بسم الله الرحمن الرحيم

IN THE NAME OF

ALLAH

THE MOST BENEFICENT

THE MOST MERCIFUL

And He is alone the Helper

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Dedicated to the Defenders of Pakistan

DEVELOPMENT OF A STRATEGY FOR RESTRUCTURING SECONDARY EDUCATION IN THE LIGHT OF POLICY INITIATIVES OF GOVERNMENT IN N.W.F.P.

BY

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INSTITUTE OF EDUCATION AND RESEARCH
UNIVERSITY OF PESHAWAR.
JUNE, 1996

DEVELOPMENT OF A STRATEGY FOR RESTRUCTURING SECONDARY EDUCATION IN THE LIGHT OF POLICY INITIATIVES OF GOVERNMENT IN NWFP

A Dissertation submitted to the
University of Peshawar in Partial fulfillment of the
Requirements for the Degree of Doctor of Philosophy in Education

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It is recommended that the dissertation prepared by Major Muhammad Younis, AEC, entitled 'Development of a strategy for restructuring secondary education in the light of policy initiatives of government in NWFP' be accepted as fulfilling this part of the requirement for the degree of Doctor of Philosophy in Education

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1996

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"DEVELOPMENT OF A STRATEGY FOR RESTRUCTURING SECONDARY EDUCATION IN THE LIGHT OF POLICY INITIATIVES OF GOVERNMENT IN NWFP."

ABSTRACT

Background

A dynamic system of education is always responsive to the ideological as well as evergrowing societal needs. Secondary education is one of the most crucial stages of education in Pakistan because it serves as a terminal stage for a sizeable section of our student population. It should, therefore, produce high school graduates with sound character and marketable skills so that they are easily absorbed into the world of work, as productive citizens.

The need for high school reform has widely been felt by the public opinion and acknowledged by various policy documents, for the last four decades. It has also been realized that the system needs complete overhaul at the level of basic structure due to widespread criticism of its irrelevant goals, inappropriate methods, inefficient use of human and financial resources and inco-ordination amongst these. Resultantly, despite our professions to the contrary, we are mainly producing students for entry into higher education. In view of the economic realities at the national level and the trends in secondary education at international level, it is imperative to evolve a strategy to restructure our secondary education.

Statement of the problem

This study, therefore, aimed at evolving a suitable strategy for restructuring

secondary education, in the light of policy initiatives of the government in N.W.F.P.

Method

In order to identify and appreciate the problems of secondary education in Pakistan, a multifaceted approach for data collection and data analysis was adopted, that included:

1. Review of the historical evolution of secondary education from its inception in the British India to the current times.
2. Review of contemporary secondary educational perspective in a few representative nations of the West and the East.
3. Analysis of the educational policies and development plans and growth of secondary education in Pakistan.
4. Collection and tabulation of the opinions of the educators at various levels about the state of art in secondary education in the N.W.F.P.
5. Collection and analysis of data about existing facilities and financial allocations in secondary education in the N.W.F.P.
6. Analysis of the results of secondary education examinations of the Board of Intermediate and Secondary Education, Peshawar.

Results

Main findings of the study were as follow:-

1. Absence of adequate opportunities for vocational/technical subjects and lack of

diversification compatible with societal needs and individual aptitudes and interests, rendering thereby the curriculum irrelevant and Humanities oriented.

2. Burning issues of secondary education are lack of education and work interface, ambiguity of goals, outmoded examination system, inadequacy of organizational patterns and funding and inequitous educational access to facilities, ineffective inservice teacher training, absence of guidance services, lack of research and development activities at the Directorate level, shortage of qualified teachers for science, vocational and technical education and inability of government schools to bear the student input pressure.

3. Complicated and criss-cross administrative structure of education in NWFP, with no clear-cut domains of primary, secondary and college education Directorates.

4. Problem areas in the implementation of educational policies on diversification of secondary education are lack of equipment and machinery, non-willingness of students to opt for technical subjects, lack of infrastructure, legislation, proper service structure of technical/vocational teachers, lack of clear policy about examinations in these subjects, that is resulting in a visible regression to general schooling.

5. No systematic need assessment of the job market, rudimentary Educational Management Information System, lack of accountability, ineffective follow up and supervision activities and ineffective coordination among key departments responsible for various facets of secondary education in NWFP.

Recommendations

Based on the findings obtained, it is recommended that secondary school education be restructured along the following lines:

1. The goals of secondary education and methods to attain them in terms of curricula and organizational structure be explicitly laid down. One of the main objectives of secondary education should be to provide diversified course offerings according to aptitudes, interests and abilities of those students who do not intend to continue their schooling beyond matriculation. Moreover, it should be tailored according to the manpower needs, as identified through need assessment surveys. This information as obtained be disseminated to parents and students through a liaison officer.

2. Historically, our system of education has had three components, viz, ideological education, character development and vocational training. This provides the best model for restructuring the current system. Contemporaneously, three models of secondary education are in vogue in most of the developed countries of the world, viz, the school model, the dual model and mixed model. The school model seems to be most appropriate model, in light of peculiar conditions in Pakistan that provides a wide range of general, vocational and technical courses at the secondary level. Besides science and humanities, a third stream, as vocational/ technical, be introduced.

3. In order to ensure better coordination among agencies/departments responsible for various aspects of education, a co-ordination council comprising of heads of these

agencies be constituted.

4. As vocational/technical education is an expensive enterprise, it be financed jointly by Department of Industries, Labour, Manpower, and Education. The private sector be involved by provision of various incentives. The Frontier Education Foundation can also play a vital role in this respect.

5. The present administrative set up of secondary education needs restructuring in order to meet the demands of vocational/technical education. This requires a specialist as Deputy Education Secretary, a specialist as educational planner at the provincial secretariat level, specialists as Deputy Director (Vocational/Technical education) at the Directorate of secondary education level, and as deputy divisional director and deputy district education officer at the division and district levels respectively.

6. Three tier system of education, i.e., Primary (classes I to VIII), Secondary (classes IX to XII) and Tertiary (class XIII onwards) be introduced and all existing high schools be converted to higher secondary schools. In this way government can save Rs 453 million, by shifting all the intermediate students to higher secondary schools while taking into account the career interests of subject specialist.

7. All the divergent systems of secondary education including "*Madrassas*" and Public Schools be amalgamated into a unified system under the umbrella of Government. Consequently, more financial resources will be needed that can be met if four percent of GNP is allocated to education.

8. In order to ensure diversification of secondary education, a composite system of Guidance and Counselling services be introduced and second shift be introduced in all Government schools in order to absorb the growing student input from Primary education.

CHAPTER I

INTRODUCTION

Twentieth century technological civilization has taught us that the strength of a nation depends directly on the fullest development of its human resources. The real challenge of the modern age is to promote those conditions which foster the development of each personality to the fullest realization of inborn capabilities (Mario Fantini, 1965, P.29). The schools are expected to prepare the youth to assume their place in society by teaching them useful skills, requisite knowledge, appropriate ways of thinking and accepted ways of making judgements. (C. Benjamin Cox, 1975, p. 27) Taking a wider view of secondary education it becomes almost axiomatic that the curriculum should be differentiated according to the abilities as well as according to the interest and aims of pupils. (Frank M.Earle, 1945, P.94).

General education and special interest education are two inter-related facets of good programme of high school education. The role of general education is to promote a programme for the purpose of developing the common values, understanding and skills needed by all students for a useful life. Special interest education is for the purpose of meeting the specialized needs, problems and interests of students. (Harold Alberty 1953, p. 200). The artificial distinction between academic, vocational and technical education had caused much damage to the development of a balanced education system. There is no reason to believe that technical/vocational education does not require training of the human personality and higher mental faculties, or that academic education may be

watered down in apprenticeship programmes for uneducated craftsmen if elements of vocational and technical education are combined with it. On the contrary both the academic and vocational programmes reinforce each other and should be reckoned as essential ingredients of the basic curriculum. The objective conditions of the modern times necessitated the elimination of this dichotomy (W. M. Zaki, 1975, p. 106). Education has to be academic, scientific, technological and practical all at the same time. In recognition of this necessity the Education Policy (1992) envisages a major shift from purposeless general education to a more purposeful, scientific and Agro-technical education.

The existing education system in Pakistan is rigidly structured. It does not facilitate movement of the students horizontally and vertically between various programmes, levels or institutions. Lack of flexibility in the educational system is the cause of the present high increase in dropouts, repeaters and failures at the secondary level. An educational system which does not provide for mobility to accommodate varying aptitudes and interests can hardly be inspiring and motivating. At the secondary level facilities are woefully inadequate to accommodate children coming from the elementary stage. The result is unmanageably large classes and poor academic syllabi. Whatever resources became available to education are utilized in meeting the demand for additional places. Improvements in the qualitative aspects of secondary education requires diversification and vocationalization of the courses so that students may be prepared for employment in agriculture, industry and business. This specialization involves much higher investment than does general education and thus remains unfulfilled. (W. M.

Zaki, 1975, p. 101).

Education policies and programmes are intimately related with the national goals of social, economic and cultural transformation. The education system itself must be in a constant state of review and change, if it to react positively to the changing situation. Secondary education has an important role in accelerating the pace of our development, as it is to provide second line skilled workers for our social and economic sectors. Secondary education must, as consistently recognized in almost all education policies, meet the needs and aspirations of the people, simultaneously taking into consideration the rapid rate of scientific, technological, economic and social change occurring elsewhere in the world. Today, more than ever before, general education at the secondary level should be replaced by a more meaningful, diversified and productive education responsive to the societal needs. We need well trained, competent and productive workers in a diversity of fields.

Diversification of secondary education curriculum ensures greater relevance to the world of work. Vocationalization of secondary education would thus lead to a better and balanced preparation for ever new tasks anticipated in a changing and complex world. Secondary education, therefore, has to be so organized that productivity of students increases by establishing strong links between schools and the world of work, factories/farms/community projects etc. It is also well known that secondary education is actually a complete terminal stage for majority of pupils. Again there is acute imbalance between supply and demand of the employment opportunities. Hence it is of paramount importance that persons completing secondary education should have acquired

skills enabling them to join a local trade or become self-employed.

The major structural failing of Pakistani educational system is that no creditable educational system was ever created. (Abdus-Salam, 1969, p.1) There is an acute shortage of trained teachers, science laboratories, workshops, and other related facilities. The curriculum has little relevance to the present day needs. The textbooks are sub-standard, and finally evaluation system lacks credibility. Hence there is a need to review the existing situation and evolve a strategy for restructuring secondary education.

Statement of the problem

The problem before this study is to examine the nature of development of secondary education in the light of policy initiatives of the government in-order to evolve a strategy for its restructuring.

Significance of the Study

The study renders the following results:

a. The study determines the nature of strengths and weaknesses in the prevailing system of secondary education.

b. It provides guidelines for formulating a better policy by the government for diversification and vacationalization of secondary education.

c. It provides rationale for the introduction of further innovation in

view of the emerging demands of the society.

d. It provides a basis for the introduction of vocational guidance in the secondary schools.

e. In the light of this analysis a more relevant curricula may be developed for scientific, technical and vocational education at the secondary level.

f. The study argues for the promotion of science education at the secondary level.

g. The study provides useful reference for future research work in the field of secondary education.

Key questions

This study revolves around some of the following key questions:-

a. What are the main features of the official policy of the government regarding the development of secondary education?

b. what is the organizational structure of secondary education?

c. What innovations have been introduced by the government for enhancing the output of secondary education?

d. How adequate is the financial allocation of the government towards the implementation of National Education Policy?

e. Are the present course offerings of secondary level relevant to the socio-economic needs of the society?

f. How adequately the teacher training programmes meet the

requirements of the proposed diversified courses at the secondary level?

g. What measures have been taken for the improvement of science education at the secondary level?

h. What are the main occupational preferences of the students at the secondary level?

i. What model should be adopted for restructuring secondary education in N.W.F.P?

Objectives of the study

The following objectives were set for the study:-

a. To analyze the existing structure of secondary education.

b. To know the manner in which the policy of the government in developing secondary education is being followed.

c. To suggest strategy for restructuring secondary education in future.

Delimitations of the Problem

The study has been delimited to the following aspects:-

a. Diversification and vocationalization of secondary education in N.W.F.P.

b. Development of science education at secondary level in N.W.F.P.

c. IX and X classes.

d. Government high schools (F.G. schools, private schools & Cadet Colleges etc. are not included in this study).

e. The period of the study is the last decade, i.e., since the introduction of national Education Policy of 1979.

Methodology

The study has been carried out in the following manner:

1. Survey of the relevant literature on some models of secondary education.
2. Study of the provisions of the National Education Policies, various reports, and recommendations of various commissions regarding secondary education.
3. Field work and analysis of the output of secondary education in its different streams and its relevance to the world of work in NWFP.
4. Survey of some of the institution involved in imparting specialist education at the secondary level.
5. Collection of data on the following aspects of secondary education in NWFP.
   a) Aims/objectives of secondary education int he light of National Education policies.
   b) Course offerings in different streams of secondary education.

c) Resources:-

i) Human

ii) Conceptual

iii) Organizational

iv) Financial

6) Analysis of the findings.

7) Development of a strategy for restructuring secondary education

8) Finalization of the report

The study is descriptive in nature. It studies various educational policies and development plans in terms of their achievements and shortcomings. The significance of the study lies in the fact that it implies multidimensional approach to explore possibilities for reforming present educational system at the secondary level. For this purpose the study has evolved various strategies/recommendations based on its findings and opinions expressed by educational experts.

Definitions of Terms

Access

The degree of the availability of places and programmes generally measured by the ratio of places available to the eligible school-going age group.

Double Shift

Practice of using the same premises, classrooms etc. for two consecutive sessions of the same year group with or without the same teacher.

Education reform

By education reform we mean a substantial and systematic attempt to change the content, structure and/or power relation in an educational system by legislative means with a view to achieving improvement.

Efficiency: Internal and External

Internal efficiency is the ratio of learning outputs to resources inputs and, therefore, concerns both the economy and the effectiveness with which an educational programme produces its immediate results or gains in skills, knowledge and development of new attitudes.

External efficiency is the degree to which programme objectives are obtained.

Effectiveness

Effectiveness is the degree to which programme objectives are obtained, that is, the extent to which students acquired the skills, knowledge and attitudes the programmes is designed to impart.

Equity

Equity is a situation wherein all eligible members of an age group receive equal opportunities, treatment, and benefit. Equality of access requires that all those eligible for an educational programme have an equal chance of participating and benefiting from it regardless of their particular characteristics.

Formal Education

Formal education refers to the hierarchically structured and chronologically organized system extending from primary school to the university and including, in addition to general academic studies, a variety of specialized programmes and full time technical and vocational training.

Informal Education

Informal education is a life long process through which an individual acquires attitudes, values, skills and knowledge through day-to-day experiences, educative influences, and the resources of his environment.

Innovation

An innovation is any new idea, method, or device that, in contrast to change, is deliberately introduced for some purpose.

In-Service Training

Training undertaken while teachers are in service as distinct from initial training.

Non-Formal Education

Non-formal education is any educational activity organized outside the established formal system.

Participation Rate

Participation rate is the ratio of total student enrolment of the school going age population. The participation rate for a given level of education is derived by dividing the total enrolment for this level of education by the population of the age group which should be enrolled at this level.

Pre-Vocational Education

Pre-vocational programmes are aimed primarily at exposing students to the world of work and to foster positive attitudes towards it. Limited manipulative skills are provided to stimulate vocational interest. It does not prepare them for employment. These

programme are incorporated in the lower and upper secondary levels of general education programmes.

Quality

The standard of excellence desired to contribute to high levels of student achievement. Quality measures the degree to which the resources and efforts used meet certain agreed upon standards, and it is complementary to effectiveness.

Relevance

The extent to which what is taught (e.g., skills, knowledge, and attitudes) can be applied to situations after the student graduates. It refers to the compatibility of the curriculum to everyday lives of pupils in their community. It also focuses on the same area as external efficiency. It also refers to the match between the goals of society and the needs of the people with the educational programmes operationalized in schools.

Restructuring

Restructuring schools is complex and involves long term effort led by those within the schools. Restructuring takes many forms, but it usually involves school based management; enhanced role for teachers in instruction and decision-making; integration of multiple innovations; and revamping and developing the shared mission and goals of the school among teachers, administrators, the community and students. change in structure is easier to bring about than changes in values, beliefs, behaviour and other

normative and cultural changes. From this definition we draw the conclusion that sustained improvement requires serious restructuring of schools, the management and their interrelationship. Moreover, the role of students, teachers, principals, parents and management are all implicated as is the structure, administration and design of work and learning.

Secondary Education

Secondary education for the purpose of this study refers to 9th and 10th classes as a part of formal education system prevailing in government high schools in Pakistan.

Strategy

Conventionally, strategy has been taken to imply generalship, the art of conducting a campaign and manoeuvering an army conceived at a fairly high level of geographical abstraction. However, for the purpose of this study a strategy can be defined as a plan for action. It involves making choices based on a random event chosen from a suitable contribution. The role of suitable contribution is to optimize the long term expected outcome from a given situation. Strategies based upon random choice are called mixed strategies. A mixed strategy implies that by exposing to smaller risk we avoid the greater risk. So it is not the individual event or instance but the complete strategy that can be assessed rationally.

Skilled workers

A worker who has a high level of practical skills at craft level and who, in the modern context, is expected to have sound technical knowledge that will enable him to venture in to new skill areas resulting from advancing technology.

Technician

A worker who occupies a position between that of a skilled worker and the technologist. This worker's education, training and practical experience should enable him to apply proven techniques to solve technical problem. He normally works under a technologist.

Technologist

A worker who has received education and training equivalent to that required for a university degree or for membership of a professional institution.

Technical manpower

Technical manpower refers to the human resource guided and prepared to take up technical occupation.

Technical Education

Technical education in the context of this thesis includes all education and preparation for occupations and careers in the world of work at the secondary level.

Vocational Guidance

Vocational guidance is described as assessment of an individual's aptitudes, interests and abilities and advice to match them effectively with education, training, occupations and long term career.

Vocational Education

Vocational education is defined as activities in or out of school education, designed to prepare an individual for an occupation. It includes career orientation, skill development and job placement.

CHAPTER II

CONCEPTUAL FRAMEWORK: REVIEW OF THE RELATED LITERATURE

Introduction

This chapter provides a brief review of available literatre relating to various dimensions of the secondary education. I have tried to trace out the genisis of the present secondary education in its historical erspective. Various theories, presearch studies and current practices in the fieldof secondary education are also examined, with a view to establishing good background to appreicate the present state of secondary education in Pakistan and to develop conceptual framework for its restructuring.

To obtain a cohesive view of related literature information from research studies, national policies on education and national development plans has been pooled together in an organized and sequential form of presentation. Studies/researches have been reviwed on following important themes of secondary education.

1. The genesis of secondary eduation in Pakistan.
2. Policy initiatives and plan objectives of the government of Pakistan in the field of secondary education.
3. Important issues confronting secondary education in Pakistan.
4. Aims and objectives of secondary education.
5. Structure of secondary education in Pakistan and elsewhere in the world.
6. Diversification and vocationalization of secondary education.
7. The curriculum of secondary education.
8. Linkage of secondary education output with manpower requirements.

9. Management and administration of secodnary education.

10. Guidance and counselling at secondary level.

11. Financing the secondary education.

12. Researches/studies done in the field of secondary education in Pakistan.

The main points/findings of the above review of the related literature is summerized in the form of findings/suggestions/recommendations.

PART I

Historical Background: The genesis of secondary education

The principal object of this section is to trace the growth of modern system of education which came to be established in the Indian sub-continent during the British period in supersession of the traditional indigenous system of education which had developed in the country through the past centuries. (Nurullah and Naik, 1956, p. 1). During Mughal reign just before the beginning of the British rule, a network of schools and colleges existed in the sub-continent where education was imparted free of cost. The primary schools called Maktabs and Patshallah were attached to mosques and temples respectively. (Syed Rasul Malik, 1992, p. 3).

The history of evolution of modern system of education in the sub-continent is linked with the struggle between the old and the new between the effort, however well intentioned it might have been, by non-Indians to impose a cheap immitation of the British educational system on India and desire of the people of the country to create a new system to meet their own peculiar needs and problems. In the

early part of nineteenth century, the indigenous system of education held the field. Soon afterwards missionaries began to spread western knowledge and encourage study of English language and literature. They were joined by the officials of the government and a few enlightened Indians who were either educated under the new system or valued its advantages, and between the combined efforts of these three sets of workers the modern educational system saw the light of the day in the sub-continent. It thrived quickly for several reasons. To begin with the, British people of the Victorian era complacently believed that their language, literature and educational methods were the best in the world and that India could do no better than adopt them in toto. Secondly, the Indians of this period, on their part, were dazzled by their first contact with Western civilization and believed that their country could do no better than imitate the British model. Thirdly, the system attained an artificial popularity and importance because young men and women educated under it were freely employed in Government service. By the end of nineteenth century, therefore, the old indigenous system of education disappeared almost completely from the field, and a new system of education which aimed at the spread of western knowledge through the medium of English language, was firmly established in its place. (Nurullah & Naik 1956- p. i).

Three groups of peoples were involved in the process of establishment the new system: the missionaries, the European officials of the Education Department, and some Indian people. To the missionaries belongs the honour of being pioneers in the modern educational system of the Indian sub-continent and even today they are doing some work in several branches of social service that have not yet attracted Pakistani

workers on a sufficiently large scale. The European officials of the Education Department came upon the scene in 1855 and dominated the whole educational field until very recently. Indians were the last to enter the stage. They began, in the early nineteenth century, by collecting funds for the establishment of modern educational institutions, and later on, undertook to run the same. (Nurullah & Naik, 1956, p. iv).

