rectified. Removal of women's illiteracy and retention of women in elementary education is stressed; they will have chances in non-traditional occupations and in emerging technologies. There will be special support services, setting of time targets and effective monitoring for them.

Scheduled castes are to be brought on to a par with non-scheduled castes. Similarly the Scheduled tribes must be catered for. A suitable infra structure will be provided for all institutions, and incentives will be provided for the educationally backward classes of society, particularly in the rural areas, hill and desert districts, remote and inaccessible areas and islands. Greater attention is to be given to education of minority groups - they are to be given constitutional guarantees to establish and administer their own educational institutions in conformity with core curriculum and appreciation of common national goals.

Special measures will be taken for physically and mentally handicapped to prepare them for normal growth and to face life with courage and confidence.

A vast programme of adult and continuing education is to be implemented. This is directed towards continuous upgrading of skills so as to provide man-power of the kind and numbers required in the society.[112.]

Reorganization of Education.

Early Childhood Care and Education (ECCE) will receive high priority. Play method and not the three Rs will be stressed at this stage.

Elementary education will concentrate on retaining all children to the age of fourteen. A child-centred activity-based process is to be adopted. First generation learners will be allowed to learn at their own pace, and remedial instruction will be provided.

School timings and vacations will be adjusted to children's convenience. Facilities like two large rooms usable in all

weathers, black-boards, charts and maps will be provided. Two teachers, at least one woman, will be provided, and this pattern will change into one teacher per class, with time and progress. Operation Blackboard will improve all primary schools in the country. Construction of school buildings and non-detention at the primary stage will be policies undertaken.

A large and systematic programme of non-formal education is visualized for drop-outs and girls who cannot attend all day classes. Modern technological aids will improve the non-formal education class-rooms, dedicated men and women of the community will be trained for these schools. Entry from non-formal schools to formal institutions will be ensured. The quality of non-formal schools will be kept as near as possible to formal education. All eleven-year olds in 1990 should have five years of schooling or equivalent through non-formal education. Likewise by 1995, all children to fourteen years will be provided with free and compulsory education.[113.]

Secondary Education will be widened to cover areas not served by it at present. Secondary education will be consolidated.

A new venture in schools is the Navodaya Vidyalayas. These are pace setting institutions of quality to be established in all districts. They are to provide for children of special talent and aptitude, irrespective of whether they can pay fees or not. The schools will be residential and free of charge. Largely the rural children should benefit from them. National integration should improve through them and quality education should increase.

The Naodaya Vidyalayas project was initiated by the Prime Minister, Rajiv Gandhi. They will now include classes VI-XII only. The medium of instruction originally decided upon was Hindi for the Humanities, and English for Science and Maths. However, the mother-tongue is now the medium of instruction in the first two classes of VI and VII and a switch to Hindi and English or another State Language will happen in Class VIII onwards. It is strongly advised that the new schools support the government policies of the three-language formula, work-experience or socially useful and productive work (supw) vocationalization at the +2 stage.

In order to promote national integration 20% of the students of the N.V.'S will migrate to N.V.'s in other States - Hindi and non-Hindi speaking.

Teachers for these institutions will need to be of higher quality, and thus better salaries will be offered to them. They are to be drawn from existing institutions in the country.

These N.V.'s are aimed towards equality and opportunity in education.[114.]

Vocational Education will be a distinct stream of education including many activities, after the secondary stage mainly, but after class VIII as well. Health service management may be improved through health man-power obtained from vocational courses at the +2 or higher secondary stage. Similar courses based on agriculture, marketing social services etc. will be available. Emphasis has also been laid on attitudes, knowledge, and skills for self-employment.

The establishment of the courses, and institutions in vocational education, will be the responsibility of the government as well as the employers in the private and public sectors. The government will, however, take special interest in the needs of women, rural and tribal students and the deprived sections of society. Programmes will be initiated for the handicapped.

Students graduating from vocational courses will have the opportunity to advance professionally and improve themselves. Therefore entry into general, technical and professional education will be possible through bridge courses. Vocational courses will also be available to primary education students, school dropouts, working and unemployed persons. Tertiary level courses will be available to young graduates from the academic stream of higher secondary education, who require vocational training. 10% of the students of higher secondary education should be covered by vocational education by 1990, and 25% by 1995. [115.]

#### Higher Education.

Urgent steps will be taken to protect higher education and its quality. Research will be encouraged in indology, humanities and social sciences, and Sanskrit and other classical languages. A national body of research in general, agricultural, medical, technical, legal and other professional fields will be set up - an interdisciplinary research body. Research in science and technology will be the responsibility of the University Grants Commission (UGC).

The open university system will be developed to increase opportunities in higher education and to democratise education.

Delinking of degrees from jobs in selected areas will begin. Exams to choose candidates with appropriate capacities for various jobs will be developed on a national basis so that finally norms of competence may be developed for use across the nation.

The new pattern of rural universities will be developed along Gandhi's revolutionary ideas on education. Institutions and programmes of Gandhian Basic Education will be supported. [116.]

Technical and Management Education. [117.]

For information on manpower need, the recently set up Technical Manpower Information System will be further developed and strengthened. Computer education will form part of professional education. Programmes of computer literacy will be organised on a wide scale from the school stage. Since technical and management education has strict and rigid entry procedures, programmes through distance learning, including mass media, will be offered. Guidance and Counselling will be strengthened. Entrepreneurship will be provided in optional courses for degree and diploma programmes towards self-employment as a career.

Research and development will be available for quality manpower. The All India Council for Technical Education will have authority for planning and formulating courses, and for standards, accreditation, funding, certification, awards and integrated development of technical and management education.

In view of the integrated nature of the task, the Ministry of Human Resource Development will co-ordinate the balanced development of engineering, vocational, and management education as well as the education of technicians and craftsmen.



In order to ensure that the education system will function as planned in the new education policy, better emoluments and facilities to teachers will be offered and there will be an insistence on acceptable norms of behaviour; provision of better facilities in the institutions may be expected; performance appraisal of institutions according to standards and norms set up at national and state level will be undertaken.

#### Value Education.

Education for social and moral values will be emphasised to eliminate obscurantism, religious fanaticism, violence, superstition, and fatalism.

#### Languages. [118.]

The 1964-1966 Education Commission policy on language will be emphasised and strictly adhered to. Thus the three-language-formula will be adopted and strengthened.

The regional languages will operate at the primary and secondary stages. They will be introduced and adopted at the university level also.

The Three-Language-Formula. At the secondary stage this must be vigorously implemented. Hindi, English and a modern regional language, preferably South Indian, should be the accepted pattern in a Hindi-speaking state; the regional language, Hindi and English should be the pattern in non-Hindi speaking states. Suitable courses in Hindi and English must be encouraged at University for students who are not already proficient in these languages.

Hindi must be developed as the language of communication and expression of culture. Therefore, Hindi medium colleges and

institutions of higher education in non-Hindi speaking states will be encouraged.

Further, the Sanskrit language also needs to be encouraged, on a liberal basis at both school and university level. It is the basis of Indian languages and cultural unity. It may be included in courses like Indology and Indian Philosophy, at the first and second degree stages.

International languages must be emphasized. English is especially important for science and technology which is growing at a tremendous rate.

#### Books and Libraries.

Low price books will be made available to encourage the reading habit. There will be an improvement of existing libraries, on a nation-wide basis too. Improvement of the status of the librarian and library facilities in educational institutions will be made.

#### Media and Education Technology.

Educational technology will be employed in the spread of useful information, training and retraining of teachers; to improve quality, for art and culture and abiding values. Radio and television programmes, and films, will be monitored for value education - violent and consumerist films will be curbed. Production of high quality children's films will be promoted.

Work Experience needs to be organized as an integral part of the educational system. Meaningful manual tasks or services useful to the community will be organized. Pre-vocational programmes at the lower secondary stage should help choice of vocational courses at the next stage.

Science education education needs to encourage a spirit of enquiry, creativity, objectivity; courage to question, and aesthetic sensitivity. Problem-solving skills must be developed, and students should discover the relationship of science with health, agriculture, industry and other aspects of daily life.