The history of evolution of modern system of education in India may be viewed in phases, six in all. The first phase opens about the beginning of the eighteenth century and closes with the Charter Act of 1813. (Nurullah and Naik,p. v)

The second phase opens in 1813 and closes with Wood's Education Despatch of 1854. (Nurulla and Naik, 1956, p. vi). The third phase opens in 1854 and closes about 1900. It is a period of rapid westernization of the educational system but of indianization of its agency. (Nurulla and Naik, 1956 p. vii). The fourth phase opens in 1901 with the conference of the Directors of Public Instruction convened by Lord Curzon at Simla and Closes in 1921 with the transfer of education to the control of Indian Ministers. (Nurullah & Naik 1956, p. ix). The fifth phase of opens in 1921 and closes in 1937 when the Government of India Act of 1935 introduced provincial autonomy in eleven provinces of British India. It is a period of first experiments under Indian control (Nurullah & Naik, 1956, p. x). The Sixth phase starts with introduction of the provincial autonomy and ends with the independence. The three years between 1937 and 1940 formed an extremely crowded hour in educational history of the sub-continent. During this short period, larger funds for education were made available, schemes for the expansion of primary education, the introduction of compulsion, and liquidation of adult

illiteracy were undertaken; and a great fillip was given to physical and vocational education. Congress ministers resigned in 1940 and interim administration was set up in their stead which continued till 1946. The one great achievement of this period, was the preparation by the Central Advisory Board of Education of a plan of post war educational development in India which was estimated to cost Rs. 300 crores and which intended to make India reach, at the end of 40 years, the stage of educational progress which has already been attained in countries like England and USA. (Nurullah and Naik, 1956, p. xii.).

Initially the British East India Company had no interest in the education of Indians. It was not until the two decisive battles of Plassy and Buxar were fought in 1757 and 1765 respectively that the British emerged as a political power in Bengal that they began to take any interest in the education of subjets. (Syed Rasul Malik, p. 3). After 1765 when the company became a political power in India, its educational policy underwent a change. Hitherto the company had restricted its attention to the education of European and Anglo-Indian children. It now began to feel that it must do something for the Indian people. Politically it was a successor to Muslim rulers who encouraged higher learning in classical languages by a) establishing *madrassahs* and *maktabs*, b) by giving marks of honour or pecuniary grant to learned scholars and Moulavis, or c) by endowing educational instituions for higher religious studies. (Nurullah and Naik, pp. 29-30). Warren Hastings, the last of the company governors, had been oriental in outlook. He believed that India should be governed by Indian methods, with the company as a kind of semi-divine arbitrator and court of appeal (Syed Mahmood, 1895, p.18).

Moreover, the company wanted to educate sons of influential Indians for higher posts under government and thereby win the confidence of upper classes and consolidate its rule in India. It was, therefore, felt that company should establish some centres of higher learning for Hindus and Muslims, a desire that led to the establishment of institutions like Calcutta Madrassah in 1781 and Banaras Sanskrit College in 1791 (Nurullah & Naik p. 30). The Calcutta Madrassah was founded by Warren Hastings in order to conciliate the Muhamadans of Calcutta....to qualify the sons of Muhammadan gentlemen for responsible and lucrative offices in States and to produce competent officers for courts of Justice to which students of the *Madrassah* on the production of certificates of qualification were to be drafted as vacancies occurred (A. Howel, p. 1). It is no wonder that original intention of the founder appears to have been to promote the study of Arabic and Persian languages and of Muhammandan Law, with a view more specifically, to the production of well qualified officers for the court of Justice (Syed Mahmood p. 18). The subjects of study in *Madrassah* were: Natural Philosophy, Theology, Law, Astronomy, Geometry, Arithmetic, Logic, Rhetoric, Oratory and Grammer (Masroor Hashmi, 1989, p. 2). The Banaras Sankrit College was founded by Jonathan Duncan, the Resident at Banaras. The college owed its establishment to the same political considerations as had operated in case of the Calcutta *Madrassah* and was an attempt to conciliate the Hindu population of the newly acquired territories. (Nurullah & Naik, p. 30). The subjects of study in Sanskrit college were: Theology and Ritual, Medicine including Botany, Music, Mechanics, Arts, Grammer, Prosody and Sacred Lexicography, Mathematics, Metaphysics, Logic, Law, History, Ethics, Philosophy and Poetry (Masroor Hashmi, p.

2). It is quite evident from the aims and objects, with which these two institutions were established that the British sought the cooperation of the Indians both Hindus and Muslims, for smooth functioning of their judicial administration. It is quite clear from the course of studies in the two colleges that they wanted to impart such knowledge to Indians which constituted their cultural heritage and that too through the media of classical languages, i.e., Persian, Arabic and Sanskrit (Masroor Hashmi p. 22).

Side by side with these educational institutions, conducted by the company, a number of other educational activities were also organized by missionaries who generally worked under the shadow of its political authority. These institutions are of great significance in the history of education in the sub-continent as pioneers of private enterprise in education (Norullah & Naik, p. 31).

Charter Act of 1813

The education policy of the Britishers in the beginning, as noted earlier, was one of non-intervention. The indigenous system of education in India was allowed to continue undisturbed. The missionaries, who were busy with the educational activities for the main purpose of proselytization, did not like this policy of the British East India company. It may be surprising to note that it was neither a statesman nor any administrator but religious leaders who first asserted that intellectual and moral ideas of the British peoples should be communicated to the Indians through the English system of education. As a result, a conflict emerged between the missionaries and the company which ultimately led to the adoption of a resolution by the British parliament at the time

of renewal of the company's Charter in 1813. This resolution which became the 43rd section of this Charter, was the first legislative admission of the right of education in India to participate in the public revenue (Syed Rasul Malik, p. 3). The Act provided one lakh rupees for the revival and improvement of literature and encouragement of the learned natives of India and for the introduction and promotion of a knowledge of sciences among the inhabitants of the British territories in India (Syed Mahmood, p. 50).

The General Committee of Public Instruction 1823

The history of administrative organization of education system in British India can be traced back to 1823. The Governor General constituted a committee called the General Committee of public instruction in 1823 when the charter of the company came for renewal. The function of the committee was to advise on and superintend public instruction in India (Syed Rasul Malik, p. 3).

Lord Macaulay's Minute 1835

In 1834, Lord Macaulay came to India to act as a Law Member in the Executive Council of the Governor-General. He also became the president of the General Committee of Public Instruction (Syed Rasul Malik p. 4). The Committee of Public Instruction was so equally divided between the supporters of Oriental learning and Western learning that no decision could be arrived at till 1835, regarding the nature of studies to be pursued by the Indians. On 2nd February, 1835 Lord Macaulay produced his famous minute in favour of Western knowledge and English language (Syed

Mahmood, p. 52). He interpreted the section 43 of the Charter Act of 1813 in his own way. For him, the word 'literature' occurring in this section meant English literature, learned native of India meant person versed in English philosophy and poetry, and promotion of scientific knowledge could only be achieved through adoption of English as medium of instruction. He boasted "that a single shelf of a good European library was worth the whole native literature of India and Arabic", (Syed Rasul Malik p. 70) and eulogised the English language as providing "ready access to all the vast intellectual wealth which all wise nations of the earth have created" (Syed Rasul Malik, p.74). Lord William Bentink, the Governor General, adopted a resolution on 7th March, 1835 through the Council in favour of English education, thereby resolving the controversy about nature and the pattern of education to be imparted to Indians (Masroor Hashmi, p. 6). This momentous decision in favour of Western knowledge and English language was welcomed by Hindus of Bengal who were already favourably disposed toward it (Syed Mahmood, p. 52). The feelings of Muslims of Calcutta were quite different from the Hindus in regard to the Resolution of the 7th March 1835. They submitted a petition signed by some 8000 Moulvies and the gentlemen of the city expressing their displeasure about the resolution, which in their opinion aimed at conversion of Muslims to Christianity by exclusively encouraging English language and Western culture (Syed Mehmood, p. 70).

Council of Education 1842

The General Committee of Public Instruction was abolished and in its

place a new body called the Council of Education was constituted on January 12, 1842. This was a step toward the centralization of administration of education in India. It was decided that all the business in education would be conducted by a deputy secretary in the General Department of the Government of India, who would also function as an ex-officio Secretary to the Council of Education (Syed Rasul Malik, p. 4).

Harding's Educational Resolution of 1844

Lord Harding gave a new impetus and an indirect encouragement to English education by resolving in 1844 to give preference in Public Services to successful and meritorious students coming from institutions where Western knowledge is pursued through English language. Thus a very material purpose was added to a series of lofty ideals that were associated with the light of Western knowledge and science. Lord Harding's Educational Resolution of 1844 also emphasized English as the language of official business in place of Persian. This decision was taken as early as 1829 by the Government of Bengal. But it was not implemented except in the case of official communications to the rulers and princes only (Masroor Hashmi, p. 8).

Wood's Despatch 1854

By far the most important document on the subject of Education was the Educational Despatch of the Court of Directors dated 19th July, 1853 which is popularly known as Wood's Despatch, after the name of Sir Charles Wood, the then Chairman of the Board of Control, on whose instance the Despatch was written (Masrur Hashmi, p.

9). It may be said that between 1854 and 1902, the educational policy in India was chiefly dictated by the Despatch of 1854 (Nurullah & Naik, p. 130). Comprehensive as the document was it touched upon many aspects of education. It aimed at the improvement and far wider extension of education, both English and vernacular and prescribed the means for the attainment of following objectives:

a. The constitution of separate department of administration for education.

b. The institution of Universities at the presidency towns.

c. The establishment of institutions for training teachers for all classes of schools.

d. The maintenance of the existing government colleges and high schools and the increase of their number when necessary.

e. The establishment of new middle schools.

f. Increased attention to vernacular schools, indigenous or other for elementary education.

g. The introduction of a system of Grant-in-aid. (Syed Mehmood, p. 85).

Though the despatch did not require the government to educate the masses of India, it did make education one of the responsibilities of Government. Till then all government efforts in regard to education were inconsistent. The despatch envisaged a machinery, the formation of an education department, that would inevitably bring consistency in government effort. It was also decided that English will generally be the medium of instruction at college or university levels, and vernacular at school level (Masrur Hashmi, p. 9). The system of grants-in-aid envisaged education as primarily a

private enterprise, supported by governmental funds (Masrur Hashmi, p. 10).

Indian Education Commission 1882

The appointment of this commission was necessitated by two reasons. The first was the desire of the Government of India to review in a comprehensive manner the development of education in India since the Despatch of 1854. The second reason for appointment of the Commission was the agitation conducted by the missionaries, particularly in England to the effect that the educational system of India was not carried out in accordance with the Despatch of 1854 (Nurullah & Naik, p.131). The Commission was headed by W.W. Hunter and is called Hunter's Commission as well (Masrur Hashmi, p. 31). The commission described its objectives as "to enquire particularly into the manner in which effect has been given to the principles of the Despatch of 1854 and to suggest such measures as it may think desirable in order to the further carrying out of the policy therein laid down" (Syed Mehmood, p. 99). Hunter Commission recommended a new system of inspection, directions, evaluation and gradation of schools. Primary education was considered the sole responsibility of the government whereas secondary education was to be supported in the private sector, except that Government will set up a model school at each district to be emulated by the private sector (Syed Rusul Malik, p. 5).

The Development of Secondary Education in India

Wood Despatch of 1854

Soon after the receipt of the Despatch of 1854, an era of rapid growth of secondary schools set in. This lead may be attributed to the newly created Department of Public Instruction whose task was greatly facilitated by the growing demand for English education and the higher grants placed at their disposal by the Government of India (Nurullah & Naik, p. 165).

Between 1854 and 1882, therefore, there was a large increase in the number of secondary schools directly conducted by Government. The number of government secondary schools in 1882 was 1363 with 44,605 pupils as against 169 with 18,335 pupils in 1855 (Nurullah & Naik, p. 165). The Despatch of 1854 laid great stress on the system of grants-in-aid. Every provincial government, therefore, framed rules of grant-in-aid and made considerable budget provision for assisting private enterprise. Consequently, private, secondary schools were opened at a greater speed. Prior to Wood's Despatch, Private enterprise in secondary education was mostly confined to the missioneries. But within few years, Indians themselves entered the field in such a large number that by 1882, the schools under Indian managements constituted the bulk of private enterprise. Schools under Indian managers were 1341 with 336837 pupils as against 757 with 287,877 pupils under other managers (Nurullah & Naik, p. 166).

Indian Education Commission 1882

When the Indian Education Commission was appointed in 1882, it had to

make recommendations on two important matters. Firstly, it had to suggest ways and means for securing a still more rapid expansion of secondary education. Secondly, the Commission had to recommend the best agency for expansion of Secondary education. With regard to the first question, the Commission recommended that the goal of government effort should be to transfer gradually all government secondary schools to a suitable non-government agency, provided that adequate guarantee of permanence and efficiency was forthcoming. With regard to the second question, the Commission held that in exceptional cases, where required, government should establish secondary schools in the interest of the people (Nurullah & Naik, p. 167).

Provincial governments in India accepted the recommendations of the Commission regarding expansion and encouragement of private enterprise. Consequently, the twenty years following the report of the Commission saw a very rapid expansion of secondary education especially through private schools as indicated in the following table (Nurullah & Naik, p. 168).

TABLE 1

Statement of Secondary Schools 1881-82 to 1901-02

		1881-82	1901-02
1.	Number of Secondary Schools	3,916	5,124
2.	Number of Pupils in Secondary Schools	214,077	590,129

Source: Indian Education Commission (p. 193).

This expansion of secondary education was not an unmixed blessing. During 1854-1902, the system of secondary education developed serious defects among which may be mentioned: (a) the neglect of the mother tongue as a medium of instruction, (b) lack of trained teachers, and (c) absence of vocational courses at the secondary stage. More important object of the secondary course of 1882 was to spread a knowledge of English. By 1902 teaching of English came to be regarded as prime object of the secondary course. The study of Indian languages were consequently neglected. The study of English was very frequently begun even before the pupil had obtained a good knowledge of his mother tongue. English was used as a medium of instruction so early in the secondary course that most of the time of the pupils had to be devoted to overcoming the difficulties created by the medium of instruction and examination rather than in mastering the liberal subjects in the curriculum. Although the Educational Despatch of 1854 emphasized the importance of training teachers, no satisfactory measures were taken to train secondary teachers in the thirty years following the Despatch. Prior to the report of the Indian Education Commission, there were, in the whole India, only two training institutions for secondary school teachers one at Madras established in 1856 and the other at Lahore established in 1880. In 1901-02 there were six training colleges (Nurullah & Naik, p. 172).

The Despatch of 854 explicitly stated that instruction in secondary schools should be " practically useful to the people of India in their different spheres of life (Nurullah & Naik, p. 172). This clearly shows that the Despatch contemplated the provision of vocational or pre-vocational instruction at the secondary stage. But this

salutary advice was negleded by later administrators. In the province of Bombay, some provision was made for vocational education by the grant of a few scholarships of Rs. 4 per month to children of agriculturists in order to encourage them to attend model farms connected with high schools, for instruction in practical agriculture. Barring this solitary exception, the high schools throughout India had been regarded not only or chiefly as schools for secondary instruction, intended for pupils whose instruction will terminate at that stage but in a much greater degree, as preparatories schools for those who are to become students of universities. (Nurullah & Naik, p. 172). This unhappy result was due to three causes. In the first place, most of the pupils of the secondary schools of those days belonged to the elite class of the society, whose main object was to obtain employment under government, securing black coated profession. Secondly, government itself had not taken any steps to provide vocational education in Secondary schools to be a model for private enterprise to follow. Thirdly, most of the newer schools did not have adequate financial resources at the start, and hence they confined their work to the course of liberal education, because it required the least equipment and expenditure (Nurullah & Naik, p. 173).

The Indian Education Commission, therefore, gave considerable attention to the provision of vocational courses at the upper secondary stage with a view to preparing pupils for various walks of life. It recommended a bifurcation of the secondary course and said, "we, therefore, recommend that in the upper classes of high schools there be two divisions; one leading to the entrance examination of the university, the other of a more practical character, intended to fit youths for commercial or non-literary

pursuits (Nurullah & Naik, p. 173).

This recommendation was accepted and alternative examinations came to be organised in every province. But the experience was not encouraging. Taking India as a whole, we find that in 1901-2 no less than 23,000 candidates appeared for the matriculation examination; but the total number of candidates appearing for all the other alternative examinations was only 2000, of which about 1200 belonged to Bombay province. It is quite evident, therefore, that the matriculation examination dominated the field of secondary education almost as exclusively in 1902 as it did in 1882 (Nurullah & Naik, p. 174).

Lord Curzon's New Policy 1904

Lord Curzon introduced a new policy in secondary education which was put in practice during the years 1904-08. The policy had been categorically stated in the Government Resolution on Educational Policy issued in 1904. The new policy in secondary education had two important aspects: control and improvement. Government tried to control private enterprise in a number of ways, e.g., recognition by the Department, whether these schools are managed by public authority or by private persons, and whether they received aid from public funds or not, the Government is bound in the interest of the community to see that the education provided in them is sound. It must, for example, satisfy itself in each case that a secondary school is actually needed, that its financial stability is assured, that its managing body is properly constituted, that it teaches the proper subjects up to a proper standard, that due provision

has been made for the instruction, health, recreation, and discipline of the pupils, that the teachers are suitable as regards character, number and qualifications, and that fees to be paid do not involve such competition with any existing schools as will be unfair and injurious to the interests of education. Such are the conditions upon which alone schools should be eligible to receive grants in order to send up pupils to compete for or receive pupils in enjoyment of Government scholarships. Schools complying with these conditions will be ranked as "recognized schools" (Nurullah & Naik, p. 225). In addition to the recognition granted by the Department, secondary schools had to obtain recognition from a university, if they desired to present pupils at matriculation examination conducted by that university. Recognition by the university entitled a school to send pupils to the Matriculation examination. Recognition from the Department entitled a school to: (i) receive a grant-in-aid from the Government; (ii) send up pupils for government examinations or for the entrance examinations of Government Technical Schools, and (iii) receive pupils holding government scholarships. Moreover, for effective control government put a ban on transfer of students from un-recognized schools to recognized ones (Review of Progress: Education in India ,1902-07, p. 71) .

The second object of Lord Curzon's policy in secondary education was to improve the quality of instruction. With this end in view, he adopted the following measures:

a. Large grants were sanctioned to provincial governments in order to improve the efficiency of government schools.

b. Large funds were also sanctioned for increasing the grants-in-aid to private schools so as to enable them to come up to the standards of

government schools.

c. New institutions for the purpose of training of secondary teachers were started.

d. Curricula was modified to make it more useful and practical.

e. Mother tongue was accepted as medium of instruction at the middle stage.

f. The Inspectorate was greatly strengthened for effective control (Nurullah & Naik, p. 228).

One of the greatest contribution of Curzon was to create the post of a Director General of Education in India. The first official to hold it was H.W. Orange (Nurullah & Naik, p. 233). Secondary schools rose to 7,550 with 11,06,803 pupils. This expansion was achieved mainly through private enterprise and was due to the great social and political awakening of those days.

Throughout the period, (1904-13) however, the official attempts aimed, not at quantity but at quality. The Government Resolution on Education Policy 1913 reflects this trend clearly.

Subject to the necessities of variation in deference to local conditions the policy of the Government of India in regard to Secondary English School is:

1) to improve the few existing Government Schools by:

   a) employing only graduates or trained teachers.

   b) introducing a graded service for teachers of English

c) Providing proper hostel accommodation.

d) introducing a school course complete in itself with a staff sufficient to teach.

e) introducing manual training and improving science teaching.

2) To increase largely the grant-in-aid.

3) To multiply and improve training colleges for teachers.

4) To found government schools as model institutions.

Regarding provision of vocational courses, attempts continued to be made to provide alternative examinations to matriculation and to direct students into different walks of life. As in the past, these attempts did not succeed, although they led to some enrichment of the curriculum and reform of the examination system (Nurullah & Naik p. 247).

A pertinent question that arises here is as to what were the causes that led to failure of all attempts, made since 1882, to provide alternative examinations to matriculation, so as to direct students in to different professions. The fact is that various measures suggested by the Indian Education Commission 1882 were not adopted properly. These included, preparing planned schemes of vocational instruction in consultation with the representatives of employers such Railways, commercial firms/factories etc; provision of teaching staff; awarding special grants to private institutions; provision of teacher training facilities for special courses, and development of trade and industries in the country to accommodate the graduates skilled in special courses. As a result, these attempts did not succeed in introducing vocational or pre-

vocational education. Moreover, there was no keen demand from the public for the introduction of vocational courses. It is quite evident that without requisite inputs we cannot expect the desired outputs.

Hartog Committee Report 1919

According to the Government of India Act of 1919, a Royal Commission on constitutional reforms was to be appointed in 1929. But owing to the continued agitation in India that the Reforms of 1919 were unsatisfactory, a Royal Commission presided over by Sir John Simon, was appointed a little earlier than the target date, i.e, in 1927. Under Section 84-A(3) of the Government of India Act of 1919, this Commission was asked to report on the growth of education in British India and was also authorised to appoint, if necessary, an auxiliary committee for the purpose. Accordingly, the Commission appointed this Committee presided over by Sir Philip Hartog who had served for several years in India as a member of Calcutta University Commission, and as the vice-chancellor of Dacca University (Nurullah & Naik, p. 203). The main findings and recommendations of the Committee regarding secondary education are as follows:

> In the sphere of secondary education there has been an advance in some respects, notably the average capacity of the body of teachers, in their improved conditions of service and training, and in the attempt to widen the general activities of school life. But here again there are grave defects of organization. The whole system of secondary education is still dominated by the ideal that everybody who enters a secondary school should prepare himself for the university; and the immense number of failures at the Matriculation and in the university examinations indicate a great waste of effort. Such attempts as have been made to provide vocational and industrial training have little contact with the educational system and are therefore infructous. At almost every point that organization needs reconsideration and strengthening, and the relations to the bodies responsible for the organization of education need readjustment (Nurullah & Naik, p. 284).

The main conclusion of the report, obviously, was that quantity had been gained at the cost of quality and that the immediate need of the hour was to improve quality rather than strive to increase the numbers still further. The expansion of secondary education during 1921-22 and 1936-37 can be seen in the following statistics (Nurullah & Naik, p. 93):

TABLE 2

Education Statement Years 1921-22 to 1936-37

	1921-1922	1936- 37
No. of Recognized Secondary School	7,530	13,056
No. of scholars in recognized secondary schools	11,06,803	22,87,872

Source: Nurullah and Naik p. 293.

This rapid expansion was due to several causes, the more important of which were the awareness among the people, the opening of secondary schools in semi-urban and rural areas and the special efforts made to spread higher education among the less advanced sections of the population. Facilities for teachers training also multiplied during 1936-37. There were 15 institutions for training teachers for secondary schools with an enrolment of 1488 which included 147 women (Nurullah & Naik, p. 297). The Hartog Committee stresses two more causes of the defects in the secondary education, i.e, (a) Laxness of promotions in secondary schools from class to class and, b) the absence of a reasonable selective system. The committee recommended the diversion of

more boys to industrial and commercial careers at the end of the middle stage, for which provision should be made by alternative courses in that stage, preparatory to special instruction in technical and industrial schools (Hortog Committe Report, p. 117-118).

During the period 1937-47 in the field of secondary education there were no outstanding developments. Rapid increase in schools and pupils characterized this period also (Nurullah & Naik, p. 225). Some progress was also noticeable in the provision of alternative or vocational courses at the secondary stage. The Provincial Governments started technical, commercial or agricultural High Schools and also began to give larger grants to private schools providing non-literacy courses. The war assisted this trend considerably. It required a large number of technically trained recruits and this created an increased demand for technical education. Even after the war the movement was kept going and in the Five Years Plans of educational reconstruction which were introduced at the centre and in all provinces with effect from Ist April, 1947, an important place was always assigned to the provision of non-literacy courses at the secondary stage. On the whole it may be said that some effective measures to provide alternative vocational or pre-vocational courses at the secondary stage were taken in the decade between 1937-47. The progress, however, was slow, partly due to lack of funds and partly due to lack of trained teachers. Even in 1946-47, the type of High schools which prepared the students for the Arts and Science courses of university still dominated the scene (Nurullah & Naik, p. 328).

Sargent Report 1944

The Central Advisory Board of Education submitted a detailed report on

post war Educational Development in the sub-continent, commonly known as the Sargent Report, in 1944. It is considered as the first official attempt to plan a national system of education for the sub-continent. The object of the plan was "to create in India in a period of not less than forty years, the same standard of educational attainments as had already been admitted in England" (Nurullah & Naik, p. 344). It provided for:

a. Pre-Primary education for children between 3 and 6 years of age;

b. Universal, compulsory and free primary or Basic education for all children between the ages of 6 and 14 years divided into the Junior Basic (6-11) and Senior Basic (11-14) stages;

c. High school education for six years for selected children between the ages of 11 and 17;

d. A university course of three years after intermediate examination.

e. Technical, commercial and art education for full time and part time students on an adequate scale;

f. The liquidation of adult literacy and the development of public libraries system in about 20 years;

g. Full provision for the proper training of teachers required for implementing and continuation of the scheme;

h. Compulsory physical education, medical inspection and treatment;

i. The creation of employment bureaus;

j. The education of physically and mentally handicapped children

k. Social and recreational activities (Nurullah & Naik, p. 345).

The function of the high school, says the Report, "is to cater for these children who are well above the average ability. It would, therefore, only admit pupils selected on the basis of abilities, aptitudes and general promise". (Sargent Report, p. 18).. The aim of High school education was defined by the Report in the following words:

> High school education should on no account be considered simply as a preliminary to University education, but as a stage complete in itself. While it will remain a very important function of the High schools to pass on their most able pupils to Universities or other institutions of equivalent standard. The large majority of High school leavers should receive an education that will fit them for direct entry into occupations and profession (Sargent Report, p.20).

The Report further elaborated the key issues and said: "[t]he medium of instruction in all High schools should be the mother tongue of the pupils. English should be a compulsory second language. The list of subjects to be taught in both the type of High Schools is given. The list is suggestive and it is not intended that every pupil should be taught all the subjects. Subjects common to both the types are: (1) The mother tongue (2) English (3) Modern languages (4) History (5) Geography (6) Mathematics (7) Science (8) Economics (9) Agriculture (10) Art (11) Music (12) Physical Training. In the academic High school classical languages and civics are added to the common list. In the technical high schools, the science subjects are to be studied more intensively. Technological subjects such as wood and metal work, elementary engineering, measured drawing etc. and commercial subject like book keeping, shorthand, type writing, accountancy, commercial practice etc., are also to be added to the common list. In case of girls, among other subjects, domestic science should be one of the options". (Nurullah & Naik, p. 347).

In respect of Technical and vocational education, the report divided the workers into four categories:-

a. Chief executives and Research workers of the future: These will normally have their preliminary training in a technical High school and then join a technological university for high courses.

b. Minor executives, Foremen, Charge Hands, etc: Technical High school will satisfy this need and would lead to higher diploma courses in future.

c. Skilled craftsmen: These may be recruited from Technical High School pupils but as a rule after their passing through the senior Basic school where they will have mastered the rudiments of craftwork. They will go to junior technical trade or industrial schools for a further two or three years full time course.

d. Semi-skilled and unskilled labour:- They will be recruited mostly directly from senior Basic (middle) schools where they will have done some craftwork (Nurullah & Naik, p. 274).

Regarding the recruitment and training of teachers, the Report assumed that one teacher would be required for every 30 pupils in the pre-basic and Junior Basic schools, for every 25 pupils in senior Basic schools and every 20 pupils in High Schools. The non-graduate teachers in High schools were expected to undergo a training course of two years and the graduates would receive one year's training (Nurullah & Naik, p. 350).

Such was the plan for the educational reconstruction in the sub-continent that the Central Advisory Board of Education had proposed. In the words of K.G. Saiyidain, "[i]t is the first comprehensive scheme of national education. Secondly it is inspired by the desire to provide equality of opportunity at different stages of education. Thirdly it stresses in clear terms the importance of the teaching profession". (Nurullah & Naik,pp. 356-64).

The foregoing review of the educational developments in the Indian sub-continent shows that its most outstanding feature was the preparation of plans for a comprehensive educational reconstruction. However, the principal charge against British educational administration in the sub-continent is that it faild to create a national system of education for the country. Our survey of educational history during the last century and a half reveals that the British failure to create a national system of education in the sub-continent is mainly attributible to their failure to evolve a synthesis of East and West, non-formulation of adequate aims of education, adoption of wrong methods, failure to develop the sub-continent socially, economically and politically; lack of necessary personnel, and absence of an education plan. Non-formulation of adequate aims was one weakness of British educational administration, whose harmful effect was further enhanced by the adoption of certain wrong methods. Foremost of these was the neglect of the indigenous system of education which resulted in its almost complete extinction by 1900. Extreme dependence on English models, and the attempt to impose a cheap imitation of all types of schemes and ideas that were evolved in England was another wrong step. England is urban, industrialised and rich; sub-continent had a rural, agricultural and poor background. This contrast in the socio-economic background made England a poor model for the sub-continent. Rawlinson is quite right when he notes that the failure of the British Rule in the Indian sub-continent was due to a sheer want of imagination (H.G.Rawlinson, p. 241).

The statement that the British educational administration failed to create a national system of education in the sub-continent should not, however, be interpreted

to mean that it achieved nothing worthwhile. In fact, it did several good things which will always be acknowledged. The most important achievement of the British educational administration was to introduce the sub-continent to English language and literature and through them, to all the thought, the scientific and industrial development, and the social and political philosophy of the West. (Nurullah & Naik, p. 364).

The survey of the historical development of Secondary Education in the Sub-Continent has revealed that prior to the English Education System, Muslims had their own well established education system. The present system came as supersession of the old indigenous system of education and not as a result of their synthesis. That is why it failed to evolve into a national system of education. Initially the Government allowed indigenous system of education side by side with the English system of education. It was Macaulay's Minute of 1835 which decided the official policy in favour of the Western knowledge. The English education gained in importance as a result of Harding's Resolution of 1844 which gave preference to students of English institutions. Wood Despatch of 1854, made education one of the governments responsibilities. The policy of grants-in-aid proved very successful in accelerating the pace of educational development in the private sector, specially secondary education. This can well be tried in our situation today. The Indian Commission of 1882 gave attention to the provision of vocational courses at the secondary level with a view to preparing pupils for various walks of life. It also recommended alternate examination at the matriculation level, but the scheme was not implemented in its true spirit.

Lord Curzon's New policy 1904 emphasized mainly the regularization of

the private sector educational institutions through various controlling mechanisms, e.g., grants-in-aid, recognition and permission to sit in the public examinations etc. It also recognized mother tongue as the medium of instruction. The Hartog Committee, 1919, also recommended the diversion of more boys to industrial and commercial careers at the end of middle stage. Sargent Report, 1944 recognized high school as a stage complete in itself and not only preliminary to university. It recommended that large majority of High school leaves should receive an education that will fit them for direct entry to occupations and professions. However it seemed that government policy led to failure in this regard, mainly because various measures suggested by the Indian Education Commission were not adopted. These were the main parameters on which the education system was erected before the creation of Pakistan. Now we shall see what improvements were suggested in the already existing system by our National Education Policies and various development plans since 1947, to make it into a national system of education for a free and independent state.

Part II

Review of the Pakistan Education Policies and Development Plans

The system of education which Pakistan inherited from the British Government in India had to be modified, changed and further developed to meet the requirements of a free and independent nation. Keeping this in view the Government of Pakistan held the First Educational Conference in November, 1947.

The Pakistan Educational Conference 1947

Realising that education was closely related to the progress and prosperity of the country and needed immediate attention Pakistan convened its first Educational Conference as early as November 1947 (Ejaz Elahi Malik, 1989, p. 9). Father of the nation, Muhammad Ali Jinnah noted the educational goals in the following words. (Curle Adam, 1966, p. 49).

> The importance of education and the right type of education cannot be over-emphasized. Under foreign rule for over a century, sufficient attention has not been paid to the education of our people and if we are to make a real, speedy and substantial progress we must earnestly tackle this question and bring our educational policy and programme on the line suited to the genius of our people, consonant with our history and culture and having regard to the modern conditions and vast developments that have taken place all over the world. There is no doubt that the future of our state will and must depend on the type of education we give to our children and the way in which we bring them up as the future citizens of Pakistan. Education does not merely mean academic education. There is immediate and urgent need for giving scientific and technical education to our people in order to build up our future economic life and to see that our people take to science, commerce, trade and particularly well planned industries. (Education Conference 1947, p. 5).

Thus as the father of nation Quaid-i-Azam Mohammad Ali Jinnah outlined an educational philosophy which incorporated both the fundamentals of Islamic tradition and of modern science and technology.

In the Pakistan Educational Conference, held in Karachi, the Chairman of the conference, Mr. Fazlur-Rehman said:

> our educational system has conspicuously failed to inculcate and maintain the strong moral and intellectual discipline which is the hallmark of true education. Thus its products, with their minds crammed with an unassimilated mass of unrelated ideas and facts passing for knowledge, have gone out into the world only to discover that they are unfitted for the business of living. The growing realization of these grave deficiencies and their paralysing effect on national life inevitably bred acute dis-satisfaction in the minds of all thinking people and has

> of late years led to a considerable concentration of energies on a complete overhaul of our entire educational structure. (Education Conference, 1947).

While summing up the aims of education, the chairman of the conference said that education must provide and it must include a vocational element, a social or a political element and a spiritual element. Men must learn to earn a living, to be good members of a society, to understand the meaning of the phrase, 'the good life' and education must help them to achieve these three ends. Vocational education, he said, must provide for material existence of society, it must receive first consideration in any plan of educational reconstruction. In the last analysis, however, all the three elements, spiritual, social and vocational, must cohere and form an integral whole; for thus alone can we achieve a complete fusion between the spirit and substance of education. (Education Conference, 1947, pp. 7-8). His address to this conference is of great value to the students of history of education in Pakistan (I. H. Qureshi, 1975, p. 28). He believed in the importance of religious and citizenship instruction in the schools. Besides, he very clearly advocated vocational education at the secondary level as well.

This conference made three major recommendations, to the effect that education should be inspired by Islam and particularly by the ideals of universal brotherhood, tolerance, and justice; that free and compulsory primary education should be introduced and that technical education should be reorganized (Curle Adam, p. 50).

The deliberations and recommendations of the conference served to stimulate and guide the task of rebuilding education in the country. The basic policies enunciated by the conference were accepted by the central, provincial and state

governments. Soon thereafter the central and provincial governments set up committees of experts to review and revise primary and middle school syllabi (First FYP, p. 542).

Education in Pakistan, under the constitution, is a provincial subject. The role of the federal government is to co-ordinate educational policies throughout the country and to guide and stimulate planning for educational development on a national basis. To assist in this task it brought into being several bodies recommended by the conference:

a. The Advisory Board of Education

b. The Inter-University Board.

c. The Council of Technical Education.

The concepts, plans and schemes evolved by the above bodies, and by many other official and non-official groups, served as a basis for the six year National Plan of Educational Development for Pakistan which was issued in 1952. This plan was prepared by the Education Division of the Central Governments in collaboration with provincial and state governments. The chief merit of this plan was its translation into money, buildings and people, of the education envisioned by the several advisory bodies and groups (First FYP, 1955, p. 543). To this extent it was a useful exercise. Unfortunately it was not related to an overall plan for social and economic development based upon an economic analysis of resources. consequently it could not serve as a concrete plan of action. It has, nevertheless, proved to be a useful guide to the relative needs of several phases and levels of education (Curle Adam, p. 50).

During the first few years of Pakistan's existence there was a certain amount of educational expansion exemplified by the fact that public expenditure for the

year 1954-55 was two and half times as high as for 1948-49. Whereas in 1948-49 expenditure on education represented 5.3 percent of the total government expenditure, in 1954-55 it represented 7.7 percent of a much larger total. Although the number of lower middle schools decreased, the number of high schools (class 6-10) increased from 1885 to 2317. Enrolment increased from 434,000 to 903,000 indicating that the rise in the enrolment of secondary schools had kept pace with primary school enrolment. Expenditure on secondary education increased from Rs. 1.3 crores to 2.6 crores. The number of institutions, training secondary teachers, doubled from eleven to twenty two which number includes six institutions training graduate teachers and two new courses of study for intermediate passed students. The total number of secondary school teachers being trained annually increased from 700 to 1000. The number of trained secondary school teachers increased from 17,500 to 22,500. Major changes in secondary education are summarised in Table 1 below (First FYP, pp. 540-41).

TABLE 3

Education Statement Years 1948-49 to 1954-55

	1948-49	1954-55
Number of schools	6,275	5,743
Enrolment	734,000	904,000
Public Expenditure	Rs.12,600,00	26,000,000
Institutions for training secondary school teachers	11	22
Annual enrolment of teachers	700	1000
Total number of trained secondary school teachers	17,500	22,500

Source: First Five Year Plan, p. 541.

First Five Year Plan 1955-60

It was not until work started on the First Five Year Plan (1955-60) that educational development was viewed comprehensively in the framework of national development (Curle, Adam, p. 51). The analysis of available information soon revealed, as the First Plan noted, gaps and maladjustments in the growth of educational system. For example, one third of primary school teachers had received no training, many university departments were mere skeletons, no provision existed for research in education, and failures had increased ominously, which proved that such facilities of staff and equipment as existed were not being well used. The plan concluded that changes, since independence, were quantitative rather than qualitative, and that main task of the plan should be to achieve a better balance in the educational system and to encourage the qualitative changes suggested by the educational authorities (First FYP, p. 543). Sufficient resources were not available to tackle all aspects of education with equal vigor, and so priorities were arranged to obtain maximum value from scarce resources, to relate education to economic development, and to achieve balance within the educational plan itself. In practical terms this entailed concentration on the training of teachers at all levels, the provision of facilities for technical and vocational education, the promotion of teaching and research in science and technology, and improvement of existing schools, coupled with the building of new schools in backward areas (First FYP, p. 544).

The chapter on education in the First Plan is a very important document, over fifty pages long, analysing almost every aspect of education in the country and making a number of wise recommendations. Some of these, though minor in terms of

investment, were of great potential value to educational advance. They included for example, provisions for educational research and for inservice training of teachers through socalled extension centers. Nevertheless the actual proposed allocations, shown in Table-2, do not seem entirely consistent with the proposed priorities (Curle Adam, p. 52).

TABLE-4

First Five Year Plan 1955-1960 Proposed Allocations For Education, Public Sector

	Million of Rupees	Percentage
Primary education	104.52	18 .0
Secondary education	154.92	26.7
Teacher education	38.20	6.6
Technical education	50.55	8.7
College and Universities	170.90	29.4
Scholarships	5.50	0.9
Scientific and Industrial research	28.30	4.9
Labour training/Schemes	17.86	3.1
Miscellaneous	9.95	1.7
Total	580.70	100

Source: First Plan p. 590.

For a country as undereducated as Pakistan considerably higher allocation for higher education as compared to primary level was hardly likely to promote better equilibrium in the system. Likewise the exiguous contribution to technical education hardly conforms to the expressed objectives of relating the educational plan to the overall

economic plan. (Curle Adam, p. 52). However, all in all the Plan could be implemented only 55 percent. There were two main reasons for this rather poor performance. First was the growing political instability and the second was lack of financial as well as skilled human resources. Altogether the performance during the First Plan period gave little encouragement to Pakistani educators. Table 3 shows how little, in concrete terms, was actually achieved. (Curle Adam, p. 54).

TABLE-5
Educational Development in
First Five Year Plan Period

	1954-55	1959-60
Primary Education Schools	41,500	44,200
Enrolment	4,266,000	4,706,000
Secondary education Schools	5,475	6,000
Enrollment	8,69,000	1,099,000
Teacher Education Annual output Primary	7400	7400
Annual output Secondary	1300	1800
Technical Education, including technical, Engineering, medical, agricultural annual out put	1,121	1767
Colleges and Universities enrollment	66,766	117,568

Source: 2nd Five Year Plan

There has been a reasonable progress in all other fields of education except for teacher education which remained static. Perhaps the most serious failure of the First Plan was in the area of teacher training. (Curle Adam, p. 55).

Secondary Education in the light of First Five Year Plan

As mentioned earlier, analysis of education and training in the First Five Year Plan encompassed all the important aspects of education. The Plan discussed various aspects of secondary education clearly. It was stated:

> Secondary schools produce the bulk of the trained and informed citizens needed in all walks of life. Most of the students, after successfully completing the secondary school, will go directly into business, industry, agriculture and government. Many of them will attend teacher training institutions and village worker training programme, technical, general and professional colleges and universities. Secondary education must meet the diverse needs of our country, and our secondary schools must be so distributed geographically as to be readily accessible to all areas and all groups. The traditional secondary school system of the sub-continent was created and developed to fulfil the need of training English speaking clerks and office workers. Secondary education thus had little meaning as a educational programme in its own right. It was largely a preparation for a restricted type of government employment or a passport to higher education. (Curle Adam, First Five Year Plan, p. 548).

It is very interesting to note that in 1955, nearly 2000 of the 2,317 High schools and about 3000 of the 3,426 Middle schools were maintained by private sector and NGOs. However, geographical distribution of the schools was not balanced and rural areas were particularly neglected. It also meant lesser number of schools for girls. The government has several well-defined functions to perform in secondary education including development and maintenance of high standards, balanced geographical distribution of schools, greater equality of opportunity for education, regardless of economic status, and more facilities for the education of girls. The Plan recognized the urgency of making a series of changes in the high school curriculum and important teaching methods. These changes, the Plan says, stem from the basic principle that secondary education has its own objectives in terms of the needs of youth. It should no

longer be treated as a preparation for entry to the higher educational institutions (First FYP, p. 549).

The plan recommended that one of the major changes, which is universally agreed and which must be made in the secondary school programme, was to offer a more diverse and enriched series of courses to prepare rounded citizens in terms of their own capabilities and the social and economic needs of the nation. More specifically, the secondary school system must strengthen its teaching of science and applied arts and give pupils more adequate pre-vocational preparation for careers in agriculture, education, social welfare, business and industry. There is general agreement on this point, but there is uncertainty about the methods for accomplishing this desirable objective. The uncertainty lies in two questions:

a. Should the secondary school system train pupils for specific occupations in agriculture, business, industry and government?

b. Should there be one secondary school system or multiple systems with schools specialized according to an agricultural, technical, commercial, or academic bias?

Regarding the first question, the Plan opined that secondary school system should not be relied upon to train pupils for specific occupations in agriculture, business, industry or government. Its role in relation to vocational education should be to prepare boys and girls in the knowledge and skills which would widen their opportunities for more particularized vocational or professional training in special or higher institutions or in employment. Secondary schools could not be expected to sacrifice their essential

objectives to the narrow training required for specific occupations. In answering the second question the plan recommended that there should be one, and not several, secondary school system. A bifurcation or stratification of the school system would tend to put pupils into social and economic classes and unduly limit their future choices and opportunities. The solution is to broaden the curriculum of each secondary school, with emphasis on those aspects of economic life which are of greatest concern to the community and which provide the most probable outlet for our youth. For example, rural schools should be encouraged and assisted to add pre-vocational training in agricultural and commercial subjects; city schools should be encouraged to add technical and commercial subjects. Under this concept secondary schools, both middle and high, would become multipurpose schools providing a general education with a practical bias adapted to the interests of the students and their life in the community (First FYP, pp. 550-51).