#### Sports and Physical Education.

A nation-wide infrastructure of sports, physical education, and games will be built into the educational edifice. As a system which promotes integrated development of body and mind, yoga will be developed in all institutions. Sports etc. will be treated as an integral part of education and will be included in evaluation.

Role of Youth. Opportunity for youth in national and social development will be provided through NSS, National Social Service, and NCC, the National Cadet Corps.

Exams. The semester system is to be introduced from the secondary stage onwards, and grades instead of marks are to be awarded.

#### Teacher Training.

Incentives will be provided, so that quality teaching will be achieved. Uniformity in emoluments and objectivity in transfers throughout the country will be maintained. The new teacher education programmes will emphasize continuing education. District Institutes of Education and Training (DIET) will be established to offer pre-service and in-service courses for elementary school teachers, and for personnel in non-formal and adult education. The National Council of Teacher Education will become responsible for

quality institutions of teacher education and provide guidance in curricula methods.[119.]

The planning and management of education will receive high priority. At centre and state levels, professionals will be involved. The Indian Education Service will be established on an all-India basis, in consultation with state governments. District Boards of Education will manage education to the secondary level. Special training will be given to educational planners, administrators and heads of institutions.

#### Financial Resources.

Financial resources will be raised by mobilizing donations, asking community aid to maintain school buildings and consumables, raising fees at the higher levels of education and using facilities with care and efficiency. Research and development agencies for technical and scientific man-power will charge a cess on all user agencies, including government.

The government and communities will find funds for programmes like universalization of elementary education, liquidating illiteracy, equality and access to education, relevance, quality and effectiveness of educational programmes, generating scientific and technical knowledge important to economic development.

Education will be treated as a crucial area of investment, for survival and national development.

Funds will be monitored and reviewed regularly. The VIIth Plan outlay on education will be stepped up for implementation of the NEP. From the VIII Plan onwards, it will exceed 6% of the national income.[120.]

In conclusion, the New Education Policy or NEP 1986 will be implemented in all seriousness, with heavier funding, to prepare individuals for the twenty-first century. The Prime Minister has quite significantly changed the name of the Ministry of Education to the Ministry of Human Resource Development, and 6% of the national income is to be allocated for this purpose.

An important feature of the NEP is the new structure of school and college education, the 10+2+3 pattern. It is to form the structure within which the new educational reforms are to be implemented. It is expected to give uniformity to the educational pattern throughout the nation.

Vocationalization at the +2 stage is expected to bear fruitful results. Students will be in a position to join the world of work if they wish to do so, while at the same time pressure on University and higher education courses will be lessened.

Subjects at the school level will include the common core of history of India's freedom movement, constitutional obligations, and maths and science for all students. Work experience or SUPW is stressed. Values in education for all students, sports and physical education and the role of youth in national and social development through the NSS and NCC, are also stressed.

Another novel feature of the NEP is the Navodaya Vidyalayas - new pace-setting schools to be set up in every district, for the benefit of rural students mainly. They are to be free and residential in nature. They will be expected to follow government educational policies with vigour, and the three-language formula of the 1966 education policy will be given importance and stress.

Equality will be stressed throughout, and therefore the position of women, and of scheduled castes and tribes will be given special attention.

Non-formal education and elementary education will also receive special attention. Operation Blackboard is expected to improve all elementary schools particularly in rural areas in a large way. Early childhood care and attention ECCE programmes are being developed.

Teacher education and in-service training is to be strengthened through DIET, District Institutes of Education and Training, and the position of teachers is expected to improve because of better emoluments.

The planning and management of education is also expected to improve. Professional educationists rather than politicians and retired administrators will be made responsible for education in the NEP.

Thus the educational policies as given in the KCR have been reaffirmed and given practical stress through policies like the 10+2+3 pattern of education, vocationalization of secondary education, the Navodaya Vidyalayas, the new subject core curriculum pattern. Also, the quality of teachers, the management of education, and financial allocation for education, being improved, will revitalize the education policies in the nation: *Education is a unique investment in the present and the future. This cardinal principle is the key to the National Policy on Education.* [121.]

Chapter VII. Footnotes.

1. NCERT - National Council of Educational Research and Training.

The Curriculum for the Ten-Year School, p.18.

2. Ibid. p.18.

3. NCERT - National Council Educational Research and Training.

Innovations in Education in India, p.37.

4. Op. cit. p.43.

5. Op. cit. p.Introduction.

6. Op. cit. p.1.

7. Op. cit. p.2.

8. Ibid. p.2.

9. Ibid. p. 2.

10. Ibid. p.2.

11. Op. cit. p.3.

12. Op. cit. p.5.

13. Op. cit. p.3.

14. Op. cit. p.4.

15. Ibid. p.4.

16. Op. cit. p.5.

17. Ibid. p.5.

18. Ibid. p.5.

19. Ibid. p.5.

20. Op. cit. pp.6 & 7.

21. Op. cit. p.6.

22. Ibid. p.6.
23. Op. cit. pp.6,7.
24. Op. cit. p.7.
25. Ibid. p.7.
26. Ibid. p.7.
27. Op. cit. p.11.
28. Ibid. p.11.
29. Op. cit. pp.11 & 12.
30. Op. cit. p.12.
31. Op. cit. p.31.
32. Ibid. p.31.
33. Op. cit. p.34.
34. Op. cit. p.35.
35. Op. cit. p.8.
36. Ibid. p.8. ['Block' refers to a group of flats or houses.]
37. Op. cit. p.9.
38. Op. cit. p.17.
39. Ibid. p.17.
40. Ibid. p.17.
41. Ibid. p.17.
42. Op. cit. p.18.
43. Mathai, Ravi J. was the initiator of the Open Learning System - the Rural University - which he has described in The Rural University. (The Jawaja Experiment in Educational Innovation.) Bombay: Popular Prakashan Pvt. Ltd., 1985. Professor Mathai died prematurely a year



earlier: 1927-1984.

44. Mathai, Ravi J., "An Open Learning System For Rural Development" in Bulletin No.19, 1978. (UNESCO Regional Office for Education in Asia and Oceania.) p.122.
45. Ibid. p.122.
46. Ibid. p.122.
47. Op. cit. p.123.
48. Op. cit. 136.
49. NCERT, Innovations in Education in India. (Part I An Inventory.) p.26.
50. Op. cit. p.27.
51. Ibid. p.27.
52. Ibid. p.27.
53. Op. cit. pp.28 & 29.
54. Op. cit p.29.
55. Op. cit. p.37.
56. Ibid. p.37.
57. Op. cit. p.38.
58. Op. cit. p.39.
59. Op. cit. p.40.
60. Op. cit. pp.40 & 41.
61. Op. cit. p.41.
62. Ibid. p.41.
63. Op. cit. p. 43.
64. Op. cit. pp. 43 & 44.

65. Op. cit p.44.
66. Op. cit.p.45.
67. Ibid. p.45.
68. Op. cit. p.46.
69. Sharma, R.C., Approaches to Curriculum Development in Population Education in Asia and Oceania. (UNESCO Regional Office for Education in Asia and Oceania. p.30.
70. Ibid., p.30. [In many Asian countries there is a cultural and religious resistance to such education being included in the school curriculum. Thus this misunderstanding has been one of the obstacles to initiating Population Education programmes in some countries in Asia and Oceania.
71. Ibid. p.30.
72. NCERT, Innovations in Education in India. (Part I - An Inventory. p.48.
73. Op. cit. p.49.
74. Ibid. P.49. [If Population Education succeeds as a school subject, there will be the impetus to further diversify and functionalize the school curriculum, which might accept topics from Environmental Education, Conversation Education, Productivity and Sex Education. All of these topics would not be added as new subjects to the school curriculum, but rather they would be incorporated into the existing school subjects.]
75. Op. cit. p.63.
76. Op. cit. pp.64-65.

77. Op. cit. p.65.
78. Ibid. p.65.
79. Ibid. p.65.
80. Op. cit. pp.65 & 66.
81. Op. cit. p.66.
82. NCERT, The Curriculum for the Ten-Year School. (A Framework.) p.16.
83. Ibid. p.16.
84. NCERT, Innovations in Education in India. (Part I An Inventory.)  
p.56.
85. Op. cit. p.59.
86. NCERT, The Curriculum for the Ten-Year School. (A Framework.) p.16.
87. Ibid. p.16.
88. Op. cit. P.17.
89. Op. cit. p.19.
90. Ibid. p.19.
91. Op. cit. p.20.
92. Ibid. p.20.
93. Ibid. p.20.
94. Ibid. p.20.
95. Op. cit. pp. 20 & 21.
96. Op. cit. p.21.
97. Ibid. p.21.
98. Ibid. p.21.
99. Ibid. p.21.
100. Op. cit. pp.22,23.

101. Op. cit. p.22.
102. Op. cit. p.23.
103. Op. cit. p.22.
104. Op. cit. p.23.
105. Op. cit. p.23.
106. Ministry of Human Resource Development, Government of India,  
National Policy on Education, 1986. pp. 1-29.
107. Shukla, P.D., Towards the New Pattern of Education in India.p.4.
108. Ibid. pp.1-10.
109. Op. cit. p.4.
110. Shukla, P.D., Towards the New Pattern of Education in India.p.234.
111. Ibid. p.234.
112. Ibid. p.234,235.
113. Ibid. p.235.
114. Ibid. p.237, 25.
115. Ministry of Human Resource Development, Government of India.  
National Policy on Education, 1986. pp.13,14.
116. Ibid. pp.14, 15, 16.
117. Op. cit. pp.239-240.
118. Op. cit. pp.244,245.
119. Op. cit. 241-242.
120. Op. cit. 243.
121. Min. of HRD, Govt. of India, National Policy on Education, 1986.  
p.3.

## CHAPTER VIII.

### SUMMARY AND CONCLUSIONS.

#### SUMMARY.

The present investigation has noted firstly, the relevance of curriculum especially school curricula to socio-economic needs in India with stress on the school level and, secondly, has tested the validity of Williamson's model of development and taxonomy of world societies; his views and comments on education and development; and his statements on the importance of relevance and equality in education in rural and urban areas in developing societies. The thesis has also assessed whether Indian education fits within the 'dependency' theory pattern or not.

The six chapters in the main descriptive sections of the thesis, i.e. (Chapter II to Chapter VII inclusive) fall into two clear parts. Chapters II, III and IV introduced and clarified, as far as possible, the theoretical position of Williamson on education and socio-economic development outlined in his book Education, Social Structure and Development.

Chapter II outlined Williamson's treatment of the concept of a 'dependent society' within the framework of 'dependency' theory and his efforts to outline a model or taxonomy of societies for comparative study. From this analysis the three significant issues of relevance/irrelevance, equality/inequality and urban/rural imbalance in education were stressed as the three important concepts being investigated in the context of the current socio-economic and educational development in India. In applying these concepts and their underlying theory to India, a contrast was drawn with the socio-

economic and educational issues of India as these have been defined by the Kothari Commission, the ARTEP Mission Report, and other national documents. The theory positions of Williamson and the Indian documents were analysed in these three early chapters. A contrast was drawn between the different recommendations for educational change, socio-economic progress and patterns of development envisaged for the country at a national level.

The next three Chapters V, VI, and VII concentrated on the realities of education and socio-economic development in India, both in historic and more contemporary periods, with the view to identify changing assumptions and practices in political, economic and educational areas. Williamson's interpretations were contrasted with these changes to make clear the differences between his propositions, and development in practice in India. The general argument was that trends of development in India were capitalist and 'dependent' in the imperial era but socialist and indigenous in the period that followed.

It is necessary to summarize this argument in detail and this can now be done through chapter summaries.

## CHAPTER II.

On the basis of information from the Kothari Commission Report, (KCR), the International ARTEP Mission Report and other national documents, e.g. Appraisal of the Fifth Five Year Plan, on economic development in India in Chapter II, it was noted that the KCR claimed a socialist stance in its recommended model of development. The KCR begun by identifying four main problem areas - the scarcity food; economic growth and employment; social and national integration; and political development. According to the KCR the main solutions to these problems

would come through education. In contrast a third approach to the economic problems in India, from the Appraisal of the Fifth Five Year Plan, outlined in Chapter II, was the discussion of the economic basis of non-employment and potential solutions. The two-sector economy in India was described and analysed with the view to offering solutions towards general economic development in the nation, and towards diminishing the non-employment problem. Unlike the recommendations in the KCR and ARTEP Mission Reports, the proposed solutions were not educational in nature.

These solutions focussed upon economic development in a developing economy in terms of the problems of the non-industrialized sector of the economy, and the problems posed by the simultaneous existence of commercialized and non-commercialized sectors. There was a stress on the need for awareness of the difference between economic growth and economic development.

The basic problem to economic planning in India was identified as the lack of awareness that economic growth in a developed economy is distinct from economic development in an underdeveloped economy; that is, theories which operate in a developed economy are unsuitable in a developing one, such as India.

Government defects in economic planning were noted from the Appraisal of the Fifth Five Year Plan, and solutions were offered for coping with the problem of the traditional sector of the economy. The need to bring the two sectors of the economy closer to one another, until they merged at some stage, was stressed.

In the light of these analyses this thesis has investigated the problems with the view to suggesting a more relevant curriculum for development.

It was noted that several features of a 'dependent society' e.g. poverty, low income, low productivity etc., as outlined by Williamson are true in the current Indian social context. However there is no evidence of the theory of 'dependency' in operation. Rather it is the case that analysis of the situation (and recommended solutions in major public documents) have established the need for an indigenous pattern of development and innovative methods to achieve this. The theory of dependency is rendered inoperative with the adoption of these methods which are now in practice according to the evidence provided in Chapters VI and VII. Thus for example, in education, the suggested pattern of change is indigenous rather than western oriented and borrowed. The recommended medium of instruction is the mother-tongue; the vocationalization of education and work-experience for social and economic development is stressed; the inclusion of agriculture in the curriculum is a further important innovation in the same direction. Such an indigenous pattern of education, built to suit the socio-economic needs of the nation does not relate to the Williamson 'Dependent Society' pattern.

In addition, the solutions recommended by the ARIEP Mission Report and solutions proposed by Indian economists, give further evidence of a socialist direction to development. In education, equal opportunities have been firmly recommended; within the economic structure of Indian society, an equal distribution of improved economic returns in the two sectors of the economy is planned.



It may be concluded therefore, that current socio-economic development in India is socialist based and towards modernization, rather than being 'dependent' in pattern.

Such a conclusion raises the question whether India may then be considered within the group of 'underdeveloped socialist' nations e.g. China, (according to Williamson). However the final conclusion emerges from the discussion in this chapter, that such a proposition is also invalid. The Williamson taxonomy of world societies, needs refinement to include all patterns of development which indicate varying degrees of institutionalization, either Capitalist or Socialist, and other patterns of development too.

#### CHAPTER III.

In Chapter III, an exposition of the role of education in relation to socio-economic development in a society was presented: first, according to the views of Williamson and, secondly, through the views and recommendations of the Kothari Commission on education, for society in India.

Comments on the role of education in India, and proposals offered by the KCR, indicated a firm belief in the power of education as the instrument of change and social and economic development in the country. Science and technology were given central importance in the overcoming of problems of food shortage, industrialization, unemployment, through an Education for Productivity programme, which further highlighted work-experience and the vocationalization of education.

The dual nature of the changing educational system in India was noted. A western-based science and technology education was

recommended side by side with innovations in the traditional pattern of education, e.g. the introduction of work experience at all levels of education and vocationalization at the higher secondary stages. These recommendations were noted as socialist in nature.

Further an important recommendation in the KCR was the development of human resources. The KCR proposed that education should be reorganized around man-power needs. In regard to education and social development the Kothari Commission has again took a positive and optimistic approach. Innovative programmes were recommended to increase equality and national integration. Thus, the public school system was to be expanded: a programme of social and national service as an integral part of education at different stages was proposed: a recommendation for development of all modern languages at the school stage, and the enrichment of Hindi was offered, so that it can take its place as official language of the Union. It was suggested that the school must help in promoting national consciousness. A change in the structure of education was also suggested i.e. the 10+2+3 pattern of education.