Regarding technical education, the report of the Technical Education Committee appointed by the Council of Technical Education for Pakistan laid a sound basis in 1950. The report has served as a guide to most of the subsequent planning and development carried out by the centre and provinces. It recommended that technical education should be treated as an integral part of the educational system. Moreover technical High schools should be established in order to introduce a technical bias in secondary education for enabling students to select courses of studies best suited to their aptitudes. Such technical High schools would be of three categories:

a. with an engineering bias.

b. with a commercial bias

d. with an agricultural bias.

The plan recommended that the Ministry of Labour at the Centre should create highly competent labour performance standards staff to prepare tests, establish standards and issue certificates in different skills and trades. It should also continue to expand its service of collecting and analysing data about manpower and occupational trends and needs. In addition to the Industry and the Ministry of Labour, the education system has an important role to play in vocational education and training. Its functions in this regard are of three types: to provide basic and well-rounded curricula and instruction at all levels, but particularly in Middle and High schools, to better prepare boys for employment and training; to provide related instruction to supplement on the job training for the apprentices and trainers; and to conduct technical schools at the diploma level to produce technicians and supervisors. The report of the Technical Education Committee emphasized that in formulating any scheme for technical education, general education must form the foundation and the school system as such should not attempt to produce skilled labour. The general character of education was proposed to be kept intact (First FYP, p. 556).

The 1952 report of the Commercial Education Committee appointed by the Ministry of Commerce and Education also reached this conclusion that teaching of general subjects in the traditionally liberal manner with provisions of options for vocational subjects, to be taught in selected schools for their direct vocational value, would probably constitute an easier line of approach (than strictly commercial schools) in our special circumstances, in addition to being in line with the experience of most

other countries. In general then, both these expert committees reached the conclusion that schools should not teach specified occupations, but that they should enrich their curricula in order to prepare pupils better for a wide choice of occupations. This is the major function of the school system in vocational training (First FYP, p. 556).

The Plan also proposed that while adding and expanding institutions for the training of secondary school teachers, it was necessary to give high priority to the training of science teachers in order to support the plan to add science instruction to most High schools (First FYP, p. 561).

The Commission on National Education

The commission on National Education appointed by the government in 1958, made a comprehensive report in 1959 (2nd FYP, p.339). This is a vital document which in twenty seven chapters and three appendices covers almost every aspect of education. It also made a number of sensible concrete proposals for the improvement of educational system (Curle Adam, p. 555). Among the recommendations made by the Commission the following may be mentioned:

Objectives of Secondary Education

1) Secondary education should be recognized as a complete stage in itself.

2) Secondary education should bring about the full development of the child. (National Education Commission, pp. 8,9,15).

Structure of Secondary Education and its Stages

3) Secondary education should properly consist of classes ix to xii, but until

compulsory education is extended to the first eight years, classes vi to viii should be considered a part of secondary education. It will, therefore, for the present be divided into three stages: Class vi to viii (Middle), ix and x (Secondary). and Class xi and xii (Higher Secondary) (National Education Commission pp. 22-23).

Curriculum

4) The curriculum at the secondary stage must be based on two principles. First it must provide a compulsory core of subjects to give every pupil the knowledge he needs to live a useful and happy life in a fast developing society. Secondly, it should include additional subjects and training to prepare him for a definite vocation and career.

5) Religious education should be compulsory in classes vi to viii and optional thereafter.

6) The use of hand tools should be made compulsory in classes VI to VIII.

7) Practical Arts courses should be introduced into Secondary School. These should include metal work, woodwork, agricultural gardens, typewriting, home economics (for girls), and courses in the artistic and ornamental crafts.

8) Within ten years, as far as possible, secondary schools should be transformed into multi-purpose schools offering a wide choice of diversified courses. (National Education Commission pp. 32-33, 45-47).

Evaluation and Examination:

9) The system of examinations should be re-organized and the award of certificates based on the performance of students in (a) the public

examination conducted by Universities, Boards of Secondary Education (75% of the total marks) and (b) school record, including the results of periodic tests and an appraisal of habits and general behaviour (25% marks).

The Teachers

10) The teachers must be properly trained before entering service. (National Education Commission, pp. 77-91).

11) The work of good teachers should be recognized by special awards made annually on appropriate occasions by the President and the Governors of the provinces (National Education Commission, p. 95).

Facilities and equipment

12) All efforts should be made by the educational authorities of the schools and the communities to provide facilities like classrooms, science laboratories, workshops, libraries, garden plots, playgrounds and equipment, in order to achieve the objective of multi-purpose secondary schools, which will provide diversified optional subjects (National Education Commission, p. 96).

Functioning of the School

13) The academic session should be of 40 weeks with a Summer vacation of two months, a Winter recess of 10 days, and a Spring recess of 14 days. Students should have 1,400 periods of instruction every year.

Guidance

14) The teacher should have intimate knowledge of the child's character and be able to give him educational and vocational guidance. Career officers

should be appointed in secondary and vocational schools to assist the teachers in carrying out this task. (National Education Commission, pp. 108-110).

Organization of Secondary Education

15) The regulation, control, and development of education at the Secondary and Higher Secondary stages should be entrusted to the Boards of Secondary Education.

16) There should be an Academic Committee to advise the Board on academic matters (National Education Commission, pp. 114-118).

Finance

17) The income of a school should be raised from three sources: (i) fees (ii) the contribution of the management, and (iii) the grant from government. The appropriate proportion would be approximately 60% from fees, 20% from the management and 20% from Government. The government grant of 20% should be paid only if a school fulfills the minimum requirements in respect of staff, building, and equipment as well as diversified courses (National Education Commission, pp. 123-136).

Women Education

18) It is from the middle stage of education (Classes VI-VIII) onwards that girls special needs begin to find expression. While most of the subjects will be common to both boys and girls, subjects of particular interest to girls such as elementary homecraft, tailoring, weaving, cookery, and home and child care should be introduced. After class VIII there will be the first major diversion and girls should be guided either into secondary

schools or into vocational schools, offering courses suited to their aptitude and interests. The diversification of subjects in our high schools should provide for courses in commercial subjects such as typing stenogaphey and book-keeping, food technology including dietetics, catering and canteen management, textile design and interior decoration (National Education Commission, p. 428).

Technical and Vocational Education

19) Technical education is an integral part of the educational system. The curriculum of the general education in schools should be diversified by including practical courses in technical subjects, such as Agriculture, Commerce and Home Economics. At the same time the curriculum of technical and vocational schools should include courses in social studies and humanities. All students should pursue a common course through the middle stage after which the first diversion of students from general to vocational and technical schools should take place. The second diversion should take place after class class X, and when the students may join polytechnic and technical institutions. (National Education Commission, p. 428).

The major recommendations of this commission report were in the field of qualitative improvement and a drastic change in the educational system of the country. The diversification of the courses in the secondary stage was a good suggestion but it failed due to inadequate number of teachers. The system of education was overhauled but the steps taken in this direction were retracted after some time, (M. Iqbal, 1967, p. 9).

Second Five Year Plan, 1960-65

The principal recommendations of the Commission were included in the Second Five Year Plan within the limits of available resources (Second FYP, p. 340). The Second Five Year Plan sought to accommodate these proposals, as well as to fill in the gaps left by the First Plan, by a larger programme than the previous one. The whole Plan was, in fact, more than twice as large as the previous one, but the share of education had dropped from 6.2 to 4 percent. In relative terms, the most significant changes were the increased stress on primary and technical as against higher education (Curle Adam, p. 56).

TABLE 6
Second Five Year Plan, 1960-65, Proposed Allocations
For Education, Public Sector

(Million Rupees)

	Million of rupees	Percentage
Primary education	327.8	24.8
Secondary education	290.2	22.0
Teacher education	49.6	3.1
Technical education	181.7	13.7
Colleges and Universities	190.8	14.4
Scholarships	46.5	3.5
Scientific and Industrial research	65.6	5.0
Labour training schemes	24.5	1.8
Miscellaneous	146.7	11.1
Total	1322.8	100

Source: Curle Adam, p. 56.

TABLE 7
First and Second Plan Allocations for
Education and Training

(Million Rupees)

	First Plan	Second Plan
Primary	105	328
Secondary	155	290
Teacher Training	38	50
Technical education	56	182
Colleges	68	55
Universities	87	135
Misc. and others	77	283

Source: (Second FYP, p. 346).

The first Plan visualized a distinct change in the Secondary school programme through the introduction of courses in technical, commercial and agricultural subjects. Unfortunately, very little diversification took place during the Plan period, nor was much done to improve the general equality of the educational programme. On the quantitative side, however, the development of secondary education exceeded Plan estimates. Provision was made for the opening of 515 new secondary schools to care for an anticipated increase of 144,000 students. Actually 540 schools were opened and enrolment rose by 23,000 in the new and existing schools.

The second Plan made provision for the amalgamation of the intermediate classes with the secondary education system; for the improvement of secondary schools by bringing their accommodation, equipment, libraries and teaching upto a specified standard; for the diversification of the programme in these institutions through the introduction of courses in technical, commercial and agricultural subjects; for the

introduction of guidance programmes so that students with special interests and aptitudes could be encouraged to take courses suitable to their talents; for the development of residential schools offering instruction of the highest standard; for additional facilities for the education of girls; and for a programme of scholarships that would ensure the education of able but needy students (Second FYP, p. 342).

During the Plan period, 160 High schools were to be opened, 103 Middle schools upgraded to High school level, and 600 Primary schools raised to middle school level. Two hundred of the 1,900 existing Middle schools were to be provided with additional accommodation and equipment. Government High schools would be improved by adding 800 qualified teachers, 650 classrooms, and 70 art rooms. Seventy science laboratories would be fitted with modern equipment. Courses in industrial arts, commerce and agriculture would be introduced in 250 middle schools and 45 High schools. The programme for secondary education proposed in the Plan would increase the participation rate at secondary level from 12 in 1960 to 16 in 1965 (Second FYP, p. 343).

Regarding technical education, the Plan highlighted that the basic weakness in the entire programme of technical education had been the failure to perceive it as an integral part of the total educational effort. Technical training had been generally divorced from the rest of the educational system and has, therefore, failed to produce the well-rounded, adaptable type of individual that was needed. Technical training must be based on the understanding that the human personality cannot be segmented and that the development of the individual as a worker, as a citizen, and as a person must be a part

of the same educational process. The second Plan represented an effort to remedy the fundamental weaknesses in the technical education and to ensure that technical education would develop as an integral part of the educational system (Second FYP, p. 346).

Report of the Curriculum Committee For Secondary Education classes (vi-xii) (1960)

In pursuance of the recommendations of National Education Commission the Curriculum Committee was established under the auspices of its implementation unit in 1960. Besides many other important observations and recommendations in different facets of secondary education, the Committee discussed the stages of secondary education, its problems, as well as objectives, and suggested a scheme of studies.

The Growing Child

The period of seven years, from the age of ten to seventeen, for which the Curriculum Committee had to prepare the curriculum and syllabi is the most critical in the life of a pupil.

The physiological and mental growth of the pupil is so great as to necessitate the division of secondary education into parts with their own specific educational objectives. The Commission on National Education divided secondary education into three stages; the middle stage, (classes vii-viii), the secondary stages (classes ix and x), and the higher secondary stage (classes xi and xii). Each of these stages has its own specific problems and objectives.

a) Middle Stage

At the middle stage the child is between the ages of 10 and 13. He desires to handle various articles to understand how they are formed. He is interested in knowing their constituents and also in separating and regrouping them. He is happy to undertake various activities as exploration of the world around him. His power of concentration is not yet developed, nor has he yet acquired any strong and stable likes and dislikes. The instinctive urges are in search of objectives around which they may be organized with a greater or lessor degree of permanency (Curriculum Committee Report, 1960, p. 23).

b) Middle Stage subjects

It is necessary at this stage to permit a child to undertake various activities so as to find particular directions for which his mind may be specially suited. For this reason, the Committee recommended the largest number of subjects, so that a pupil tries a variety of experiences and learns something of every essential branch of knowledge, which he will need in practical life. The compulsory subjects are (1) Urdu, (2) English, (3) Maths. (4) Social Studies, (5) General Science, (6) Religious Education, (7) Arts and Crafts and Practical Arts and (8) Physical Education. One or two elective subjects are also permitted which could be additional language such as Arabic or Persian, or a subject like Drawing or Music. The Committee recommended seventeen practical subjects and every pupil was expected to take up at least one of them (Curriculum Committee Report, 1960, p. 24).

c) Secondary Stage: The Pupil

At the secondary stage, the committee says that the pupil is passing through adolescence and is acquiring specific likes and dislikes for certain type of mental and physical work. His power of understanding and judgement is improved. His special aptitudes and interests have considerably stabilized and he is able to select courses of study according to his aptitudes. As the majority of pupils will leave school at the end of class x and will take up different careers, the depth of the syllabi was increased so as to ensure a certain minimum level of competence (Curriculum Committee Report, p. 24).

d) Secondary Stage: Subjects

The Committee felt that reducation was necessitated in the number of compulsory subjects as compared with middle stage and provision of a wider range of elective subjects. Subjects were also grouped to suit the personal inclinations of pupils or the careers which they may wish to take up. There was a wide variety of elective subjects from which pupils would be allowed to make their choice. Courses of study had been brought close to the needs of the practical life. The compulsory subjects were (1) Urdu, (2) English, (3)General Mathematics, (4) Social Studies, (5) General Science and Physical Education. The number of elective subjects had been increased as compared to middle stage and every student was expected to take 3 to 5 elective subjects/Papers.

e) Examinations

The existing system of examination, the Committee recommended, needed

improvement. It should aim at testing understanding, intelligent observation and co-ordination, power of reasoning and critical judgement, and not simply the amount of information and knowledge of facts. Mere cramming should not be permitted to lead to success. The syllabi, instruction, and examination should be closely related, so as to constitute parts of one integral process (Curriculum Committee Report, p. 56).

Commission on Students Problems and Welfare, 1966

This Commission was appointed to find out the causes of students unrest and to recommend suitable measures to rectify their grievances. The Commission also found that adoption of unfair means to succeed in an examination had become rampant and that it was being practised not only with the connivance but also with the active cooperation of some of those responsible for conducting examinations. The Commission said "nowhere have we found a good word for the system of internal evaluation and sessional work markings, introduced in compliance with the recommendations of the Commission on National Education, to give a weightage of 25 percent marks to be awarded by the class teachers and counted towards the final result" (Commission on Student Problems, 1966, p. 5).

The Commission received numerous complaints against the text books prepared by the Text Book Boards. It was allged that the books so prepared neither advanced the objectives laid down by the Commission on National Education nor were they notably better than the old textbooks. The general criticism was that they were stereotyped and unimaginative and designed merely to give such elementary knowledge

of the subjects, mostly in the tabloid form, as could be learnt by rote. The Commission realized that there was little in the syllabi which required a student to make an intelligent use of his knowledge. Moreover, the science syllabus was further said to be out of date and insufficient to give the student the background necessary for developing an interest for higher studies in science (Commission on Student Problems, p. 26). The Commission thus recommended that the government should set up experts committees to prepare appropriate syllabi and see that the text books are prepared in accordance with the syllabi and really fulfil the objects which were sought to be achieved by the Commission on National Education (Commission on Student Problems, p.28). The commission further recommended that scholarship examination should be held every year at Class VIII level not only to find out as to who are worthy of being helped with scholarships to go over to the next stage of education but also to determine as to how many of those who take this examination are capable of benefiting from such higher education. Those considered unsuitable should be advised according to their respective aptitudes to choose vocational and technical subjects so that they may be properly equipped in classes ix and x to go on to technical schools and polytechnic instead of crowding instituions of general education (Commission on Student Problems, p. 28).

The Third Five Year Plan (1965-70)

Rationale of the Third Plan Programme

The Third Plan was squarely directed towards a well balanced and

integrated development at all levels of education. Quality education was the keynote of the Third Plan. Two other crucial concerns of the Third Plan were the widening the base of primary education and greatly increasing the facilities for the technical and vocational education (Ghafar S.A, p. 2).

It is of great importance that children coming through the expanded primary system should have the opportunity to go on for further schooling. The Third Plan, therefore, considered that facilities for appropriate secondary education had to be extended to a certain realistic size. It was felt that, at this stage, vigorous efforts were necessary for the introduction of diversified courses and the induction of a large number of students into subjects such as Industrial Arts, Agriculture, Commerce, and Home Economics. Here some guidance and counselling becomes important for directing students to the most appropriate form of education, to apprenticeship, to craft training, and to the study of science and mathematics consistent with their interests and aptitudes (Ghafar, S.A., p. 4).

The Third Plan recognized that secondary education provides the largest number of people with requisite skills and intellectual ability to meet the immediate and multifarious needs for a rapidly expanding economy. This stage of education should, therefore, be looked upon mainly as terminal rather than merely preparatory to higher education. (Ghafar, S.A., p. 18).

The Plan laid down that highest priority at the secondary level would be accorded to the rapid introduction and development of a diversified currriculum. Two or more electives would be introduced in the majority of secondary schools from the wide

range of subjects in industrial arts, agriculture, commerce, home economics and other pre-vocational and technical disciplines (Ghafar, S.A., p.19).

The teaching of mathematics and science would also receive the greatest possible emphasis during the Third Plan. The Plan observed that the quality of education in these subjects was deficient and needed urgent attention. This would be done by the provision of upto date laboratories, science equipment, and text books. The main problem was the dearth of suitably educated and trained teachers of science and diversified electives ((Ghafar, S.A., pp. 21-22).

A very important feature of all these programmes whose keynote was diversity and choice was the development of an effective guidance system, to assist the children in making suitable decisions. This guidance and counselling programme would be based on the use of standardized tests of intelligence, interest, and aptitudes stratified for different age and grade level children and young people. This programme, The third Plan said, would assist pupils in making correct choices of subjects for study or in seeking opening for employment (Ghafar S.A, pp. 21-22). The Plan also endorsed the on-going scheme of pilot secondary schools. The scheme aimed at developing a selected number of schools with an expanded and diversified curriculum to serve as model for others (Ghafar S.A., p. 20).

Regarding secondary school teachers, the Third Plan proposed the following steps:

1) Every University must realize its responsibility of providing teachers for secondary level of education fully equipped in quality and substantial in

numbers.

2) Education should be introduced as a regular elective subject at the undergraduate level.

3) The syllabi of B.Ed. and B.A./Hons. in Education should be modernized.

4) By the end of the Third Plan all the teachers training colleges would be staffed by qualified persons as 'teachers of teachers'.

5) Education Extension centres would be greatly strengthened.

6) Teachers of pre-vocational subjects at the middle junior High schools and diversified courses at secondary stage would be trained on priority basis to meet the demand of Comprehensive High schools (Ghafar S.A, pp. 26-30).

The Third Plan envisaged a necessary shift from traditional subjects of study to practical and essential skills. Without this the country's long term social and economic objectives would founder for lack of skilled personnel needed to carry out the great variety of tasks upon which development depends. However, the plan pointed out, that one of the main problems of education at the trade/craft level was that responsibility was dispersed among so many agencies. There was a need for co-ordination among them (Ghaffar S.A, pp. 35-37).

The Third Plan allocated a total of Rs. 2730 million for the education sector out of which Rs. 410 million were allocated for secondary education, i.e., 15% of the total allocation for the education sector. The Plan could only utilize 43.64%. (Third Five Year Plan). Total achievements against its targets are given below:-

TABLE 8
Third Plan Targets and Achievements

S. No	Sub-Sector	Unit	II Plan targets 1965-70	Total achievements	%age achievements
1.	Improvement of Existing High Schools				
	a. Construction of buildings for existing High schools	Number	10	3	30
	b. Construction of additional rooms at High schools	Number	800	675	84
	c. Construction of Arts/Drawing Rooms	Number	200	126	63
	d. Provision of Scientific equipment and furniture at High schools	Number	300	300	100
	e. Provision of library service in existing High schools	Number	200	186	93
	f. Introduction of science courses in existing High schools	Number	780	780	100
	g. Provision of hostels	Number	50	30	66
2.	Establishment of High Schools	Number	1600	535	33
	a. By upgrading of middle School to High schools	Number	100	83	83
	b. By opening of new high schools	Number	100	66	66
	c. By opening comprehensive High schools	Number	40	20	50
3.	Additional enrolment in High school	Lakh	1.25	1.02	82

Source: Third Five Year Plan p. 432

New Education Policy 1970

Inspite of many efforts, the system of education was not coming up to the aspirations of the nation and there was a feeling of general dissatisfaction prevalent in the country. Consequently a study was launched by the Education Division with the

objective of reviewing the existing educational policies, so that their shortcomings and failures are identified and remedial measures are suggested. A set of proposals was the result of this review to formulate a new education policy. These proposals were transformed into the New Education Policy which was adopted by the cabinet in 1970 (Perveen Shahid, 1985, p. 2). The aims laid down in the Policy are:

a. To impart a common set of cultural values based on the precepts of Islam.

b. To create a literate society.

c. To attach a high priority to the development of scientific and technical skills.

d. to use education as a force of national unification.

e. To integrate *madrassas* into normal school system.

f. To undertake massive programms of adult education.

g. To reorganize secondary education.

h. To decentralize educational administration (New Education Policy, 1990, p. 27).