The positive approach of the KCR in regard to education and socio-economic development was contrasted with those of Williamson. He was clearly pessimistic about the western model of education for development and advocated major changes in education for developing countries. In regard to this issue he is in agreement with the views of the Kothari Commission which advocates an indigenous base for Indian education. Williamson's skepticism was mainly in regard to the western model of education for developing countries, and over the difficulties

of linking of education with economic growth, that is, in matching manpower needs with the economic system in developing societies.

In conclusion, the position adopted by the KCR was that the role of education in economic and social growth and development, is a positive one, whereas Williamson has given evidence of skepticism on these issues.

#### CHAPTER IV.

In Chapter IV, the relevance of curriculum and connected issues were the main focus of attention. The discussion relates to relevance, equality and balance in education and development.

The theme of misalignment in supply and demand of man-power was therefore developed. Note was made of the failure of technical education in India in the past, which was introduced with a view to making education relevant to man-power needs in society. Further an important recommendation offered was the need to investigate job vacancies and needs in both rural and urban areas on a systematized basis.

In regard to curriculum and man-power needs, a change was advised from the western traditional 'white-collar' service education to one centred on a curriculum closer to that advocated by Gandhi in the Wardha Education Report in which a system of basic education was recommended for India. This approach stressed that local job skills lie at the centre of a local-based education, while literacy and numeracy patterned around this, so that manual work might receive its justifiable position in education. It was expected that the problem of non-employment for the educated would be tackled at the same time.

Numerous innovative measures were noted both in urban and rural areas, in the spheres of both formal and non-formal education. A

noteworthy recommendation in the KCR was the restriction of unplanned and uncontrolled expansion of general secondary and higher education, in order to avoid further educated unemployment; intensive efforts would be required to vocationalize secondary education and to develop professional education at the university stage; and to devise suitable machinery at both national and state levels to relate estimates of manpower needs effectively to the output of the educational system. It was further recommended as a matter of priority that manpower needs should form the basis of expansion of vocational education at both school and college level. Nation, State and District level needed to co-operate in making curriculum relevant to job needs in India. The ARTEP Mission findings agreed with this approach.

Effective teaching methods were stressed by the ARTEP Mission so that students could learn to use their initiative in their working lives. Occupational and educational surveys were conducted by this Mission, which disclosed emerging job opportunities and potential needs for vocational preparation.

In support of the experiments in the non-formal system of education in India, the ARTEP Mission Report commented that there was no need to adhere to the traditional concept of schooling, which required academic qualifications. Thus fourteen-year olds who were interested in agriculture, farming, cattle-breeding, bee-keeping, poultry and food processing, should be admitted to higher secondary schools which provide appropriate courses. Those interested in academic education should be provided with the means of obtaining required credits through correspondence.

Chapter IV included in it many of the innovative recommendations for education as given in both the KCR and the ARTEP Mission Report. The ARTEP Mission Team further suggested the forging of links between formal education and the world of work. Vocational subjects were to be offered by institutions in close collaboration with employers. The Team commended private efforts in progress as being an indication that the community had taken note of the irrelevance of education for societal needs, and had taken action against this deficiency.

Further recommendations were the inclusion of vocational guidance and employment information in the curriculum and the consideration of the teacher's position as being important for the curriculum.

Thus the ARTEP Mission discussed the relevance of curriculum to socio-economic needs, after detailed investigation and study of the various means of making the curriculum relevant to life in India. Comments and discussion were closely linked with the evidence and recommendations of the KCR. The issues which were highlighted, and which were of great significance, were man-power needs and the curriculum, which involved proposals for the vocationalization of the curriculum, and the introduction of agriculture, work-experience, vocational guidance and employment information.

These issues were discussed in relation to the three central themes of relevance in the curriculum; rural-urban imbalance in education; and equality-inequality, stressed in both the Kothari Commission and in Williamson's Education, Social Structure, and Development.

From this discussion it was noted that India is both aware of and concerned about these social and economic needs and is currently involved in a process of significant change, both in education and in

the social and economic spheres. The earlier traditional 'dependent', western model of curriculum has slowly given way to indigenous forms of education within which more equal opportunities for literacy and job skills exist, and work experience programmes, for example, help to break down the bias toward 'white collar' jobs.

Undoubtedly, these innovations are taking place at all levels of education, and educationists and administrators are fully aware of the 'dependent' pattern of education which existed. This is contrary to Williamson's assumption that developing societies are not alert enough or concerned about their 'dependent' pattern of socio-economic structures and education.

Further according to Williamson and the authors quoted by him, e.g. Tibor Mende, Balogh, Anderson, Foster, Gunnar Myrdal, Paulo Friere, the foreign western model of education is the cause of these problems. Like the Kothari Commission, their position is that an indigenous approach in education is lacking and that manpower needs have led to a stress on the importance of technical education, although its introduction in many of them has been a failure as in India. Instead, as Williamson has noted, a qualification-escalation ratchet exists, and the paradox is that, the more useless educational certificates become, the more is education and its expansion prized.

In regard to the rural-urban imbalance in education, Williamson made several significant points. This rural-urban imbalance he suggested is a well-known feature of the educational scene, particularly in poorer societies. Educational provision for rural areas is scarce while illiteracy and drop-out rates are high. They have fewer schools and fewer teachers. There is migration from village to town and there

is higher demand for education in urban areas, while rural areas remain educationally under-resourced. Williamson concluded with two important points which he felt would contribute to the development of education in rural areas; firstly, changes were imperative in the existing inegalitarian pattern of resource distribution and secondly, a change is needed in the conception of what it means to be educated.

In contrast to Williamson's comments, India has shown awareness of both these issues in its current policies. Finance provision for education has steadily increased, while the fifth Five Year Plan alone made significant recommendations in the area of non-formal education, which would affect mainly rural and less-privileged urban youth. India has also stressed a practical orientation and education is to be strongly work-oriented; the dichotomy between literary and manual work is to be totally abolished. A further example of change in educational thought is the importance given to nonformal education. It has been stressed in all areas of education - youth, adult, women's and girl's education, and at various age groups among children.

Thus far, educational reforms in India have been reviewed in the light of the views discussed on relevance, equality and rural-urban imbalance in education. The earlier period of curriculum development i.e. the imperial period of British Rule in India was covered in Chapter V, and later the nationalist period of educational reforms from 1937 to the period of the Kothari Commission 1964/1966, also in Chapter V. In a spirit of research Indian educationists contacted other societies and hence the USA and the USSR have strongly influenced innovations since 1947.

CHAPTER V.

Chapter V, in the main, focussed on the historical development of curriculum for Indian education, from the end of the eighteenth century to the third decade of the twentieth century. Then followed a review of the nationalist period when a change in the nature of educational thought was demonstrated in selected educational Commission Reports beginning with the Wardha Commission of 1937. The change was, in general terms from a capitalist to a socialist and more liberal pattern of thought, from a clearly dependent pattern of education to an indigenous system. These themes emerge from the Reports of 1937 on to the Kothari Commission of 1964/'66, and into the current period.

The subject matter of these Reports showed that educationists were beginning to stress national and socio-economic needs in education, i.e. the relevance of the curriculum to these needs, equality-inequality in education, and urban-rural imbalances as discussed by Williamson. However in contrast to the arguments of Williamson, the Indian government had addressed, via educational commissions, those innovations and their implementation which could lead to a removal of dependency and the commencement of economic growth.

This is not, however, the same as saying that Williamson's propositions were untrue. Chapter V demonstrated the historical dimensions of 'dependency'. It was noted in Chapter V, that in the eighteenth and nineteenth centuries India slowly fell into the position of an occupied and administered colony. By the 1850s Britain was an important imperial power involved in capitalist free trade. The kind of economic relation between the 'colony' i.e. India, and England, produced a particular local educational history, and educational policy was made



by England in the interest of the English capitalists, traders and missionaries.

The system was 'dependent' in nature since the reason for educating the people was to have lower cadre government servants at a lower cost, for administrative reasons. Dependency was also expressed by the transmission of a political ideology aimed at the preservation of Empire. The details of this transmission varied over time. For example the early phase of British education in India was guided by missionary effort. This then gave way to the Orientalist phase in education under Warren Hastings which stressed the importance of local traditions after which followed the Anglicist phase popularised by Macaulay, which stressed the idea of providing education in English and establishing an English ethos in education. The early nineteenth century was marked by the Orientalist - Anglicist controversy. The outcome was a western model of education for India.

The intellectuals and classical scholars produced in this early public school system were indifferent to science and technology. Instead Indians took up the legal profession and neglected studies and careers which might have ended Indian poverty by the development of a scientific agriculture and a basis for modern industry. Thus there grew up a class of unemployed intellectuals. Such a group provided an indication of the irrelevance of the curriculum to India's needs in the nineteenth century. Similarly Macaulay's "downward filtration " theory established the concept that education was for a tiny elite group - future civil servants - to whom Western values and concepts were imparted. These values, it was proposed, would eventually *filter down to the masses*. As Arthur Mahew has written this theory proved very

detrimental in developing a smooth system of education. This theory created a class of people who began to consider themselves to be aliens in their own country.

Later this filtration theory was discarded as ineffectual and futile. Between 1850 and 1860 the Wood's Despatch gave a two-tiered approach to education. The Anglicist policy continued and there was English for the elite at higher levels of education, but vernacular languages at the elementary level for most people. This two-tiered policy which also resulted in the neglect of primary education in rural areas helped to create a rural-urban imbalance in education.

Thus far then the account of educational progress in British India in the eighteenth, nineteenth and early twentieth centuries points to irrelevance in curriculum, inequality and imbalance in education, and a 'dependent' model having been imposed upon the country. The economic system in operation as given in this account also emerges as 'dependent' in pattern.

By the third decade of the twentieth century a reaction against this existing pattern of education began; the liberal non-elitist nature of all the recommendations in the educational reports which follow are indirectly indicative of the previous capitalist form of education.

Reaction in educational thought is evident in the nationalist Wardha Commission of 1937. The Wardha Education Commission proposals were aimed at a relevant, equal and balanced system of education. There was a focus on child welfare along with education and the innovations suggested were original and indigenous in design.

Whereas the system and model of education which evolved for British India in the eighteenth, nineteenth and early twentieth

centuries, was for the Indian elite, in striking contrast, the Wardha Commission proposed an educational system for the entire population.

Primary education and vernacular languages had received little or no attention in the previously existing systems of education. Rather, it was expected that Macaulay's 'downward filtration theory' would provide all the education necessary for the general population, while at the higher levels of education the medium of instruction was only English and when primary education developed, the two-tiered system provided English for the elite and vernacular languages for the masses. The Wardha Education Commission on the other hand proposed a system of primary education for all - rural and urban children alike to be delivered in the mother-tongue.

The earlier 'dependent' model of education had totally ignored Indian culture but the basic education which was proposed by the Wardha Commission stressed local history and culture. Science and technical subjects were excluded in the earlier system of education. As already noted, Indians were trained to be low level bureaucrats. On the other hand the system of basic education proposed by the Wardha Education Commission stressed local crafts, work-experience, and therefore included a technical element to education, in the expectation that students would find education to be relevant to their lives and environment. Whereas the 'dependent' system of education catered for the Indian elites, who were educated away from indigenous Indian culture, the basic education system was rooted in Indian life and culture.

The proposals of the Wardha Commissions are evidence that the focus was constantly kept on equality in education, relevance to

national and individual needs, and on rural education, all of which issues had been ignored by the earlier system.

In the same period 1936/'37, the ruling government report, the Abbott-Wood Report, gave evidence of enlightened thought in education and for the first time commented on both technical and general education as the need for India. Later in 1944, the Sargeant Commission Report touched on all aspects of post-war educational development. This Report is also evidence of a more liberal outlook in education - it stressed equality at all levels, while urban-rural imbalance, and relevance in the curriculum were investigated in a more enlightened spirit. It also accepted the concept of basic education. Unfortunately this enlightened educational report was looked upon with suspicion and ignored at the time.

Eight years later the first education commission of the national government in 1952-1953 - the Secondary Education Commission, or as popularly known, the Mudaliar Commission, provided a comprehensive Report on education, which was nationalist in spirit. It proposed that the ideals basic to secondary education should be patriotism, democracy and socio-economic progress. Its recommendations were that multipurpose subjects should be included in the curriculum along with general science and agriculture to develop a relevant educational system. At the secondary school level, an 'activity school' as part of the community, was recommended. It was to be a small community within a larger one. Secondary education was to be terminal in character so that students could enter life or higher education, according to choice. Relevance, equality and balance in education were the aims.

The period between 1956 and 1964, before the Kothari Commission, produced other relevant education commissions e.g. on Integration of Post-Basic and Multipurpose Schools 1957; Religious and Moral Education 1960; Emotional Integration 1961; Girls' Education 1964/1965 etc. All these topics of concern were incorporated in the Kothari Commission 1964/'66, the report which has been used as the basis of this thesis.

Chapter VI.

Chapter VI discussed several measures outlined for adoption by the Indian educational system, which might solve the problems posed by Williamson in regard to developing countries in the area of education and socio-economic development, i.e. the irrelevance of education to the employment market, the wide gulf which exists between the educated and less educated or illiterate, the escalation of qualifications and the emergence of educated unemployed; the scarcity of educational provision in rural areas which results in high drop-out rates and illiteracy.

In the Chapter, the current educational scene was described with accompanying statistics for the literacy-illiteracy position in the country and in the individual States. Statistics defining the educational situation of minority groups and the sexes, in both rural and urban areas; and the situation of the educated unemployed in the country were included.

On these issues, Williamson's contentions are that urban bias in education needs to be minimized and that strategies to reduce the inegalitarian distribution of resources need to be introduced without delay. Further he pointed to the inequalities maintained and legitimated through education. He noted the World Bank message that mass

participation in education is still an unachieved ideal. An elitist bias exists everywhere with urban upper-and-middle income groups being favoured against the poor.

However it is precisely these issues which have been addressed in India. The fifth Five Year Plan identified four areas, regarded as interdependent and interrelated:-

1. Equality of educational opportunity;
2. A closer link between education and development and the employment market;
3. Improvement in the standards of education;
4. Involving the academic community in social and economic development.

Educational policies in the form of solutions were proposed under the following eight programmes:-

1. Integrated child care services programme;
2. Universalization of elementary education;
3. 'Nehru Yuvak Kendras' (Youth Centres) a programme of non-formal education for the age-group 14-23 years;
4. Work-experience and vocationalization of secondary education,
5. Examination reform;
6. Centres of advanced study in Indian universities;
7. National staff college for Educational Planners and Administrators;
8. National Service Scheme.

The four identified problem areas cover all the issues commented upon by Williamson as being neglected in thought and practice in developing countries. The policy solutions recommended deal also with

Williamson's statements on the endemic problems of education in developing countries, i.e. that it is irrelevant to the employment market and educated graduates are not being assimilated by the economy; that the social attitudes of educated graduates are not conducive to manual work, thereby enlarging the distance between the privileged educated and the less privileged mass of the population.

It is notable that these identified problems and solutions were included in the Fifth Five Year Plan constructed for the years 1974-79, and this is an indication that these are recently debated issues, and are currently being implemented and practised. The earlier four Five Year Plans in India were also concerned to an extent with these same problems which the Fifth Five Year Plan sought to resolve. Further these themes were continued into the Sixth and Seventh Five-Year Plans. Although the data has been updated the analytic themes have remained constant.

The sixth Five-Year Plan, outlining the goals of education, stressed equality of opportunity in education, with the aim of improving the quality of life and society. It aimed to establish purposeful linkages between education, employment and development for the economic and social improvement of the community and to promote belief in the values of national integration and political development. It also sought to sensitize academic communities to the problems of poverty and illiteracy in the environment and to create respect for democracy and dignity of labour. Such goals are aimed at equality, relevance and balance in education.[1.]

The Seventh Five-Year Plan has aimed to reduce mass poverty. Malcolm Adisheshiah, the well known Indian economist, has stressed that

the Sixth Plan should have built its programme around that objective.[2.] The Approach Paper to the Seventh Five-Year Plan focussed on social justice, employment and poverty alleviation in its programme of policy making, which included increased productivity, especially of food and food grains, and the redistribution of assets.