The 1970 Education policy was to be implemented during the Fourth Plan period. (Perveen Shahid, p. 9). The 1970 Education Policy recommended that alternative arrangements should be made for vocational training of those not proceeding for secondary education (Perveen Shahid, p. 9). The policy suggested creation of facilities for 4,35,000 students to get enrolment target of 122 million. However, these facilities were to be offered in the fields of science, Technical Education, Agricultural Services, Trades and Home-Economics. 1970 Policy also emphasized expansion and improvement

of facilities so that enrolment ratio between these fields and general education comes to be 60:40. 1970 Policy recommended diversification of education from secondary level upwards with separate Technical Education Institutions or by adding separate wings in the existing institutions (Perveen Shahid, p. 21).

The Fourth Five Year Plan 1970-75

The development plans of Pakistan have increasingly been based on the concept that education is a vital national investment and a major determinant of economic progress. This admitted importance of education, however, has not always been reflected in the implementation of the Plans owing to pressure exerted by completing demands. The objectives of the Fourth Five Year Plan generally include the main elements of the New Education Policy of 1970. (Ghafar S.A. 1985, Fourth FYP, p. 1).

The Fourth Plan would encourage private sector investment in education by providing more liberal subsides to the educational institutions managed privately. The Plan very rightly noticed that there were three categories of secondary schools in the country, i.e., Government High School with national or regional language as medium of instruction, English medium government and private schools, and *Madrassahs* imparting religious instruction. It is essential that gulf between various types of schools is gradually narrowed down. An important step would be the preparation of a comprehensive curriculum with a common base for all schools so as to allow students the benefit of inter-transferability. The Third Plan visualized a transformation of this stage of education

by making it broad-based and science oriented. The actual progress made in this direction during the previous Plan, however, leaves much to be desired. Out of 400,000 students who took the matriculation examination of 1970, more than 75% appeared in general art subjects, about 20% in elective science and about 5% in all the remaining groups. It is necessary to vocationalise a large majority of secondary school courses, imparting basic knowledge of crops storage, agricultural equipment, soil, seeds, rural carpentry, first aid and nutrition as an integral part of courses in rural secondary schools. The programme of diversified courses would be intensified to cover a sizeable proportion of secondary schools in the urban areas. (Ghafar S.A., p. 9). The Plan proposed that education in Arts should be restricted and instead provision should be made through liberal grants for the teaching of science and diversified courses, including part-time vocational and professional training in secondary schools and intermediate colleges. The curriculum of *Madrassah* would be broadened and modified so as to allow teaching of science mathematics and vocational subjects (Ghafar S.A., p. 10).

The Fourth Five Year Plan (1970-75) was prepared within the framework of the United East and West Pakistan. But after the dismemberment of East Pakistan in 1971, the Plan was abandoned and the country resorted to Annual Development Plans. Education Policy promulgated in 1970 was replaced by another Education Policy 1972-80, which had been the guiding factor in financing education thorough the annual development plans (Abdul Ghafoor, 1982, p.14).

The Education Policy (1972-80)

The Education Policy (1972-80) laid down the aims of education which include the following:

a. Ensuring the preservation, promotion and practice of basic ideology of Pakistan and making it a code of individual and national life.

b. Building up national cohesion by promoting social and cultural harmony compatible with our basic ideology through conscious effort of the educational process.

c. Equalizing access to education through provision of special facilities for women, underprivileged groups and mentally retarded and physically handicapped children and adults in all areas in general and the backward in particular.

d. Designing curricula relevant to the changing social and economic needs compatible with our basic ideology and providing a massive shift from general education to more purposeful and agro-technical education.

e. Providing a comprehensive programme of studies through integration of general and technical education and by keeping options open for transfer from one course of study to another. (Education Policy, 1972, pp. 1- 17).

Regarding the secondary education the Education policy (1972-80). proposed the following:

1. Education in class ix and x would be made free in all schools from Oct. 1974.

2. Efforts would be made to increase participation rate of Secondary level from present 8% to 15% by 1980.

3. The Policy suggested that a boy who leaves school after matriculation/intermediate must be ready to accept social responsibility by getting absorbed in our socio-economic framework as a trained middle-class technician or worker. For this purpose vocational and occupational subjects would be added to general education at this stage (Education Policy, 1972, p. 9).

4. There would be massive shift from enrolment in arts towards enrolment in science and technical subjects. By 1980 one third of the total enrolment will be in each of the three streams. Arts, Science and Technical/Vocational subjects (Education Policy, 1972, p. 9).

5. The integration of general and technical education will equip secondary and college students for gainful employment, including self-employment, in industry, agriculture, business, home-economics and education, in addition to providing them a programme of general education. The areas of vocational studies for which facilities will be developed include: electronics, auto-electricity, plumbing, household electrical appliances, dairy farming, poultry farming, vegetable farming, sericulture, crop and livestock production, shorthand, type writing, insurance and estate brokering, clearing, forwarding and shipping practices, home management, cooking and baking, First Aid, home nursing, food

production and preservation and education.

6. An integrated science course, including mathematics, biological and physiological sciences, will be introduced at the High and Intermediate stages with a view to giving students a more comprehensive and diversified preparation enabling them to have a wider choice at the time of entry into higher institutions of professional and general education (Education Policy, 1972, p. 11).

7. The existing comprehensive schools would be converted into schools for talented children (Education Policy, 1972, p. 19).

8. The curricula for the elementary stage classes (I-VIII) and the Secondary Stage (IX-XII) would be revised in detail to eliminate overloading, emphasize learning of concepts and skills, and encourage observation, exploration, experimentation, practical work and creative expression. This task was to be assigned to representative committees of specialists, lecturers, practicing teachers and curriculum research experts (Education Policy, 1972, p. 27).

9. Educational Equipment Technical Assistance centres would be established in Sindh and NWFP. These centres would produce scientific equipment and other instructional aids to standard designs (Education Policy, 1972, p. 29).

10. The present examination system at secondary level would be reviewed and streamlined by the standing committees to be constituted under the

National and Provincial Educational Councils (Education Policy, 1972, pp. 31-32).

Annual Development Plans 1971-72 to 1977-78

As explained earlier, the Fourth Five Year Plan was abandoned and the country resorted to Annual Development Plans. Like other sectors of the economy, allocations for the education sector were now to be made on a year to year basis, with a view to the programmes pursued by the government. During these years the Education Policy, 1972-80, was promulgated by the government and as such funds were provided for these programmes which were incorporated in this Policy. The Fifth Plan provided details of expenditure on various sub-sectors of education as under:

TABLE 9

Annual Distribution of Development Expenditures on Education by Sub Sectors

(Rs Millions)

Year	Total annual Expenditure (a)	Expenditure on sub-sectors of education(b)						
		Primary	Secondary	Teacher Trg.	Technical	Higher	Misc.	Total
72-73	4455	37	46	8	22	50	57	220
73-74	6506	23	53	9	44	63	117	309
74-75	10754	57	75	15	53	119	193	512
75-76	13558	139	113	22	53	186	193	706
76-77	16239	48	86	15	50	128	239	566
77-78	17150	206	89	40	61	141	231	768

Sources: a) Pakistan Economic Survey (1980-81 p. 241).

b) Fifth Five Year Plan (1978-83 p. 715).

The total development expenditure on education ranged between 3.5 and 5.2 percent of the total public development expenditure. During 1975-76 it went upto 5.2 percent, where as during 1976-77 it fell to 3.5 percent of the total public sector development expenditure. Expenditure on primary education sector during 1977-78 rose to 27 percent of the total development expenditure on education, from 8 percent in the preceding year. During the years 1975-76 and 1972-73, it was 20 and 17 per cent respectively. This means that primary education received a boost during 1972-73 and 1977-78. The percentage expenditure on secondary education fell from 21 percent in 1972-73 to 12 percent in 1977-78. Teacher and technical education attained steady increase in their development expenditure. Similarly, college and university education, bracketed as higher education, also made gains, i.e., between 18 and 26 percent of the total educational expenditure (Abdul Ghafoor, 1982, p. 15).

The major trends which emerged during this period were: (a) giving a high priority to providing access to education through expansion of programmes for basic functional education; (b) improvement of the quality of education; (c) Consolidation of higher education; (d) increased emphasis on technical education; (e) research, experimentation and innovation in educational programmes; (f) improvement of the organization and management of education with a tilt towards involvement of the community and decentralization of authority. Primary education had been free for quite some time. During the period 1972-77, secondary education was also made free and privately managed educational institutions were nationalized. To meet the increasing demand and remove regional disparities many new schools were opened. The expenditure on education was in the range of 1.3 to 1.8 percent of the GNP. A large part of the increase in expenditure over these years is attributed to price escalation, increase in the

salaries of teachers and the nationalization of the privately managed educational institutions (Abdul Ghafoor, 1982, pp. 15-16).

Fifth Five Year Plan (1978-83)

At the very outset the Plan recognized that one of the most significant problems in the field of education is the low efficiency of educational institutions and the poor quality of their product (Fifth FYP, p. 299). The Plan provided safeguards for primary and secondary education by putting restrictions on the transfer of allocated funds to the school education to any other sub-sector (Fifth FYP, p. 303). The Plan proposed to increase participation rate to 68 percent for primary school, 31 percent for middle school and 14 percent for high schools by 1982-83. (Abdul Ghafoor, 1982, p. 17).

The education sector was provided Rs. 9646.3 million as development expenditure, Rs. 10569 million as recurring expenditure. Against the total plan outlay of Rs. 148.17 billion the education sector was allocated Rs.9.64 million which constituted 6.5% of the total outlay. This meant that the financial allocations for the education sector did not exceed the percentage allocations of the Second Five Year Plan. Primary and secondary education were allocated 31 and 33 percent respectively of the total education Sector financial outlay. If the development and non-development expenditures were taken together, then we find the primary education at the top with 35 percent, secondary education 28 percent, teacher education 12 percent and University education 7 percent of the total sectoral allocation. The details of these as worked out in the Plan are as under:-

TABLE 10
Estimates of Financial Requirements for 1978-83

(Rs. in million)

S. No.	Sub-Sector	Development Expenditure	Non-development expenditure	Total
1.	Primary	3049.7	6990.6	10040.3
2	Secondary	3257.8	4815.7	8073.5
3	Teacher Training	380.0	318.0	698
4	Technical Education	766.0	933.3	1700.1
5	College	767.0	2802.6	3569.6
6	University	725.0	1307.3	3032.3
7	Scholarships	450.0	62.4	512.9
8	Non Formal Education	50.0	3.6	53.0
9	Production and Supply of books	40.0	-	40.0
10	Curriculum Development	16.0	3.6	19.6
12	Examination Reforms	5.0	2	7.0
12	Guidance and counselling	5.0	65.6	70.0
13	Development and library Services	36.0	6	42.0
14	Development of Meusums	10.0	5	15.0
15	special Education	23.0	10	33.0
16	Miscellaneous	65.0	1244	1309.0
	Total	9646.3	10569.0	28215.3

Source: Abdul Ghafoor, 1982, pp. 18-19.

Among other things, the Fifth Five Year Plan envisaged a reducation in dropout rate in primary education, a vocational bias to secondary education, more job oriented technical education, expanded facilities for training of teachers, more amenities for teachers in rural areas, continuation of reform of examination system and curricula, improved supervision and intensification of education research (Ghafar S.A. p. 4).

At the secondary level the Plan laid major emphasis on re-orientation of education and qualitative improvement. The principal step in reorienting secondary education was the introduction of agro-technical courses. The plan provided for the introduction of these courses in 1750 additional schools at the middle stage and 874 schools at higher stage. Detailed programme for secondary education was as under

(Ghafar S.A., pp. 12-13)

TABLE 11
Detail of Programmes for Secondary Education

			Punjab	Sind	NWFP	Balochistan	Federal	Total
1.	Additional Enrolment (000)							
	a. VI-VII	M	309	129	80	12.5	16.2	547
		F	177	40	13.4	3.5	1.9	186
	b. IX-X	M	55	42	29	3.2	4.2	131
		F	38	35	5.9	0.6	6.1	78
2.	Physical Programme							
	i)	Upgradation from Primary to Middle	2270	768	592	94	142	3866
	ii)	Upgradation from Middle to High	503	362	268	26	62	1236
	iii)	Establishment of New High schools	-	12	-	5	41	158
	iv)	Introduction of Agro-tech. studies						
		a. Middle	1000	250	300	100	100	1750
		b. High	500	100	150	50	74	874
	v)	Construction of buildings for existing schools						
		a. Middle	30	50	40	15	26	161
		b. High	50	30	40	15	27	162
	vi)	Development of Science education construction of science labs.	160	60	60	30	30	340
	vii)	Supply of Science apparatus	250	130	60	30	70	540
	viii)	Construction of additional class rooms, drawing rooms and library rooms	1000	980	225	110	541	3156
	ix)	Construction of Hostels	240	240	120	120	550	1270
	x)	Construction of teachers residences	575	250	175	30	120	1150

Source: Ghafar, S.A., 1985, pp. 12-13.

Fifth Five Year Plan.

The evaluation of the Fifth Plan revealed that in the sub-sector of education percentage of utilization was 33.46. The physical achievements of the Plan were also very low. In the introduction of agro-technical studies in High schools the

achievement level was 22.88 percent. In the field of construction of teachers residences the Plan could only achieve 9.08 percent (Mukhtar Ahmad Bhatti, 1987, pp. 434-436).

The total expenditure on education during the period 1970-71 to 1977-78 was in the range of 1.3 and 1.8 percent of the GNP. It appears that during the Fifth Five Year Plan, financing of education did not improve but in fact deteriorated as may be seen in the following Table (Ghafoor Abdul, p. 23).

Table 12
Annual Total Education Expenditure, GNP

Educational Expenditure (Rs. in Million)

Year	Development	Non-Development	Total	GNP current Factor Cost	Educational Expenditure as % of GNP
1970-71	186	443	629	45620	1.4
1971-72	126	510	642	49268	1.3
1972-73	232	623	855	61258	1.4
1973-74	312	841	1153	81058	1.4
1974-75	522	1253	1775	105717	1.7
1975-76	715	1560	2275	124415	1.8
1976-77	573	1726	2299	141166	1.6
1977-78	656	2310	2966	169310	1.7
1978-79	660	2773	3133	193315	1.3
1979-80	693	2828	3521	230658	1.5
1980-81	973	3258	423	275132	1.5

Source: Ghafoor, Abdul, 1982, p. 23.

Expenditure on secondary education recorded a decline during the period from 1971 to 1978 as compared to the expenditure during the Second and Third Five Year Plans. However, there seemed to be a recovery during the Fifth Five Year Plan period as indicated in the table below:

TABLE 13
Sectoral Expenditure as Percent of the Total Expenditure on Education

Sub-Sector	Second Five Year Plan	Third Five Year Plan	Annual Plans 1971-78	Fifth Five Year Plan
Primary	4	4.6	16	24
Secondary	21	24	15	20
Higher (including college, general)	28	25	22	25
Technical	17	20	9	8
Teacher	4	3	3	7

Source: Abdul Ghafoor, 1982. p. 25.

National Education Policy 1979

Aims of education are guide posts which provide purpose and direction to the educational system. Obviously they should be consistent with our faith, national ideology and aspirations. Since aims have to provide clear-cut framework, selection of the same need to be carred out boldly and with clarity of thought in order to provide a sound and meaningful base to the educational effort in the country. Consequently Government decided to adopt the following aims of education in National Education Policy 1979.

a. To foster in the hearts and minds of the people of Pakistan in general and the students in particular a deep and abiding loyalty to Islam and Pakistan and a living consciousness of their spiritual and ideological identity thereby strengthening unity of the outlook of the people of Pakistan on the basis of justice and fairplay.

b. To create awareness in every student that he as a member of Pakistani nation is also a part of the Universal Muslim Ummah and that it is expected of him to make a contribution towards the welfare of fellow Muslims inhabiting the globe on the one hand and to help spread the message of Islam throughout the world on the other.

c. To produce citizens who are fully conversant with the Pakistan movement, its ideological foundations, history and culture so that they feel proud of their heritage and display firm faith in the future of the country as an Islamic state.

d. To develop and inculcate in accordance with the Quran and Sunnah, the character, conduct and motivation expected of a true Muslim.

e. To provide and ensure equal educational opportunities to all citizens of Pakistan and to provide minorities with adequate facilities for their cultural and religious development enabling them to effectively participate in overall national effort.

f. To impart quality education and to develop fully according to their capacity, each individual's potentialities, through training and retraining and to develop the creative and innovative faculties of the people with a view to building their capability to effectively manage social, natural and productive forces, consistent with the value system of Islam.

g. To provide a minimum acceptable level of functional literacy and fundamental education to all citizens of the country particularly the young, irrespective of their faith, caste and creed in order to enable them to participate productively in the total national efforts.

h. To create interest and love for learning and discipline among the youth and to ensure that every student is imbued with the realiztion that education is a continous and a life long process.

i. To promote and strengthen scientific, vocational and technological education, training and research in the country and to use this knoweldge for socio-economic growth and development thereby ensuring a self-reliant and secure future for the nation (National Education Policy, 1979, pp. 1-2).

Implementation Strategy

Educational Polociy, 1979 adopted following strategies:

1. Highest priority would be assigned to the revision of curricula with a view to reorganizing the entire content around Islamic thought.
2. Efforts would be made to integrate traditional *Madrasah* and Modern Schools into one system of education.
3. National language would be used as medium of instruction
4. As far as possible, facilities and programmes of educational institutions will be attuned to the demographic factors, structure of the economy and needs of the labour market.
5. The interdependence of knowledge and action would be made manifest to train people for productive work and inculcate willingness to continue to learn and develop their capacities to keep pace with the rapidly changing production methods and working conditions in the highly technical modern world.

6. A massive programme of equipping the farm and factory workers with specialized unit skills would be launched in order to raise the productivity beginning with sectors which had promise to quick growth and development (National Education Policy, 1979, p. 2).

Secondary Education

The National Education Policy, 1979 stated that secondary education stage plays a very crucial role in education. It was, therefore, essential that secondary school curriculum provides a number of meaningful options to enable the students to select courses suited to their aptitude, interest and requirement. Practically in all the countries of the world, the secondary education is of 12 years duration and B.A/B.Sc. of 4 years duration after secondary education. It is, therefore, necessary to restructure the entire education system. The policy gave the following programmes for the restructuring of secondary education. (National Education Policy, P. 22).

Programmes

i) The present four-tier system will be replaced by a three-tier system of elementary (i-viii) secondary (ix-xii), and university education in a phased manner. Interests of the college teachers will be protected.

ii) Mathematics will be a compulsory subject for all students.

iii) Agro-tech nical subjects will be introduced in all the schools in a phased manner.

iv) A wide range of curriculum offerings will be introduced at the secondary

stage for greater diversification according to the aptitude of the students.

v) One thousand Middle schools will be upgraded to High level and 200 new schools will be opened. This will bring about an increased enrolment from 18 laks at present to about 28 laks during the next five years.

vi) Second shift will be introduced in schools, wherever feasible, in order to increase the enrolment.

vii) 1,150 residences for teachers, especially for female teachers, will be constructed.

viii) New science laboratories and libraries will be added to secondary schools where required. Science equipment, library books, and other teaching aids will be provided in secondary schools.

All the programmes of the secondary education will be adjusted with the Fifth Five Year Plan allocations (National Education Policy, 1979, pp. 32-34).

Sixth Five Year Plan (1983-88)

Except for the Second Five Year Plan, the performance of education sector in the planned and non-planned period ending 1977-78 remained utterly deficient. The Second Plan achieved its targets both financial as well as physical. Overall the participation rate of primary school age population improved from 17 percent to 48 percent during the first thirty five years of our independence. The share of government expenditure on education as a proportion of the GNP declined from 1.8 percent in 1977-78 to 1.5 percent in 1982-83. Moreover, while the base of the pyramid did not expand

satisfactorily, its top was raised further by opening new colleges and universities. Four new universities were established against none provided for in the Fifth Plan. Nothing could portray the upside-down state of our educational priorities better than the Fifth Plan experience i.e., co-existence of the quantitative expansion of the consumptive higher education and the falling participation rate of primary education. The key note of the Sixth Plan strategy was to reverse this trend (Ghafar, S.A.1985, Sixth FYP, pp. 3-4).

Secondary Education

The main concerns of the proposed secondary education programme were maximum feasible expansion of secondary education facilities in the rural areas and qualitative improvement of teaching programmes, with special emphasis on science and mathematics. It was proposed to minimise the urban/rural and male/female disparities as indicated in table 14 below (Ghafar S.A. p.21).

TABLE 14

Participantion Rates at Different Levels of Secondary Education

		1982-83			1987-88		
		Male	Female	Total	Male	Female	Total
A.	Participation rates in Classes V-VIII						
	Total	35	14	26	44	19	33
	Urban	64	39	52	71	45	59
	Rural	23	4	15	34	8	22
B.	Participation rates in Class ix-x						
	Total	21	8	15	26	12	20
	Urban	49	27	39	52	36	45
	Rural	10	1	6	16	25	10

Source: National Education Policy, 1979, p. 21.

To bring about a qualitative improvement in secondary education, physical facilities of schools would be improved and special attention paid to the provision of laboratories, science equipment, library books and qualified staff. To provide a broad based education at the secondary level, the programme of teaching agro-technical groups of subjects, including training in Industrial Arts, Agriculture and Commerce would be strengthened. The on-going training programme in about 3,000 schools at the middle stage and 200 high schools were to be consolidated and strengthened, and training in these subjects would be introduced in 400 more schools in class vi to viii and 100 high schools in classes ix and x (Ghafar, S.A. pp. 22-23).