Adisheshiah stated that in the field of education the Seventh Five-Year Plan should concentrate on *educational expenditures on universalizing primary education, providing adult literacy and continuing education to 110 million illiterate and neo-literate adults, and on science and technology.*[3.]

Adisheshiah also argued that secondary and higher secondary education, arts and science university and college education, should be consolidated and improved in quality, rather than be expanded. The delinking of jobs from degrees should become a reality.[4.]

Thus equality, irrelevance and balance remain ideals in the development of education.

The evidence from the reports and the Plans confirms that India has been aware of, debated those problems in education and worked towards solutions, which Williamson has considered to be neglected areas in education in developing countries. The KCR discussed above gives evidence of this fact as well, indicating that the previous 'dependent' model of education, of the years of early imperialism in India has succumbed to a transformation in educational thought, to innovations in proposals, to an indigenous concept of education, which should prove relevant to national socio-economic growth and development.



Currently, India cannot be correctly considered within the 'dependent' framework of society, as described by Williamson particularly in the area of education although in many ways the pattern of education is still akin to the traditional western model.

The process of making Indian education indigenous has been problematic, and a summary of main points is useful. Central to these changes has been the recommendations of the Fifth Five Year Plan to make provision for the vocationalization of secondary education. Work-experience in the curriculum has been planned for both elementary and secondary levels of education. The NCERT has completed a work-experience curriculum for the first ten years of school. By such means it is hoped to change the attitudes of the educated to manual work and to provide equal opportunities in education. It is also hoped to make secondary education terminal. Otherwise the fact that 91% of secondary leavers enter academic courses poses a problem to higher education. However there are practical difficulties over the vocationalization of education. The inaugural speech of the Union Minister of Education to the standing committee of CAGE, 13th June, 1973 indicates some of these problems:

*We have hardly any data on manpower needs or employment opportunities. We also do not know enough about the best forms of vocational education to be provided at this stage. There is hardly any organization at the district level where the programme will have to develop. There are no adequate agencies to look after the programme either at the State or at the national level.(5.)*

Since 1973 there have been efforts to investigate systematically local employment needs at the state, district and local level. The ARTEP

Mission for example conducted an investigation in its own right and began to sketch potential job needs.

Unfortunately, vocational preparation in preference to on-the-job training continues to be vastly more popular and the pressure on higher education continues as before. The multipurpose schools started in the mid-fifties, in line with the recommendations of the Mudaliar Commission had only limited success. Unfortunately also, it is true that work-experience and vocationalization do not have a clear allocation of funds in the Plans made by the State Governments. In the Central Government Sector, however, Rupees one hundred million were made available for this reform, and one thousand secondary schools were covered by the programme during 1974-1976. It is clear that to succeed, vocational education needs proper articulation, including financial articulation, with the rest of the educational system. Equally important, there must exist a sufficient number of job opportunities for those who complete such courses.

A second major area in the Indian indigenous reform of education has been the provision of universal elementary education. In 1950, Article 45 of the Indian Constitution provided for free and compulsory education for all children up to the age of fourteen years. This ideal has not yet been achieved. Progress in this field is slow despite efforts in the Fifth Five Year Plan to ensure that the major thrust in elementary education needs, in the most backward areas and in the most under-privileged sections of the population, are satisfied. However, important extra innovative programmes in this area have been the Part-Time Facilities programme and National Programme of Minimum Needs. It is hoped that these measures will soften the present rigidities of the

system and make it more functional and open. These programmes also mark a change to an educational system that is more relevant to existing needs. The National Programme of Minimum Needs is a package programme which includes elementary education. The importance given to elementary education is also further reflected in the financial provision of the Plan, which is aimed at improving equal opportunities in education.

Further towards this end, the Nehru Yuvak Kendras were established in nonformal education for youth between the ages fourteen years to twenty-three years since only seven to ten percent of this age group were in formal education. This was a Central Government Sector scheme, and fully financed and implemented by the government of India. Sixty million rupees were allocated for it and its functional literacy programmes. It was hoped that by the end of the Sixth Five Year Plan the Constitutional obligation would have been fulfilled.

These measures at the national level, are hopefully breaking down barriers between the privileged educated and the uneducated poor. However these Plans must be organized at both State and Central Government level as well, and the relevant details to suit local needs - district, regional, and institutional - need careful planning before implementation.

The third major area of indigenous reform has been efforts to improve the quality of education. These measures include examination reform, the creation of centres of Advanced Study in Indian Universities and the establishment of a National Staff College for Educational Planners and Administrators. These measures have been

aimed also at making education relevant to social and economic development of the nation.

The fourth major area of reform has been the decision that, via the Fifth Five Year Plan, formal and nonformal education should be correlated and integrated, since in a country like India with enormous educational needs, formal education through full-time institutional education only, cannot be sufficient for the achievement of major educational objectives.

The nonformal system requires flexibilities and adaptation to real learning needs. Nonformal ways of education need to be developed for all categories of learning and in all levels of education for children, youth and adults from elementary to higher education. Three areas are emphasized - non-school going children in the age-group six to fourteen, youth between fourteen and twenty-three years, and functional literacy for adults linked with development schemes. Specific features and details require to be worked out separately in each state, due to socio-economic and socio-cultural differences between them, but some elements could and should be common.

The CABE - Central Advisory Board of Education - recommended that the exclusive emphasis on the formal system of education should give way to a large element of non-formal education which should be introduced within the system. Multiple entry and part-time education must be adopted. At the secondary and university stages, part-time and correspondence courses should be developed and self-study programmes encouraged.

All State Plans should include programmes of non-formal education as an integral part of educational provision, and suitable machinery

should be set up in each State to formulate, devise and implement programmes of non-formal education including functional curricula, integrated with the formal system.

A further important feature of non-formal education is adult education which is significant for the success of the programme of universalizing elementary education and in ensuring the intelligent participation of the people in all programmes of national development. Therefore adult education and functional literacy programmes are being developed as a priority. Overall, the development of a nonformal system of education has been identified as a solution to the existing problems in education in the areas of relevance, equality and balance.

#### CHAPTER VII.

Chapter VII continued the theme of contemporary reform and dealt with current innovations and practices and in particular experimental innovations which yielded improvements. The NCERT identified innovations in different parts of the country, at various levels and in a wide range of fields. Among the experimental innovations were non-formal rural and urban education for the weaker sections of society; science at every grade and work-experience in the formal system of education; national integration through the school curriculum, inter-state camps and through introduction of the three-language formula; the Free Progress system and the Ungraded School System as innovations in the structure of education; innovations in the content of education include, Population Education integrated into many subject areas, Social Studies for the primary classes, and new educational technology in Maths, Science, and Language classes.

The NCERT reports are the result of consultations with the Directors of Education in the States, Vice Chancellors of the Universities and Heads of a large number of educational institutions and centres. These innovations in the different areas of education indicate the resolve of Indian educationists to transform the educational system to one that is relevant, equal and balanced and to one that is indigenous rather than 'dependent'.

The reforms of content, structure, method and evaluation are a break with the traditional past and western model of education. The approach is suited to local needs and is indigenous in character. According to this system importance is given to education and community development, including the socio-economic and socio-cultural development of the country, and its overall regenerative influence on the prevailing educational system.

A variety of agencies are involved. For example the UNESCO Planning Mission gave significant aid in the areas of science and maths. UNESCO case studies have been reviewed, e.g. the open university system. In addition to efforts at the government planning level, effective voluntary efforts also exist in the Vigyan Shiksha Kendra or Centre for Science Education, and in the Vikram Sarabhai Community Centre for Science and Technology.

What emerges from these educational innovations is that India is keenly aware of what the new concept of education should be. The innovations in progress are solutions to problems of equality of educational opportunity, of establishing closer link between education and the employment market for development, of improving the quality of

education and of involving the academic community in social and economic development as recommended in the Kothari Commission.

These innovations currently practised in India also reflect ways of meeting the educational needs of other developing countries, as discussed by Williamson. Thus for example, all community efforts and the nonformal system of education are aimed at making the educational pattern relevant to the socio-economic needs of the country. Nonformal education is geared towards the universalization of education and therefore satisfies the need for equality in educational opportunity, besides easing the problem of increasing student numbers in formal higher education. Weaker sections of society, urban-slum and backward rural areas are constantly in the minds of educational planners and administrators, thus providing for a greater rural-urban balance in educational provision .

The introduction of new subjects into the curriculum, work-experience classes, the stress on science and maths, and the inclusion of the concept of national integration at school level are transforming the traditional 'dependent' pattern of education into one that is more relevant and indigenous, in which the life needs and aspirations of the people are kept in focus.

The New Education Policy.

The New Education Policy or NEP 1986, will be implemented with increased financial provision to prepare the individuals for the twenty-first century. The Prime Minister Rajiv Gandhi quite significantly changed the name of the Ministry of Education to the Ministry of Human Resource Development, and 6% of the national income is to be allocated for this purpose.

An important feature of the NEP is the new structure of school and college education, the 10+2+3 pattern. It is to form the structure within which the new educational reforms are to be implemented. It is expected to give uniformity to the educational pattern throughout the nation.

Vocationalization at the +2 stage is expected to bear fruitful results. Students will be in a position to enter the world of work if they choose to do so, while the pressure on University and higher education courses will be minimized.

Subjects at the school level will include the common core of, history of India's freedom movement, constitutional obligations, and maths and science for all students. Work experience or SUPW (Socially Useful Productive Work) and values in education for all students is stressed. Sports and physical education and the role of youth in national and social development through the NSS (National Social Service) and NCC (National Cadet Core) are likewise emphasized.

Another novel feature of the NEP is the the Navodaya Vidyalayas- new pace-setting schools to be set up in every district, for the benefit of merit students of rural areas mainly. They are to be free and residential in nature. They will be expected to follow government educational policies firmly and the three-language formula of the 1966 education policy.

Equality will be stressed throughout, and therefore the position of women, and of scheduled castes and tribes will be given special attention.

Non-formal education and elementary education will also receive special attention Operation black-board is expected to improve all



elementary schools particularly in rural areas. Early childhood care and attention, ECCE, programmes are being developed.

Teacher education and in-service training is to be strengthened through DIET- District Institutes of Education and Training, and the position of teachers will be improved through better emoluments.

The planning and management of education is also expected to be improved. Professional educationists rather than politicians and administrators will be made responsible for education in the NEP.

Thus the educational policies as given in the KCR have been reaffirmed and given practical stress. The NEP 1986 will revitalize education in the present and prepare individuals for the changes of the future.

#### CONCLUSIONS.

In view of these emerging trends in education in India and their implications for socio-economic development in the country, the following conclusions may be drawn:-

1. The national government has a positive approach to education and socio-economic development in general, in contrast to Williamson in Education, Social Structure and Development where he has shown skepticism on the same issues, i.e. in relation to relevance, manpower needs and education; and a western model of education for a developing nation and in relation to the areas of equality and balance in education.

In contrast, the Kothari Commission went further and even suggested the possibility of reorganizing the educational system around the 'education and manpower needs' to alleviate the non-employment problem and to change social attitudes to manual work and jobs which

are other than white-collar. The NEP 1986 has reemphasized these recommendations and kept the nonemployment problem in focus, when introducing vocationalization at the secondary level of education.

2. The importance of nonformal education cannot be stressed enough. It is organized to develop relevance, equality and balance. The pattern advocated in the Fifth Five Year Plan requires to be fully implemented in the country and with all immediacy. The package programmes offered would provide education together with health and functional literacy for all from pre-school to adult level. Transfer from the nonformal to the formal system of education is fully available to students of merit. In other words, the linkage between formal and nonformal education is being made secure and complete. This has again been emphasized by the NEP 1986.

3. In the educational area, the nonformal system of education and the linkage of the formal and nonformal systems perhaps provides the closest to a satisfactory approach and solution to the current problems of the two sector economy. It is however neither advisable nor feasible to destroy in totality, the model of education already in existence. The intelligentsia among the people must not be thwarted but rather encouraged to higher achievements, e.g. towards effort to unify science and spirituality, an ideal posed in Indian education. This could be a major contribution that India could make to world culture. The NEP 1986 has introduced the Navodaya Vidyalayas, pace-setting institutions, for the benefit of merit students. These institutions, one in every district, will be residential and free. They are built with the aim of encouraging high achievement in education. Indian nationals must compete and achieve in an international arena. Therefore, the study of foreign

languages and culture, together with the knowledge of science is also important and must be retained in the educational system.

The changes as already discussed are of immediate importance, e.g. that indigenous languages must occupy a central place in the curriculum, that the study of maths and science and agriculture must be stressed and that work-experience and vocational subjects are essential, if relevance of education to socio-economic needs is to be achieved. Excellence and quality in education must be retained and maximized. The NEP 1986 has reemphasized these issues and particularly the Language policy, i.e. the three-language formula as given in the KCR.

4. Whereas the social structure gives some evidence of a 'dependent' society according to Williamson, that is, poverty, low income, etc., the system of education since 1937 has been changing from a 'dependent' one which suited the needs of an imperialist government, to an independent one with indigenous characteristics and more aligned with the needs of the people and the nation.

In particular, India has increased its economic productivity. Low productivity now only applies to the non-industrial and traditional sectors of the economy. Mortality rates are not as high as they used to be, because of increased medical aid and health facilities. Urban squalor does persist and so does economic dependence, that is, one section of society is economically dependent on another. However, in regard to illiteracy and political corruption, the remaining features of Williamson's 'dependent' economy, it must be noted that illiteracy is being tackled on a wide scale though it continues as a major problem.

Political corruption is a feature of both worlds, 'dependent' and developed.

The 'dependency' theory once in operation in India was true only during the imperial phase. Economic backwardness is being tackled with a many-pronged attack. Recommendations in education are intended to help overcome this problem in every area. The national government has shown itself keenly aware of distortions in the economic and social system, which came as a result of overseas expansion, and capitalist enterprise. However the expatriate economic interests, mentioned by Williamson, are not significant in the current economic system in India. There is no expatriate competition with indigenous entrepreneurs. Rather the problem of the existing society is an indigenous one, of the two-sector economy, each operating independent of the other. There is a need for contact and co-operation between them, so that the entire economy in the nation may develop and progress.

5. In the area of education, the trend is toward an indigenous and original system, relevant to socio-economic development and to the needs and aspirations of the people. Distortions which made education in India 'dependent', have been analysed and are being tackled. The conclusion drawn is that the dependency theory no longer operates in the field of education in India. The recommendations in the Kothari Commission, (still the most relevant document in education related to the present socio-economic and educational scene in India,) are socialist in intent, and in accord with the needs of the people, encourage modernization in the country. The NEP 1986 has reemphasized the educational ideals of the KCR, for implementation.

The conclusions drawn in regard to the 'dependency' theory in relation to a developing society - India - find support in the statements, comments and quotations in "Educational dependency a critique". The theory is relevant to the imperialist period but not to the post-imperial one, when innovations have been taking place in socio-economic patterns of development. It is a theory of colonialism, and is *far less satisfactory in explaining post-colonial and non-colonial developments. Dependency theory has been overtaken by events and needs serious revision.*[6.]

*Again, dependency theory has not survived transplant to other areas and later time periods. As one Marxist critic argued, Lenin's theory of imperialism applied to one specific time phase in the evaluation of capitalism and this period has clearly passed.*[7.]

A major criticism of both Dependency theory and Modernization theory is that they *have universal applicability and cannot easily accommodate variations. (Dependency theory) assumes that there is only one inevitable path to underdevelopment in the way that modernizers assumed one universal trajectory of development....*[8.]

Investigations within the Dependency theory framework, in education, have tended to concentrate on descriptions of dependence, rather than attempting to explain variations, or even consequences of dependence.[9.] As a variation of the usual stress on descriptions of dependency, this thesis has explained the circumstances in which the British educational pattern was introduced into India. It has given in brief, an historical perspective of Indian education from the ancient Hindu and Islamic systems which operated in the country, to the introduction of the British educational system, beginning in the

eighteenth century. The Hindu and Islamic educational systems needed revitalization at the time that British education was introduced. Thus it was adopted slowly, and then wholeheartedly, although the ancient indigenous systems continued to operate side by side, developed, transformed in pattern, and finally offered competition to the newly adopted British educational system. The consequence was that the British educational pattern was adopted, and in current times, it has been adapted to national and local needs.