To improve quality of instruction, the plan proposed to implement the following programmes:

a. admission tests covering academic aptitude, communication skills and proficiency in academic subjects proposed to be studied.

b. science laboratories and libraries be provided better equipment and latest books and journals.

c. teachers should be provided facilities and incentives to improve their qualification through study at Pakistani and foreign universities.

d. Arrangements be made for in-service training of teachers.

e. Services of expatriate Pakistani scholars shall be made available as visiting professors, particularly in scientific fields (Ghafar, S.A. p. 39).

A comprehensive guidance and counseling service can be offered only if standardized, reliable, and valid psychological tests are available and teachers have necessary expertise in administering and interpreting these tests. As a beginning the Plan

provided to "make necessary preparation for establishing limited guidance services on an experimental basis in 450 secondary schools 6 in each district of which two will be girls schools)" (Ghafar, S.A, p. 49).

Plan Allocations

During the sixth Plan period education facilities were designed to expand at accelerated pace. This was indicated by the fact that the total expenditure in the public sector would increase from Rs. 6380 million in 1982-83 to Rs. 14700 million in 1987-88, an increase of 130 percent. In terms of proportions of GNP, expenditure on education will rise from 1.5 percent to 2 percent. Moreover, during the Plan period an investment of over Rs. 1000 million might be made in the private sector (Ghafar, S.A, p. 61).

Despite financial shortfalls, the secondary education sector was, according to draft Seventh Plan, able to meet the following targets during the Sixth Plan as indicted in tables 15 and 16.

TABLE 15
Sixth Five Year Plan (1983-88) Financial Targets and Achievements

Rs. (Million)

Sub-sector of Education	Allocation 1983-88	Utilization 1983-88	%age utilization
Primary	1254	1330	106.06
Secondary	1653	1622	98.12
Teacher	98	97	98.97
Technical	541	459	84.84
College	588	673	114.45
University	839	792	94.39
Scholarships	370	375	101.35
Mass literacy	126	95	85.81
Miscellaneous	215	206	100.00
Special Programme			
NMAs/MPAs	532	532	64.09
Other Divisions	220	141	

Source: Mukhtar Ahmad Bhatti, 1987, p.347.

Table 16
Sixth Plan Physical Targets and Position in 1987-88

	6th Plan Bench Mark 1982-83	Position in 1987-88	Achievements during the Plan period
Number of Middle schools	6402	8256	1854+2300 schools upgraded
Number of High Schools	4221	6594	2373
Enrolment in classes 6-8 (000)	1731.0	2460.4	747.4
Participation rate (%)	24.7	30.4	2.7
Enrolment in classes 9-10 (000)	683.0	784.7	101.7
Participation rate (%)	17.5	17.2	3%
Enrolment in classes 6-10 (000)	2396	3245	849
Participation Rate (%)	22.1	25.7	3.6

Source: Seventh FYP, p. 44.

Review of Sixth Plan

Although significant expansion had taken place in secondary education, it remained inequitably distributed among income groups and regions in the country. The long distances involved in the availability of Middle or High school facilities were another important factor responsible for the low enrolment ratio, especially in the case of girls. Every Education Policy and Plan had recommended that classes xi and xii be made part of the secondary education. Not much has been achieved in actual implementation. The Sixth Plan had made no provision for the opening of new intermediate colleges, although a number of intermediate colleges were established during the Plan period. The last two five year Plans emphasized diversification and vocationalization of secondary education, but 98 percent of the students in secondary

schools continue to be enrolled in non-vocational courses.

A large majority of students, graduating from classes viii and x have acquired no marketable skills for absorption in the economy. Classroom instructions focus on external examinations which encourage rote memorization. A great deal needs to be done to improve the teaching of science and mathematics. A large number of secondary schools face a serious shortage of laboratories, science equipment, and qualified science and mathematics teachers (Seventh FYP, p. 243).

Although the Sixth Plan achievements were lower than the targets, considerable progress was made in education sector as indicated in the above tables. During the Sixth Plan period following policy changes were made:

a. For education '*Iqra*' surcharge was levied on imports which yielded additional resources of Rs. 13.1 billion.

b. The recurring expenditure of the provinces on education over and above the 1982-83 level was treated as development expenditure and reimbursed to them.

c. Foreign funding earmarked for education projects was passed on to the provinces in addition to their normal share in Annual Development Programme (ADP).

d. The concept of spatial planning in education was introduced so that no geographical area remained deprived of basic educational facilities (Seventh FYP, p. 244).

Seventh Five Year Plan (1988-93)

The sector of education envisaged to realize the following principal objectives during the Plan period:

a. Broaden the resource base for education.

b. Universalize access to primary education.

c. Substantially improve technical and vocational training facilities.

d. Improve the quality of education at all levels and in particular of university education (Seventh FYP, p. 245).

The Seventh Plan allocated Rs. 23.1 billion for development programmes of education and training. In order to supplement it, *Iqra* surcharge levied in 1985-86 on imports of goods from abroad was to be credited directly to the *Iqra* fund as an additional income/budget for the development of education especially literacy education. Private sector would be encouraged through grants-in-aid and other incentives to share the additional burden of opening schools and colleges in the country (Syed Rasul Malik, 1985, p. 50). In all future housing schemes, provision of primary and secondary schools as well as health centers and dispensaries would be made compulsory. The cost of these facilities would be included in the cost of land and development charges which will be recovered from the allottees (Seventh FYP, p. 245).

TABLE 17
Summary of Seventh Plan Allocations for Various Sub-Sectors of Education

(Rs. in million)

S.No.		Seventh Plan Allocation
1.	Primary Education	10,128
2.	Secondary Education	6,404
3	Teacher Education	287
4	Technical Education	2000
5	College Education	615
6	Scholarships	760
7	Literacy and Mass Education	300
8	University Education	1800
9	Library system	86
10	Misc. Programmes	150
11	Other Division	150
	Total Rs.	22,680

Source: Seventh Five Year Plan, P. 245.

Secondary Education

The Seventh Plan envisaged expansion in the secondary education to absorb the increased output from primary schools. The curriculum at the secondary level would be so designed that students leaving the system after classes VIII or X would possess some useful skills to enable them to earn a living. In classes VI, VII, and VIII, students might be required to opt for one skill-oriented subject such as Agriculture, Home Economics, Metal Work, Electricity, Wood Work or Furniture Making etc. Skill training in Classes IX-X will be more sophisticated in order to turn out laboratory technicians, dental technicians, typists, accountants etc. Where technical teachers are not available, local artisans will be engaged on a part time basis.

During the Seventh Plan it was anticipated that the participation rate

would increase from 30.4 percent to 41.6 percent at the middle stage and from 17.2 percent to 24.1 percent at the secondary stage (Seventh FYP, p. 247).

Admission to class ix will be selective, based on the student's cumulative records, including class viii examination and other tests such as scholastic and aptitude tests.

Besides construction of additional classrooms and improvement of existing ones, a second shift in secondary schools will be introduced in urban areas, wherever feasible.

The seventh Plan proposed the following educational structure:

Class 0, I, II, III	Lower Elementary
Classes IV,V,VI,VII,VIII	Upper Elementary
Classes IX,X,XI,XII	Secondary

No new intermediate college will be opened, instead Classes XI and XII would be added to High schools wherever required; and intermediate colleges will start classes ix and x as well. Incentives will be provided to attract good science and mathematics teachers. Science education project will be expanded to cover more schools.

Under the Seventh Plan, a programme would be launched to provide at least one model or comprehensive school for boys and one for girls in each district so that quality education to the talented children could be ensured.

The Plan observed that different agencies were responsible for vocational and commercial education and there was no co-ordination between them. During the Seventh Plan a council of technical education would be constituted to ensure such co-ordination (Seventh FYP, p. 247).

Testing and Evaluation

The Seventh Plan provided for the establishment of Educational Testing and Measurement Services which will develop standardized tests of intelligence, aptitude, scholastic ability etc. The test scores will be used in conjunction with traditional examination scores and cumulative records of the students achievements. By a legislation to be enacted, the admission to educational institutes will be selective and strictly on merit basis.

TABLE 18
Secondary Education Physical Targets NWFP.
(1988 - 93)

S.No.		Number
1	Upgradation of Primary schools	730
2	Consolidation and improvements of Middle schools	520
3	Construction of buildings of Middle and High schools	6
4	Addition of class rooms in Middle schools	250
5	Introduction of Agro-tech. in High schools	150
6	Upgradation of Middle schools to High level	410
7	Establishment of new High schools	16
8	Addition of classes xi and xii in High schools	8
9	Consolidation and improvement of existing High schools	230
10	Addition of classrooms in High schools	125
11	Upgradation of existing High schools to model schools at District Headquarters	6

Source: Seventh Five Year Plan, p. 371.

Review of Seventh Plan (NWFP)

During the Seventh Plan period (1988-93) developmental outlay of Rs.

3431.078 million was allocated to the education sector of the North West Frontier Province against which the utilization was Rs. 3599.463 million, indicating full utilization of funds. During the period 1988-93 Rs. 15895.903 million were expected to be utilized for the recurring expenditure of the education sector. The details of developmental and recurring expenditure during the seventh Plan period are indicated below in table 19 (Eight FYP, p. 5).

TABLE 19
Development Expenditure on Education Year 1987-88 to 1992-93

Year	Developmental Expenditure	%age increase/ decrease	Recurring Expenditure	%age increase/ decrease
1987-88 base year	416.996	-	2130.075	-
1988-89	468.805	+12.4	2096.894	-1.6
1989-90	509.055	+8.6	2361.674	+12.6
1990-91	587.426	+15.4	2560.738	+8.4
1991-92	645.97	+10.0	3163.000	+23.5
1992-93	971.210	+50.3	3665.522	+15.9

Source: Eigth Five Year Plan, p. 5.

The major physical targets and achievements of the Seventh Plan were as follows in table 20.

TABLE 20
Physical Targets and Achievements of 7th Plan

S. No.	Item	Target	Achievement
1.	Primary Schools	2589	2170
2.	Mosque Schools	4391	4391
3.	Additional rooms in Primary Schools	1913	1103
4.	Reconstruction of building of Primary Schools	418	300
5.	Reconstruction of building of High schools	30	24
6.	New High Schools	7	5
7.	Upgradaton of Primary schools to Middle schools status	692	601
8.	Upgradation of Middle schools to High schools	318	282
9.	Upgradation of High schools to Higher Secondary school status	28	22
10.	Construction of college buildings	12	10
11.	Construction of hostels in colleges	11	10
12.	Improvement of existing colleges	45	37
13.	Improvement of Technical and Commercial institutions.	2	3
14.	Construction of buildings of vocational institutes	4	3

Soruce: Eighth Five Year Plan, p. 6.

Sectoral Policy during the Seventh Plan Period

The NWFP had formulated the following policy guidelines for Seventh Plan period (Eighth FYP, pp. 6-7).

i. Improvement in quality by removing the imbalances, e.g., in rural and urban facilities and male and female institutions.

ii. Highest priority for primary education, specially for girls' education.

iii. Motivation of private sector to play a more active role in education.

iv. Improvement of physical facilities of the existing institutions by providing

additional rooms in over-crowded schools, arranging furniture, equipment and science apparatus and re-construction of dilapidated school buildings.

v. Expansion and improvement of data-collection system for generating the requisite, reliable and up to date statistics.

vi. Moratorium on the establishment of new intermediate colleges; instead increase in the number of Higher Secondary Institutes.

New Initiatives During the Seventh Plan Period (NWFP)

The government of NWFP took the following initiatives during the Seventh Plan period to improve the access to and quality of cation:

i) With a view to comprehensive school mapping, the first physical school census was completed.

ii) The computerization of career records of the teachers has commenced.

iii) The National Education Management Information System (NEMIS) has been installed in the Department of Education.

iv) The Frontier Education Foundation has been established. Its Board of Directors and full time Managing Director have been appointed. Its Endowment Fund has received the first tranche from the provincial government.

National Education Policy (1992-2002)

The National education Policy 1992-2002 portrays the following picture of education:

> The participation rates at various levels of education are low. The progress in the direction for universalization for primary education is far from satisfactory. At primary, the drop out rates are in the vicinity of 50%. The women participation in education is minimal. The policy on the medium of instruction has vacillated. The quality of public instruction continues to deteriorate; the system has not responded to the inputs made. The curricula, apart from being over loaded, have not kept pace with the advancement of knowledge. So are the text books, which do not promote self-learning. The technical and vocational institutions are not dispersed equitably to enable the rural poor to benefit from these institutions. Nor, has the vocationalization of education been pursued with the enthusiasm it deserved. The mass education and technical and vocational education have failed to find an equilibrium of the type which could ensure the employability of the educated youth. The interface between society and education is resisting the diffusion of new ideas in either direction (National Education Policy, 1992, pp. 1-2).

In the process of making the Policy a series of educational conferences were held first in the provinces and Azad Jammu and Kashmir followed by a National Educational conference which analysed the whole gamut of education in nineteen working groups, comprising renowned educationalists drawn from each level of education. The problems identified, and the solutions presented at the conferences have been used to prepare the edifice of the present Policy. The Policy does not start from the first milestone, nor does it propose to demolish the existing structures. The Policy restates the objectives of education and proposes to introduce all pervasive reforms for increasing the efficiency of the system and for adjusting new educational social, economic and institutional values. The target is the creation and implementation of educational

programmes from which the nations of the Muslim Ummah can draw inspiration in their march towards twenty first century (National Education Policy, pp. 2-3).

Major Provisions of the National Policy (1992-2002)

Curriculum, Medium of Instruction

a. All vocational curricula shall be related to employment market.

b. The linkage between curriculum development, text book writing, teacher training, and examinations will be re-enforced.

c. The weightage of mathematics and sciences shall be increased.

d. A wide range of vocational subjects relevant to job requirements in the employment market and self-employment shall be introduced and liberal loans will be provided for this purpose.

e. Emerging needs which include environmental education, health education, population education and computer education shall be integrated in relevant subjects.

f. Overcrowding and overlapping of concepts in the curricula shall be removed.

g. English may be used as one of the media of instruction in addition to Urdu or a Provincial language.

Textbooks

a. Textbooks shall be revised and updated to incorporate new knowledge.

b. Curriculum development and textbook development shall be coordinated.

c. Workshop technique shall be adopted to develop new books.

d. Incentives shall be provided to teachers for producing new and attractive learning materials, making use of audio-video and print media.

e. For each course, multiple textbooks will be approved and the institutions will be allowed the choice to select any one of these texts. Private publishers will be encouraged to produce school textbooks.

Teachers

a. A separate unit of teacher training shall be set up by each Provincial Education Department and at the Federal level.

b. Mobile training units may be set up for on the job training.

c. Teacher training institutions will be reinforced with equipment and latest technology.

d. A regular in-service training programme for all level teachers will be launched.

e. Deficiency of science and mathematics and languages teachers shall be removed.

f. The private sector will be encouraged to set up teacher training institutions.

Physical Facilities

a. Well-equipped science laboratories shall be provided in all middle and secondary schools.

b. Science teaching kits shall be provided in class X to XII also.

c. Computer education will be introduced in phased manner starting with secondary schools.

d. Utilization norms of labs. and other facilities would be improved (National Education Policy, pp. 22-23).

Evaluation

a. A system of continuous interval evaluation culminating in the annual examination will be used to evaluate the performance of students. The certificate awarded to students will include marks obtained in interval evaluation as well as the final examination.

b. A National Testing Service will be set up outside the government to standardize national norms and to develop tests for entry into professional institutions and universities and award of scholarships for higher education etc.

Guidance and Counselling

A suitable institutional structure shall be established for the management of guidance and career counselling programmes to be introduced at the school, college and university level.

Discipline

A system of teacher's accountability shall be developed and enforced to maximize the participation of teachers and students in academic pursuit (National Education Policy, 1992, p. 24).

Secondary Education

The following would be the priority tasks in secondary education.

a. To make secondary education available to all.

b. To lay emphasis on science and mathematics followed by specific training

at the work site.

c. To improve quality of secondary education by enhancing competence of teachers, better physical facilities and improved curricula, textbooks and teaching aids (National Education Policy, 1992, p. 8).

d. To redesign curricula relevant to the nation's changing social and economical needs and providing a massive shift from general education to more purposeful agro-technical, scientific and professional education.

The Policy allocated additional funds for education development (1990-2000) in elementary and secondary education sub-sectors to the tune of Rs. 10 billion. In view of the present emphasis on elementary level, it would be desirable to attain average annual rate of enrolment increased by 10 percent per annum at the secondary level for the decade 1990-2000. According to the projections thus made, there will be one million students in Class-IX and X in year 2000 representing around 27% of the age group. By the year 2000 the province-wise enrolment would be as given in Table 21. (National Education Policy, 1992, p. 63).

TABLE 21
Enrolment Projections for Classes IX and X
(With Increase of 10% Per Annum).

(Thousands)

Province	Current	Projections - 2000	
		Numbers	% group
Pakistan	733	1901	27
Punjab	441	1144	31
Sindh	196	508	34
NWFP	82	213	12
Baluchistan	14	36	5

Source: National Education Policy, 1992, p. 63.

Eighth Five Year Plan (1993-98) NWFP

The Provincial Eighth Plan for the Education and Training Sector has been formulated to, *inter alia*, translate the objectives of National Education Policy (1992-2002) and Provincial Social Action Programme into concrete proposals, so far as possible, within the framework of available resources.

Objectives of the Eighth Plan

The major objectives of the Eighth Plan will be to:

i. Broaden the resource base for the financing of Education Sector.

ii. Increase involvement of the Private Sector in education, partly by grants through the Frontier Education Foundation;

iii. Reduce the imbalances in education system, e.g., gender and rural/urban imbalances;

iv. Undertake measures for decentralization of Primary Education;

v. Produce technically capable force by quantitative expansion and qualitative improvement of technical and vocational education;

vi. Improve the quality and relevance of education through curricula reforms and provision of other essential inputs;

vii. Make education responsive to the community requirements;

viii. Involve the community in the planning and operation of education facilities at the local level.

ix. Provide greater access to Primary Education, with the aim of

universalizing access to Primary Education for all boys and girls of 5-9 years age group by the year 2000;

x. Qualitatively improve the physical infrastructure at all levels of education; and

xi. Increase the avenues of employment of educated youth, and reduce their unemployment by improving their education/training and improvement of the system of examinations (Eight FYP, pp. 8-9).

TABLE 22
Target for Eighth Plan (1993-98)

Sectors	Numbers
Secondary Education	
1. Upgradation of Primary Schools to Middle (Boys)	500
2. Upgradation of Primary Schools to Middle (Girls)	267
3. Upgradation of Middle Schools to High (Boys)	150
4. Upgradation of Middle Schools to High (Girls)	70
5. Upgradation of High Schools to H.S.C. (Boys)	16
6. Upgradation of High Schools to H.S.S. (Girls)	4
7. Additional Rooms in Middle and High Schools (Boys)	500
8. Additional Rooms in Middle and High Schools (Girls)	230
Colleges	
1. Establishment of Inter Colleges (Male)	12
2. Establishment of Inter Colleges (Female)	5
Teachers' Education	
1. Establishment of Elementary Colleges for Men	4
2. Establishment of Elementary Colleges for Women	10
3. Creation of Additional Places in existing Elementary Colleges	200
4. In-service Training of Teachers	25000

Source: NWFP Eighth FYP, pp. 13-14.

TABLE 23
Financial Allocations of Eighth Plan

	Sub-sector	Throw forward of 7th plan	New Programme	(Million rupees)	
				Total	Percentage
1.	Primary Education	79.148	6550.000	6629.148	67.3
2.	Secondary Education	175.490	1129.590	13000.080	13.2
3.	College Education	125.452	635.323	760.775	7.7
4.	Technical Education	136.379	488.710	625.089	6.4
5.	Teachers' Education	30.000	118.871	148.871	1.5
6.	Adult Literacy	-	40.000	40.000	0.4
7.	Education Foundation	-	260.000	260.000	2.6
8.	Scholarships	-	86.037	86.037	0.9
	Total	546.469	9303.531	9856.000	100

Source: Eight Five Year Plan, p. 12.

An outlay of Rs. 078.019 million will be utilized on Social Action Programme of Education Sector.

Summary of provisions of Education Policies and Plans about Secondary Education

We have reviewed various Education Policies, reports of the Commissions and Development Plans since 1947. Government of Pakistan appointed several commissions/committees to review the education system and offer concrete suggestions/recommendations for its quantitative expansion and qualitative improvement. Such reform efforts started with the First Education Conference held in 1947 and has culminated in the latest Education Policy of the government promulgated in 1992. Side by side with the reform efforts, there had been attempts to integrate educational planning with the overall economic planning of the country. Since educational planning was made an integral part of the economic planning of the country, it was necessary briefly to

discuss five year Plans initiated by the government as well.

Following Education Policies and Development Plans have been reviewed.

1. Pakistan Education Conference 1947.
2. First Five Year Plan (1955-60).
3. The Commission on National Education (1959).
4. Second Five Year Plan (1960-65).
5. Report of the curriculum committee for Secondary Education classes VI-XII.1960.
6. The Commission on students problems and welfare 1966.
7. Third Five Year Plan (1965-70).
8. New Education Policy 1970.
9. Fourth Five Year Plan (1970-75)
10. The Education Policy (1972-80).
11. Annual Development Plans (197172 to 1977-78).
12. Fifth Five Year Plan (1978-83)
13. National Education Policy 1979.
14. Sixth Five Year Plan (1983-88).
15. Seventh Five Year Plan (1988-93).
16. National Education Policy (1992-2002).
17. Eighth Five Year Plan (1993-98).

The main provisions of the education policies/plans are summarized as under. The numbers in parentheses indicate the Policy or Plan in the above stated list.

Objectives of the Secondary Education

1. Preservation of the ideology of Pakistan (10,13).
2. Inculcation of Islamic values and incorporation of fundamentals of Islam (1,8,10,13,16).
3. Transition of Pakistan society into era of science and technology (1,7,8).
4. Full-fledged development of child as an individual, as a citizen and as a worker (1,7,10).
5. The secondary education should develop vocational, social or political and spiritual element of the individual (16).
6. Secondary education should be considered as a complete stage in itself (1,2,3).
7. Promotion of the ideals of universal brotherhood, tolerance and justice (1).

Curriculum

1. Provision of Technical and vocational streams in High school to make it comprehensive in nature (3,4,7).
2. Provision of Teaching of Science, Applied Arts, Pre-vocational preparation for careers in Agriculture, Education, Social Welfare, Business, and Industry (2).
3. Shift from general to more purposefuls. scientific, technical and vocational education (7,16).
4. Compulsory core subjects for every child plan additional subjects and

training to prepare him for a definite vocation (3).

5. Skill Training at ix and x classes to be more sophisticated (15).
6. New areas to be included in the relevant subjects are environment education, health education, population education and computer education (16).
7. Highest priority be given to the revision of curricula (13).
8. Broad based curriculum with a common base for intertransferability of students from one stream to another. (9,14).
9. Integration of general and technical education (10).
10. Ratio of Science/Technical/Vocational vs. Arts be 60:40 (8).
11. Vocationalization of secondary education for majority of students, who do not intend to go beyond matric (8,9,14).
12. There should be a balanced distribution of students between different streams (12).
13. Workshop Technique be adopted for the development of Textbooks (16).
14. Curriculum of *Madrassah* be enriched with the teaching of science, mathematics and vocational education (9).
15. Over-lapping be removed (16).

Examinations/Evaluation

1. System needs re-organization (3,10).
2. Examination should aim at testing power of reasoning and of critical

judgement (5).

3. Introduction of Semester System (12).
4. Admission Test covering academic achievement, aptitude, communication skills and proficiency in academic subjects (8,14).
5. Education Testing and Measurement Services to develop standardized tests of intelligence, aptitude and scholastic ability, to be used in conjunction with traditional examination scores (15,16).
6. Marks be given as 75% for annual examination 25% for internal/school/teacher assessment (3,8).

Teachers/Teacher Training

1. Teachers training before entering services and in-service Training for teachers as well (3,7,14).
2. Teachers Services be recognized by special awards (3)
3. Syllabi of B.Ed. should be modernized (7).
4. Universities should realize the responsibility of providing teachers for secondary level in sufficient numbers (7).
5. Incentives like promotion, good salary must be provided (14).
6. A separate unit for Teachers Training at the Directorate (16).

Guidance and Counselling

1. Guidance and Counselling Centres may be established in each school (3).
2. An effective guidance system to assist children in making suitable

decisions (7,14).

3. Specialized counselling and guidance with supporting services of text development, occupational information and placement services at the secondary level (10,12).

4. National Institute of Psychology (NIP) to prepare standardized tests, inventories, training manuals (13).

Private enterprise

1. Encouragement of private sector investments in education by providing liberal incentives (9,17).

2. Nationalization of private institutions (11).

Organization of Secondary Education

1. Decentralization of secondary education (8)

2. Reorganization of secondary education (8).

3. Boards of secondary education should regulate and control the development of secondary education (3).

4. *Madrassah* education should be integrated into the modern school system (8).

5. A suitable institutional structure for the secondary education be evolved (16).

Physical Facilities

1. Facilities like classrooms, science laboratories, libraries, playgrounds, and

equipment must be provided to achieve the objective of multipurpose secondary schools (3,8,14,16).

2. Expansion of physical facilities in rural areas only (14).

3. Provision of science laboratories and libraries and other facilities must be attuned to demographic factor (13).

Structure of Secondary Education

1. Only one school system (2).

2. Multipurpose school providing general education with additional vocational subjects (3).

3. Secondary education should consist of three stages

   i). Class VI-VIII Middle

   ii). class IX-X Secondary

   iii). Class XI-XII Higher Secondary (3,4)

4. Expansion of secondary education to absorb increased output of primary education (15).

5. Scholarship examination at VIII class, to determine who are to be helped financially and those found low standard should be advised to opt for vocational training (6).

6. Amalgamation of XI, XIII with secondary education (4).

Vocationalization/Diversification

1. Re-organization of secondary education is required by inclusion of vocational/technical element (1).

2. Secondary schools must meet the diverse needs of our country (2,7).
3. Technical subjects must be made integral part of general education (2).
4. Diversification is required in marketable skills (15).
5. Secondary schools should not be relied upon to train pupils for specific occupations, rather we should prepare students in knowledge/skills required for particularized vocational/technical training (2).

Access/Equity

1. Free education upto class X (10).
2. Secondary Education to all (16).
3. Secondary Education should be so distributed geographically as to be readily accessible to all areas and all groups (2,13,16).
4. Disparities in education will be remedied (9,11,12,15).
5. Urban/Rural as well as Male/Female disparities must be removed (17).

Educational Research

1. Research in experimentation and innovation be carried out in Education Programmes (11,12,16).

Restructuring/Re-organization of Secondary Education

1. Vocational education must receive first consideration in any plan of educational reconstruction (1).
2. Major changes are needed to offer diverse and enriched series of courses to prepare rounded citizens in terms of their own capabilities and economic needs of the country (2).

3. Present four tier system to be replaced by three tier system as under:

   i) 0 - VIII Elementary

   ii) IX - XII Secondary

   iii) University Education (13)

4. Secondary Schools should be transformed in to multipurpose schools offering wide choice of diversified courses (3).

5. Second shift may be considered (13,15).

Women Education

1. More facilities for education of girls (2).

2. Diversification of subjects in secondary schools should provide courses suited to their aptitude and interests (3).

3. Expansion of facilities for female (12).

Financing

1. Adequate financial resources for secondary education sufficient to meet its expenses (3).

2. Expenditure to be met as under:-

   a. Fees 60%

   b. Management 20%

   c. Government grants 20%

3. *Iqra* surcharge yielded Rs. 13.1. billion

Various plans and programmes reviewed above have several features in common as indicated in our summary. Overall performance has improved in some areas

of secondary education. The goals of vocationalization and diversification of secondary education have not been achieved so far. The restructuring of secondary education has not been materialized. Major reasons attributed for the failure of reforms is non-allocation of financial resources required for their implementation and inadequate management capabilities of the planners and implementing agencies. However, these factors have to be further examined in related research. We shall now turn to various facets of secondary education and look into some of the latest trends in this field in order to evolve a strategy for the restructuring of our secondary education system.

Important issues Confronting Secondary Education

This section deals with identification of major problem areas in education, and specifically secondary education. The study examines various issues concerning secondary education in Pakistan. We also review some of the options for addressing these issues. A recent study conducted under the auspices of the World Bank on the theme of secondary education has identified following major issues in secondary education of Pakistan:

> The overall education system needs overhauling, improvement and drastic changes. The mismanagement of educational institutions indiscipline of students at campuses; absenteeism of teachers for want of proper accountability; poor academic achievements, unreliable evaluation system; irrelevant curriculum; lack of proper training facilities for managers and administrators; issues of access and quality and improvement of the management information system are some of the important issues which need to be addressed and corrected before the nation enters the 21st century (Muhammad Iqbal, 1994 p. 9).

It has been brought out in the review of education policies and

development programme that provision of inadequate financial resources has led to the failure of government initiatives aiming at the improvement of education in Pakistan. The World Bank (1991) has taken up this issue in the following words:

> Financing is not the only constraint to expansion; implementation capacity is a major constraint even if enough money were available. The annual requirement for construction of new student places would exceed by about 100% at middle stage and 30% at secondary stage. Thus it would strain both the financial and implementation capacity of the government. One solution is to tap private resources to alleviate these strains (The World Bank Report, 1991 p. 58).

There are, however, four main issues in the involvement of private sector. These are the provision of credit facilities, especially for the construction of school buildings, removing the regulatory barriers, provision of scholarships for students from low-income families studying in private schools, and the optimal mix of public and private schooling. Government should spend more on education to improve the quality of inputs in Government schools, so that these schools may be forced to compete with the private sector schools (The World Bank Report 1991 p. 64).

Improving education at the secondary stage in Pakistan will require a sustained effort over many years. Following issues also need attention in this regard: (a) clarifying the purposes of education; (b) making participation more equitable; (c) improving the quality of education; (d) strengthening the examination system; (e) restructuring the schools system; and (f) assuring adequate financial resources. There is need to define exactly what we want to achieve. The purposes of secondary education are even separately discussed in the government education policies, but problem arises in their implementation stage, when the objectives are not achieved. The World Bank recommended that Matriculation should continue to serve as certification for entry into the world of work.

There are rural and urban disparities in the enrolment ratio at the secondary level. Moreover, there are gross imbalances at the secondary level between the number of boys and girls enrolled. Increasing participation of girls in secondary stage will require a two pronged strategy: (a) Strenuous efforts to enroll young girls in primary schools and to keep them in school through grad 8; and (b) the government must continue to respond equally to the demand for further education of boys and girls completing grade 8. To minimise urban/rural disparity in the provision of facilities at the secondary level, The World Bank (1991) suggests a short term measure that more new facilities catering to the secondary stage should be located in small towns serving rural areas, where demand is expected to increase (The World Bank, p. 66).

Regarding the improvement in the quality of education at the secondary level The World Bank Report (1991) suggests that quality of instruction must take priority over expansion of places. The proportion of recurrent expenditure spent on quality inputs should increase from about 1.4% at present to about 10%. Quality improvements must include the teacher qualification, textbooks, curriculum, facilities, learning materials and examinations.

The system of public examinations at secondary level is acknowledged to be in need of drastic overhaul. Top priority must be given to redesigning the procedures for developing and grading public examination. So that they: (a) reinforce new curricular initiatives; (b) reward a wide range of academic skills including, but not limited to, memorization, and (c) are technically adequate for achieving their purposes. The World Bank Report (1991) thus proposes that reform will require substantial in-service training, greater use of the computer in all aspects of examination development and administration

and improved communication and linkages between Examination Boards. These objectives would be greatly facilitated by the establishment of the National Testing Service proposed in National Education Policy of 1992. Moreover, political will on the part of the national leaders is also required for the effective implementation of the measures already existing for the eradication of malpractices in the examinations.

Restructuring the school system has been an important issue in Pakistan since its creation. The present system is recognized as being haphazard and unplanned. Upgradation of schools dilutes the effectiveness of school management and supervision and reduces the facilities available. Efforts are underway to transfer grades XI and XII to High schools. The government should strengthen its efforts to implement the policy devising the ways and means to reduce complexities arising in the organization and administration of the secondary education.

In the past Pakistan has underfinanced education, as compared with similarly situated countries of the region. However, the underfinancing has affected different stages of education differently. In general, the primary education has been more adequately financed than secondary and higher education. The result is more expansion in the primary sector. It is estimated by The World Bank Report (1991) that Pakistan would require about 9.2% per annum increase in funding for education. Transferring some of the burden to the private sector would reduce this requirement to about 8.3%. Therefore, the government should be able to maintain its policy of providing access to the secondary and intermediate stages for all students who qualify for entrance, provided financing for the education sector as a whole continues to grow at an adequate rate, estimated to be between 8% and 9% per year.

Another important issues is education and work interface. One of the exportes on the subject, Raja Roy Sing (1986) says:

> "The link between education and the world of work is a fundamental dimension of the relationship between education and society. The role of education in preparing children and youth for life is becoming much more complex, with rapid social changes affecting the world of work, especially with the application of modern technology and the revolution of rising expectations fueled by industrialization and the mass media. On the other hand, education has developed into a system in which the constituent units, the schools have their own organization patterns tending to isolate them from life outside the system's confines (Raja Roy Sing, 1986, p. 143).

The interface of education and the world of work has three important aspects. First, practical activities involving work should be an integral part of the learning process. Education divorced from application is self-stultifying; combining theory and practice is a fundamental principle of good education aimed at an all round development of human personality. The applications of this principle cover a wider range of educational practices, from work in school laboratories to participation in national development projects. The second aspect is that participation in work strengthens and develops certain social attitudes and values which are desirable in themselves and essential for society, such as respect for manual labour, a sense of social identification and participation in national development. The third aspect of education and work interface is education's responsibility for preparing pupils for working life. This concept is wider than the notion of preparation for an occupation. It seeks to relate education and activities and processes more closely to the world of work which the pupils will enter and it means to endow them with the habits, work styles, understanding and practical operational skills which will ease their transition to the world of work (Raja Roy Sing, 1986, p. 144).

A very important element of this preparation for working life is the

integration of vocational experiences into general education. In China productive labour is a part of the general curriculum, and in Indonesia programmes have been introduced in general secondary schools to equip all pupils with basic practical skills before they join the work force. All students in Philippines are required to take vocational courses at secondary level. In the Republic of Korea, vocational subjects are part of general education for all students at secondary level. Every student in upper grades in Thailand must take one of the vocational courses (Raja Roy Sing, 1986, p. 146). In Pakistan too official policy contemplates the integration of general and vocational/technical education to prepare secondary school students for gainful employment including self-employment (Raja Roy Sing, 1986, p. 145).

There is now consensus based on experience that the education and work interface should start from the earliest years of education at the primary level and should continue through the total education year. However, the forms and purposes of the education and work vary considerably according to each level of education. Primary education covers the formative period during which with due regard for the physical and intellectual development of the child, the foundations should be laid for the development of basic work habits and work values. The most critical period in preparing the young for the world of work occurs during secondary education. This is recognized in the policies of many countries in the region which favour the vocationalization of secondary education (Raja Roy Sing, 1986, p. 146).

At the implementation level, there has been significant progress. A prominent feature is the restructuring of the delivery system to closer links between technical and vocational education and industrial, agricultural and service agencies within

the community. This has contributed to making the courses and activities more flexible, practical and relevant to perceived socio-economic and manpower needs. These trends are supported by a variety of improvements with in the delivery system itself. Theory and practice are being progressively integrated; short and optional courses are appearing in many institutions; mass media and non-formal multi-purpose institutions are being established, especially in support of rural development (Raja Roy Sing, 1986, p.148).

American Education Commission (1932) report on issues of secondary education has raised following two important issues:

a) Should secondary education providing a common curriculum for all, or differentiated offerings?

b) Whether eecondary education include vocational training are be restricted to general education only (Raubinger *et al*, 1969, pp. 131-132).

These issues were also raised in the First Year Plan of Pakistan and it was resolved that secondary education should offer diverse courses and there should be only one and not several school systems in the country.

We have discussed important issues confronting secondary education. Among these important issues have been the education and work interface, issues of clarifying the purposes of education, improving quality of education, strengthening of examination system, restructuring the school system and assuring adequate financial resources. The issues involving private sector was also discussed. Various important steps have been suggested for the resolution of these issues. We have noted that the issue of clarifying the purpose of education is very important, therefore, in the next section we shall take up this issue in detail.

AIMS AND OBJECTIVES OF SECONDARY EDUCATION

In this section we shall discuss aims and objectives of education in general and secondary education on in particular. The national education policies have always provided general guideline about the goals, aims and purposes of education Pakistan. These general guidelines were rarely spelled out in the form of specific purposes of education for each level separately (Mohammad Iqbal, 1994, p. 10).

The World Bank Report (1991) provides a set of purposes of education at the secondary level as under:

> Education at the secondary stage should prepare students as quick learners and easily trainable. Students should leave this stage to be able to speak and write either Urdu or English fluently, and the other language as well. They should have good quantitative skills, so that jobs that require manipulation of numbers or other quantitative thinking skills can be learned quickly. They should be good problem solvers, have had experience dealing with practical problems and situations, know their community and its problems well, have experience working as a team members, and be accustomed to taking an active role in their own learning. The majority should expect to enter the job market or qualify for job related training. Minority should expect to continue to the intermediate stage of education. The curriculum at this level must be appropriate for both outcomes, entry into the labour market and continuing education (p. 12).

Mukhtar Ahmad Bhatti *et al* (1987) have summarized the objectives of secondary education spelled out in various education policies of the government as under

1. Recognition of secondary education as a complete stage in itself and so designing the curricula as to equip students intellectually, physically, morally and vocationally for a full life.
2. Full development of the individual by relating teaching to the needs and interests of adolescents, having a common core of subjects to ensure

imparting certain basic skills and develop character through a new concept of teaching which instead of emphasizing memorization, leads to development of mental skills, aesthetic and spiritual values and focusses on character building.

3. Creation of a spirit of nationhood in all Pakistanis.
4. Provision of technical and voctional streams in high schools, to make them comprehensive in nature.
5. Integration of general and technical education so as to equip secondary students for gainful employment including self-employment.
6. Diversification of course offerings suited to aptitudes, interests and requirement of students.
7. Expansion of science education (Mukhtar Ahmad Bhatti *et al*, 1987 (pp. 315-316).

Speaking of education in general Sir Fredrick Bourne, Governor of East Bengal in his opening address to the third meeting of Advisory Board of Education for Pakistan, held in Dacca, from 14th to 16th December, 1949 said: "[t]he accepted aim of education is the full integration and development of human personality in all its aspects (p. 101).

While describing objectives of secondary education Mukhtar Ahmad Bhatti, (1987) says that aims of education must consist of the national aspirations of the people. Social, cultural, political and economic national aspirations of our people revolve around the development of an Islamic perosnality with individual freedom within the

parameters of Islam (p. 1).

For intellectual development of our people, economic emanicipation, development of knowledge, social justice in society, preparedness for defence and advancement in technology, we have to transfrom societal aims into achievable educational objectives; otherwise the much trumpeted general aims are likely to remain weasel words. It is recognised that education influences and is influenced by the rapid scientific and technological advances taking place all over the world. Unless growth takes place in education through introduction of diversification and other innovative practices and the development of valid objectives, our youth will not be able to meet the challanges of future. We should wholeheartedly endorse the principles of formulation of objectives enunciated in the previous education policies, most of which though not properly implemented, presented valid suggestions for reform. Secondary education has an important role to play in accelerating the pace of our development. It must meet the needs and aspirations of our people, simultaneously taking into consideration the rapid rate of scientific, technological, economic and social change occurring elsewhere. The education system itself must be in a constant state of review and change, if it is positively to react to the changing situation (Mukhtar Ahmad Bhatti, p. 2).

The fundamental purpose of the school is the transmission of culture to the young. A relatively simple society transmits its culture without schools at all. Schools appear as the culture of a society becomes more complex (Edward A. Krug, 1960, p. 81). John Dewey, says the following in this regard: "without such formal education it is not possible to transmit all the resources and achievements of a complex society" (1960).

High schools are devoted both to the transmission of culture and to the fostering of various objectives related to following aspects of living: (1) intellectual development (2) moral or character development (3) citizenship (4) physical health (50 mental or emotional health (6) enjoyment of living (7) family living and (8) preparation for jobs. Variations in degree of importance among the objectives represented by these aspects of living are, in part, related to individual differences, but not to differences among students taken as groups. The objective of intellectual development, for example, is just as important for the so called terminal as for the college preparatory group. Similarly the job or career objective is just as important for the college preparatory group as for those not going to college (Adward A. Krug, 1960, pp. 110-128).

The Commission on the Reorganization of Secondary education, USA, regarded following as the main objectives of education: (a) Health (2)Command of fundamental processes (3)Worthy home membership (4) Vocation (5) Citizenship (6) Worthy use of leisure (7) Ethical character (Raubinger, *et al*, 1969 p. 105).

Education is essentially a unitary and continous process and that each of the objectives defined above must be recognized throughout the entire extent of secondary education. Health needs are evidently important at all stages; the vocational purpose and content is coming properly to be recognized as a necessary and valuable ingredient even in the early stages and even when specific preparation is postponed; citizenship and the worthy use of leisure, obviously important in the earlier stages, involve certain phases of education that require maturity on the part of the pupil and, hence, are indispensable also in the later stages of secondary education. Furthermore, it is only as the pupil sees

his vocation in relation to his citizenship and his citizenship in the light of his vocation that he will be prepared for effective membership in a democratic society (Raubinger, *et al* 1985, pp. 105-113).

The problems of society have undergone overwhelming change. Environmental problems, both physical and human, seem to have moved in upon us with the pace of a hurricane. Today's High school needs to become stronger not only in quality, it needs also to become more universal in usefulness, more personal and individualized in its procedures, and more relevant to the individual's and society's needs (Burton W. Gorman, 1971, p. 8) Burton W. Gorman advocates preparation of the students for social responsibility as a major aim of education. He points out, "[t]he tide of rapidly rising crime, indifference to environmental problems and aloofness from internal social division must be turned. Citizenship is the vocation of all, and all must be prepared for it" (p. 296). Archibald Maxleish (1968) puts his appraisal as applied to the college which is applicable to High school with equal force. "The college no longer exists to produce men prepared for life in a society of men, but men prepared for employment in an industry or profession (p. 16).

Frank M. Earle (1945) comenting on the objectives of secondary education says: "The secondary school of tomorrow must become universal, instead of limiting its courses of instruction to the highly formal and abstract treatment of those subjects which, following tradition, it was inclined to consider necessary for all educated men and women, it must extend the range of its pursuits, even more than it is doing at present, to include the active interests of the less intellectually gifted members of the community

only so can it become a source from which every pupil can draw inspiration and guidance as his personality matures" (pp. 11-12). The secondary school cannot afford to remain indifferent to the problems encountered at this stage by those who would employ its graduates. The attitude which he adopts on entering employment is also important, and the school may have a great deal to do with developing in him a sound attitude, through which his work will be competently done to the satisfaction of both himself and his employer (Frank M. Earle, 1945, p. 14).