Further the educational dependency theorists attempted to explore education in terms of creating and maintaining social divisions and cultural alienation in Third World societies. In a similar way the investigation of the Indian social scene and educational pattern, in this thesis, has shown that social divisions were already deeply embedded in society, e.g. the social divisions of the Hindu hierarchical caste system. The British educational system adopted in the nineteenth century added to and strengthened such divisions e.g. in the two-tier educational pattern, which gave British education in the English language to urban high-school and college graduates, while leaving the primary school children of rural areas to indigenous patterns of education delivered in the mother-tongue, in the hope that some form of urban education would filter down to the masses. The consequence was cultural alienation of the English-speaking urban graduates, besides the creation of fresh social divisions based on educational patterns. This was true in the period of imperialism in India. This thesis has however, investigated the later changes towards relevance, equality and balance in education, in current times which indicates that the dependent educational pattern did not survive the imperialist period.

Dependency theorists attempted to use mechanisms and models of economic dependency theory to explain educational transfer from the metropolis to the periphery. The criticism against such an attempt is that,

*educational institutions and cultural values are very different from financial capital and technology. The mechanisms of transfer of the latter do not necessarily apply to the former.[10.]*

Yet writings on educational dependency have followed the patterns of economic dependency theory in relation to transfer of educational systems. However, although educational transfers may be accurately described, their outcomes and influence on attitudes in a society are not so easily predictable.

*Analyses of educational transfers should give more attention to social, political and cultural structures into which foreign values and institutions are introduced. The interaction between them should be studied carefully from a comparative perspective.[11.]*

This has been the approach adopted throughout this thesis, which has stressed the socio-economic and political aspects of Indian society in the historic past and the current present.

There is need for investigation of the political processes by which foreign practices in education are adopted within less developed countries as has been investigated in this thesis in Chapter V. It is not only important to establish how dependency is harmful, but more important to analyse the degree to which it operates in an underdeveloped society and the circumstances in which it does so. The investigation in this thesis has tried to adopt such an approach in the present case study on India. It is an investigation of the extent to

which dependency operated in Indian society ; in which period of time in history, and the circumstances in which it did so.

More studies of educational systems operating in post-colonial, non-Marxist societies, similar to the present case study on India, are needed. Variations in the circumstances of transfer of educational patterns, and their consequences in society, need identifying. Such studies will facilitate the creation of a more refined framework for comparative study of educational systems.

Educational transfers still continue in current times, as described in the case study on India, but in a changed new spirit of friendship and understanding, as opposed to the earlier aim of imperialism. Countries such as India have forced a degree of mutual respect, trust and acceptance between nations, so that total control of the developing society is no longer the aim of the donor country, but rather, some foreign influence remains present in the process of national development.

The above dependency theory statements, and framework for analyses of educational systems, were attempts to find alternatives to certain types of modernization explanation. There were two kinds of objections to the Modernization model. First, it did not appear to work. Less developed countries did not seem to develop along the lines of prediction made by Modernization theory. Second, it assumed that the less developed country would aim at an idealized version of society as existed in the mother-country.[12.]

There exist some weaknesses in Dependency theory also, as noted thus far, which however, do not necessitate a return to Modernization theory. A new analytical framework is called for, but the issues



addressed by dependency theorists are still important.

*Dependency is not dead*, [13], even though some of the theoretical descriptions of it have been discredited.

6. When recommendations of the Kothari Commission and the Fifth Five Year Plan are implemented widely and fully, the Indian educational system will be closer to relevance so far as socio-economic development is concerned. The NEP 1986 has reemphasized the concerns of education as given in the KCR, for implementation immediately. It is significant that India - despite its low GNP, and its colonial experience - has achieved a relatively high degree of independence in some aspects of her educational system, including scientific research.

7. The three issues discussed by Williamson- equality/inequality, relevance/irrelevance, and balance/imbalance in education- were kept fully in focus throughout discussions in the Kothari Commission. This contradicted the assertion by Williamson that Third World countries are not sufficiently aware of these issues. He was unaware that evidence in India pointed to the fact that the national government was aware, has recommended strategies to find solutions, and that these solutions were in the process of being implemented.

8. In view of the situation which has emerged from the present investigation that India cannot be properly classed within a 'dependent society' and that the dependency theory does not operate within its society, and particularly so in the educational area, it follows that the Williamson taxonomy of world societies emerges as inadequate as a model of comparative study.

In regard to India,

*...there are less developed countries such as India which have used almost entirely local capital to achieve industrial development. India is less dependent than Denmark or Belgium or even Canada in economic terms even though India would usually be considered a peripheral country.[14.]*

The Williamson taxonomy of societies needs adjustment and refinement in order to include successfully the Indian educational system, the various world societies and educational systems which exist. Williamson conceded that the various capitalist and socialist states which exist, practice these ideologies in varying degrees of strength and weakness.

Williamson classified and described developing societies as 'dependent society' and 'dependent socialist society', when in fact, the investigation here has shown that a developing society may follow a unique indigenous pattern of progress, as post-colonial and non-colonial societies might and will do.

The conclusion here is that any classificatory model of societies based on the dependency theory will find itself in difficulty, since the dependency theory operates only within a particular social-economic-political framework, that of capitalist imperialism.

9. With reference to relevance of education to socio-economic needs in India, the KCR's four identified problem areas are restated: shortage of food; non-employment, particularly educated unemployment; need for social and national integration and political development. This investigation has shown that these issues have been analysed clearly and carefully by various commissions, e.g. the Kothari Commission Report, the I.L.O. - Mission for Employment Promotion, the Fifth Five

Year Plan, the NCERT, the research institute which initiates educational innovation and change in India, at a national level and in the NEP 1986. The four problem issues are currently being investigated further and various programmes are in the implementation stage. In order to achieve success the organization of finance on a larger and wider scale is needed, so that these proposals are universally implemented. The Five Year Plans have already made generous allocations for various areas in education. The NEP 1986 has been promised 6% of India's national income with the next Five Year Plan. The Prime Minister Rajiv Gandhi made himself responsible for this financial provision for education.

It is expected that the universal implementation of the recommendations discussed and analysed in this study will create a system of education which is relevant to the socio-economic needs of India.

The discussions have clarified a number of principles. The Education Minister Nural Hassan summarizes them well:

*...deep faith in education as an important instrument of social change ... is found in all these different groups.....Many fundamental questions have been raised and worthwhile suggestions made for experimentation. For instance, the very basis of the formal system of education we have adopted is often challenged and there is a growing interest everywhere in all proposals of radical reconstruction. There is also an increasing interest in programmes of nonformal education or vocationalization. The linking of university degrees with job qualifications has also been challenged and there is a rekindling of interest in all alternatives such as*

*the scheme of basic education propounded by Mahatma Gandhi or the proposal for the introduction of work-experience made by the Education Commission. The very fact that such ferment in thinking has been generated is evidence of some basic underlying vitality within the system;....This healthy reaction and academic ferment make one feel that the time is ripe for designing a new strategy of educational development and that there are good chances of its successful implementation.[15.]*

Chapter VIII. Footnotes.

1. Government of India, Planning Commission, Sixth Five Year Plan, 1980-1985. p.352.
2. Adisheshiah, Malcolm, Some Thoughts on the Seventh Five Year Plan. 1985-1890. p.2.
3. Op. cit. p.11.
4. Ibid. p.11.
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7. Ibid. p.36.
8. Op. cit. p.39.
9. Ibid. p.39.
- 10.Op. cit. p.37.
- 11.Op. cit. p.39.
- 12.Ibid. p.39.
- 13.Op. cit. p.36.
- 14.Op. cit. p.32.
- 15.Hassan, Nurul, "Address to the thirty-seventh session of the CABE- central advisory board of education." Nov. 1974. pp.33,34.

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