We cannot ignore the social and economic changes taking place today, for they bring us into more direct contact with the occupational problems of our young people. Hitherto, the large number of secondary school pupils have postponed the actual choosing of a career, though not the thought of it, until they have come to the end of their school studies. For the few, the more highly gifted, this may not create any serious difficulty, either of choice, or of further preparation, but for the many it is certain that this postponement makes the choice more difficult than it should be, especially when the course of study previously followed has been inappropriate for them. Too sharp a distinction between the education given in the school and the 'training given in the occupation, creates in the adolescent an attitude of mind which intensifies the difficulties confronting him. Reconciliation of the aims and methods of these two stages can best be achieved during adolescence, by interpreting the aims both in a more liberal manner and by allowing the methods of each to influence the other (Frank Emeral, 1945 pp. 15-16).

Ernest L. Boyer, President of Carnegie Foundation and former U.S. Commissioner of Education, advocated four essential goals and stated how they could be

achieved. First was that of learning to think critically and communicate effectively through a mastery of language. Second, students should learn about themselves, their human heritage and the world in which they live through a core curriculum. Third, students should be prepared for the world of work and further education through electives. Finally all students should fulfil their civic and social responsibilities through school and community services (John Mortin Rich, p. 20).

Mortimer Adler in his essay, "Rediscovering the Essence of Education", envisions the goals of schooling for be the same to all students. The uniform objectives of secondary schooling should be threefold. They should correspond to three aspects of the common future to which all children are destined.

1. Our society provides all children ample opportunity for personal development. Given such opportunity each individual is under a moral obligation to make the most of himself and his life.
2. All the children will become, when of age fullfledged citizens with suffrage and other political responsibility. Secondary schooling must do everything it can to make them good citizens, able to perform the duties of citizenship with all the trained intelligence that each is able to achieve.
3. When they are grown, all (or certainly most) of the children will engage in some form of work to earn a living. Basic (secondary) schooling must prepare them for this or the specific job while they are still in school (John Martin Rich, p. 38).

We have, so far, reviewed education policies of Paksitan, reports, studies

and related literature to evolve a set of aims and objectives for secondary education. It has been brought out that aims and objectives of secondary education revolve around the individual. It is generally agreed by all that individual's all-round development is the ultimate aim of education. He, as an individual, as a citizen, and as a worker should be a well-rounded personality. Now that we have brought out the main objectives of secondary education, the next step would be to evolve a suitable structure to achieve these aims and objectives. In the next section we will review the available literature on the structure of secondary education.

Structure of Secondary Education

In this section we review the education structure of Paksitan in the light of education policies. We shall discuss the present structure of our system. We will also review various structures prevailing elsewhere in the world to correlate with that of ours, in order to evolve a strategy for restructuring ours.

The standard structure, time span of various stages, administrative pattern, curriculum trends, and teachers' training programmes are vital ingredients of a system of education. Each component has been elucidated to produce a clear, comprehensive and concise portrait of the existing system of education.

Standard and Structure

The standard of any system of education at a given time hinges largely upon the following four major characteristics:

1. Structure: Structure or the division of educational pyramid into different levels/stages, tiers and their inter-relationship.
2. Time: Duration of each level/stage.
3. Inputs: Extent and quality of input, i.e., teachers, buildings, curriculam, equipment etc.
4. Operation: Extent and benefits of utilization of these essential inputs.

The academic structure of the existing system of education in Pakistan is as given in table 24 (Said Rasul Malik, 1992 p. 7).

TABLE 24
Education Structure in Pakistan

S. No.	Sub-Sector/level	Grade/class	Years of Duration	Age-group
1	Primary Education	I-V	5	6-10
2	Secondary Education	VI-X	5	11-15
3	Higher Secondary Education	XI-XII	2	16-17
4	College Education	XIII-XVI	2	18-19
5	University Education	XV-XVI	2	20-21

Source: Malik Rasul Said, 1992, p. 7.

Traditionally, there are three discrete levels of education primary or elementary, secondary, tertiary or higher education. We inherited a stratified system of education with three distinct levels of education. We have a primary system of education followed by a secondary level. In secondary level we have (a) general, (b) vocational/technical, and (c) teacher training. In higher education we classify types of education according to fields of specialization, e.g., humanities, social sciences,

medicine, engineering, agriculture, veterinary sciences, architecture etc.

In our classification of both levels and types, we have some interesting problems. In the context of primary (the first level), the duration may vary from country to country. According to a UNESCO document, (1984), in the 30 countries of the region, entrance age to the first level of education varies from five to eight. Though age six is the most common (14 countries). The duration of the first level of education varies from 3 to 8 years, but the most common duration is 6 years (14 countries) and five years (12 countries), Similarly, the second level could start from grade IV and end anywhere between grade VIII to XII. Certain new institutions, particularly those developed for vocational and technical education, do not fall strictly into these three levels or cut through several levels. As far as the types of education are concerned, their classification also seems to be complicated. A comprehensive school is neither general education or vocational/technical. It is a combination of the two and thus is strictly not classifiable as one or the other (Khawaja Sarfaraz, 1986, pp. 116-117).

Alongwith the notions of level and type is also associated the concept of age-grade. By this term we mean the practice of sub-dividing the period of study in each level and type of education to compartments of one year each called the grade (sometimes standard), and relating them to the age of the pupil. For instance our primary level education comprises the five grades from class I to V. Usually, children of five years age are enrolled in Class I. Thus the specific age group children enrolled in the primary schools are of 5-10 years. The participation rate is also determined on the basis of the 5-10 age group. The structure of education system is as given in Chart I. (Khawaja Sarfaraz, 186, p. 118).

Chart I

EDUCATIONAL STRUCTURE

Terminal exam/	Age	Grade	Institution		
General Education				Technical/Vocational	
Ph.D	24	XIX	UNIVERSITIES	Teachers/Law Training certificates colleges	Medical college/Engg. University/ Agricultural University
	23	XVIII			
M.Phil	22	XVII			
M.A. M.Sc., M.Com.	21	XVI			
B.Sc. BA (Hon)	20	XV			
B.Sc, BA B com.	19	XIV	Degree Colleges		
	18	XIII			
F.A/F.Sc.	17	XII	Higher Secondary Schools Intermediate Colleges		Polytechnic Technical Institutes
		XI			
	16				
S.S.C. (Matric)	15	X	Secondary (High School)		
	14	IX			
8th class Departmental (Exam.)	13	VIII	Middle/Junior High		
	12	VII			
	11	VI			
5th (class) (Departmental exam.)	10	V	Primary		
	9	IV			
	8	III			
	7	II			
	6	I			

Structure of Secondary Education

At present 5+3+2+2 years of schooling is the structure of education at primary, middle and secondary level (Mukthar Ahmad Bhatta, *et al*, 1987, p. 61).

Level	Grade
Primary	Grades 1-5
Lower Secondary	Grades 6-8 (Terminal)
Secondary	Grade 9-10 (Terminal)
Higher Secondary	Grades11-12 (Terminal)

The school system is, however, complicated. Majority of primary schools stand alone (Classes 1-5). Yet primary sections are also included in the middle and secondary schools. This has created administrative difficulties resulting in criss crossing of administrative domains of Directors of primary schools and secondary schools. Secondary and higher secondary education is carried out in secondary and higher secondary schools. However, there are middle schools which provide lower secondary education independently: Higher secondary education is bifurcated into two types of institutions - Higher Secondary schools falling in the domain of Director Secondary schools and Intermediate Colleges controlled by Director Colleges (Iqbal Muhammad, 1994 pp. 2-3).

Usually five years of education after primary is considered secondary education but there are a number of middle schools from grade 1 to 8, as well as secondary schools having classes 6 to 10 and also higher secondary schools from grade

6 to 12. Some schools have classes 1 to 12. Years of schooling at different levels need thorough restructuring.

Before suggesting anything, let us review the years of education suggested in different policy documents.

Report of the primary and secondary education committee of the Pakistan Education Conference (1947), felt that school courses should comprise the following stages:-

Pre-Primary	3 to 6 years
Primary	6 to 11 years
Middle	11 to 14 years
Secondary	14 to 17 years

The first all Pakistan Education conference (1951) after spelling out the rationale of Psychological development and also quoting the examples of different countries, recommended divisions of secondary school levels into three stages as given below:-

1. Lower secondary stage (Middle) From 10 + to 13+
2. Secondary stage From 14 + to 16+
3. Higher Secondary stage from 16 + to 18+

National Education Commission (1959) recommended division of pre-university education into the following stages:

Stage	Duration	Age
Primary	5 years	5+to 10+
Middle	3 years	10+to13+
High	2 years	13+to 15+
Intermediate	2 years	15+ to 17+

Proposals for the New Education Policy (1969-70) recommended placing of classes VI to X as Junior High Stages and classes XI to XII as Higher Secondary stage (Mukhtar Ahmad Bhatti, pp. 61-62).

The Education Policy (1972-80) included classes IX to XII in secondary and intermediate education; however, it also referred to classes VI-X as part of the secondary stage.

The Third Five Year Plan (1965-70) mentions education at secondary level as comprising two stages (a) Secondary, consisting of classes ix to x and (b) Higher secondary or intermediate, comprising classes xi and xii.

National Education Policy (1979) underlining the crucial role of secondary education in educational structure, recommended replacement of the four tier system of education (Primary, Secondary, College and University) by a three tier system of elementary, (I-VIII), secondary (IX-XII), and University (4 years B.A./B.Sc. and above) in a phased manner. Although some secondary schools had been upgraded up to class xii, yet, by and large, we still follow the four tier system (Mukhtar Ahmad Bhatti, p.63). This proposal (of three tier system primary, secondary and tertiary) was reinforced in the National Education Policy of 1992.

Structure of Secondary Education in other Countries

Chart 2 below gives the structures of secondary school education in 6 leading nations of the world.

England

Secondary education is available to children/adolescents between ages 11 and 18. School leaving age is 16 in England. The 11 + 18 Secondary school system survives as the most usual form. There are three types of secondary schools, (i) Gramer schools, (ii) Technical schools: and (iii) secondary Modern Schools. Entry into these schools is based on the results of test taken at the age generally known as "Eleven Plus". Recent trend is towards comprehensive schools. About 90% of secondary students attend these schools which aim at offering a complete range of courses in order to provide equal opportunities of education to all boys and girls, irrespective of their socio-economic status.

West-Germany

Secondary education is compulsory upto grade 9/10. This stage is divided into two parts, namely, secondary stage I (Grades 5 or 7 to 10) and secondary stage 11 (Grades II to 13). After primary schooling of four years, pupils are sorted into four different types of schools, change over from one type to another being possible. At the age of 10, most children and their parents face still difficult decisions as to the choice of the secondary school.

1. Intermediate Schools: (grades 5 or 7 to 10) These are compulsory for all pupils who

do not attend any of the other three types of secondary schools. These schools prepare pupils for vocational fields.

2. Secondary Modern Schools: (grades 5-10).These schools provide suitable education to pupil for high standard practical jobs in the fields of agriculture, business, industry and administration.

3. Grammer Schools: (Grades 5 or 7 to 13) these schools provide, highly academic education. Successful pupils from these schools can join universities, technical colleges, colleges for teachers education and other special institutions. Admission in Gramer schools is highly selective.

4. Comprehensive Schools: (grades 5 or 7 to 10) these were introduced to offer equal opportunities to all pupils as an alternate to traditional three types of schools at secondary education level.

Secondary Stage II encompasses a number of general and vocational schools divided into two types. One type provides vocational education while the other leads to university education (Mukhtar Bhatti, p. 64-65).

United States of America: In USA, the most common pattern of secondary education is 6+3+3, i.e., elementary, junior high, and senior high at ages of 6 to 12, 13 to 15 and 16 to 18 respectively.

France: France has a three tier structure for secondary education. However, at the upper level it has a more diversified pattern. France has primary (6 to 11), lower secondary (12 to 14), and upper secondary (15 to 18). At the upper secondary level France has upper secondary general and technical and upper secondary technical as well.

Sweden: In Sweden total period of secondary education comprises ages 7 to 19. It has

two main ladders, i.e., Unitary (7 to 16) and upper Secondary (17 to 19 years). Students choose technical vocational education after 9 years of compulsory schooling.

U.S.S.R: Like Sweden former U.S.S.R. (Soviet Union) had two tier system spread over 7 to 18 years of age, i.e., poly. General (7-15) and upper secondary Technical (16-18) (Keith Watson, 1985, pp. 24-24).

Japan: The structure of educational system is 6+3+3. Lower secondary education (grade 7-9) is compulsory while in the upper secondary schools (grades 10-12) about 94% of those completing lower secondary stage join upper secondary. Students may be classified into "General" and "specialized". Specialized courses are further classified into vocational and non-vocational ones. Vocational areas include Technical/ Commercial/Agricultural Courses or those in Fisheries, Home Economics and Nursing. Non-vocational subjects include science, mathematics, music, fine arts, etc.

Korea: The formal secondary school system consists of three years middle schools, grades 7, 8 and 9, after six years of elementary education and three years of high school, grades 10,11 and 12, 6+3+3 pattern. High schools are divided into general and vocational schools. There is no entrance examination for middle schools. Over 98% of primary school graduates move to middle schools and about 90% middle school graduates enter high schools (Mukhtar Ahmad Bhattai, 1987, pp. 63-64).

Secondary education in Pakistan starts after 5th Class and completes at class 10. It generally serves a dual purpose, as a terminal stage for a large number of students and as a preparatory stage for higher education for those who wish to continue their education further. The contents of studies of the existing secondary programme have in the past been dominated by a curriculum of a general nature which served mainly the

purpose of preparation for higher education. The increasing need for middle level skill of workers in the developing economy of the country and the enrolment of a growing proportion of the age group in secondary schools warrant that secondary education should have a pronounced scientific, technical and vocational bias and be terminal in nature.

Diversion of students usually takes place at three stages. Firstly, after class VIII when a student may follow the general education course in secondary schools or the vocational course in trade schools. Secondly, after class x when one stream goes to intermediate colleges and the other enters polytechnics/Technical institutes for technical diplomas/certificates course. Thirdly after class XII where one stream enters the general universities and the other enters technological universities and professional colleges (Said Rasul Malik, p. 9).

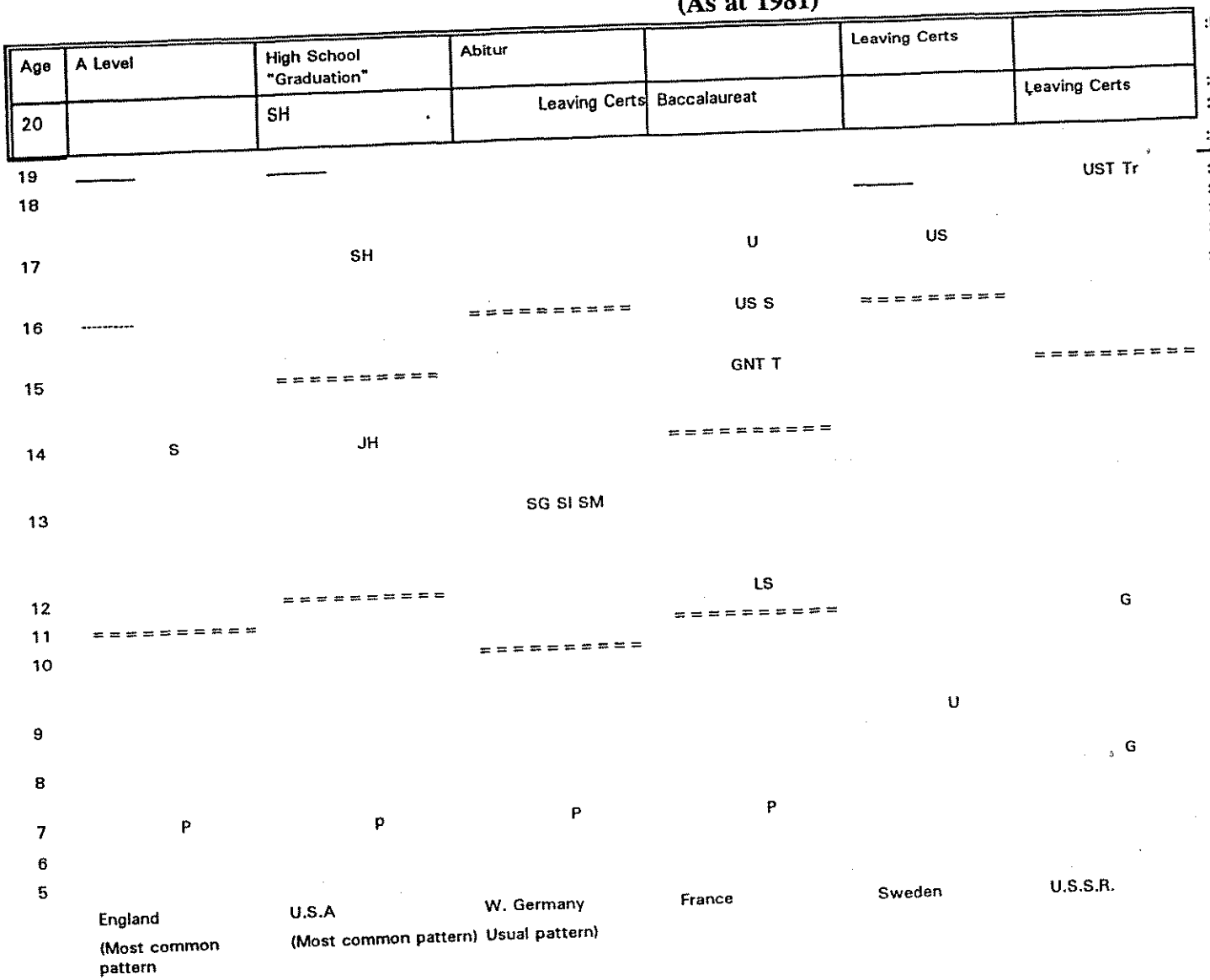
There are two distinguishing features of the secondary education, i.e. a reorientation towards science and diversification of programme under which there is a large number of subjects of technical and vocational nature. There is increasing emphasis in secondary education on science technical and vocational education so as to achieve a ratio of 40:60 in enrolment between the general stream on the one hand and the science, technical and vocational stream on the other. It is admitted broadly that science subjects form an integral part of the courses in technical and vocational education and also serve as a base for advanced technical and professional disciplines. Secondary education is administratively a mixed up phenomenon as discussed above (Said Rasul Malik, p. 10).

In any educational plan, whether for an institution or for a national system, three basic elements must be considered. They are the inputs of education, such as teachers, buildings, financial resources, etc; the demand for education from the school

age population, and the output of the educational system that determines the educational structure of the population. The inputs and the demand for education are determined outside the educational system and the educational structure of the population must satisfy socio-economic needs. The interaction of these three elements determines the characteristics and evolution of an educational system (Correa, Hector , 1971, p. 206). In the context of Pakistan there has been lack of interaction between the community and the education system (Ghafoor Abdul, 1982, p. 40). Andrew and Moire (1970) have described the interaction of the American educational system, especially the schools, with the community. According to them 'An educational system is not a self-contained system. It interacts with the larger system of which it is a part, e.g., the community in turn modifies the objectives in a dynamic way (p. 23.).

In this section we have looked into the stratified structure of Pakistan's education system, which shows criss-crossing. There is no clear demarcation about the areas of responsibilities of various directorates. There are complaints that Directorates interfere in each other's business and areas of responsibility. It is, therefore, recommended that schools should be clearly demarcated as Elementary upto class VIII, and Secondary from class IX to class XII. So that there is no confusion. It should be decided once for all that classes XI and XII form part of secondary education and not of college education. As indicated in the educational structure of other countries, most of these embody vocational/Technical education as an integral part of the general education. So our government should also decide on this important issue and provide enough resources for its successful implementation. This has to be seen in the next section how best diversification and vocationalization can be undertaken at secondary level.

CHART 2
COMPARATIVE SCHOOL STRUCTURE-SELECTED COUNTRIES
(As at 1981)



:Kay and Paterna: Limits:of Age Range

:ENGLAND:6+5/7
:P=Primary
:S=Secondary 5-18

:U.S.A:6+3+3
:P=Elementary
:JH=Junior High
:SH=Senior High 6-18

WEST GERMANY 4+5/6/9
: P=Primary
:SG=Sec.Grammer 6-19
:S1=Secondary Intermediate
:SM=Sec.Modern

:FRANCE:5+4+1/2/3
:P=Primary
:LS=Lower Sec. 6-18
USG&T=Upper Sec. Gen. & Tech.
UST=Upper Sec. Technical

SWEDEN: 9+3/4
:U=Unitery 7-19
:US=Upper Sec.

U.S.S.R.:8+3
:Poly G=Poly.Gen. 7-18
: Tech.
:T=Trade

Source: Keith Watson (1985) *Key Issues in Education*, Croom Helm UK. p. 24.

Diversification and Vocationalization of Secondary Education

Diversification and Vocationalization of Secondary Education is an important concern of this study. Hence, before suggesting any strategy, a conceptual framework for this purpose is required. We will review the theory and practices in this field, specially of advanced countries. We will also study the efforts of Pakistani author and educationists in this regards. Furthermore, we will discuss the reports and studies conducted by International agencies on this issue.

Mauritz Johnson, (1965), describes that the curriculum of a school encompasses far more than its formal course offerings. With the broadening of the concept of curriculum, it has become customary to refer to the organized course offerings as the instructional programme. Nevertheless, various combinations of courses offered by a large school are commonly referred to as curricula, each with a descriptive modifier such as college preparatory, general, commercial or some other indication of emphasis or subsequent use. For the diverse student bodies found in most secondary schools this kind of multiple curricula are usually considered preferable to a single curriculum for all students. Indeed, there are those who feel that six or eight course patterns are too few to provide for the numerous differences among students. A third curriculum plan, in which each student is provided with the particular combination of courses considered most appropriate for him, is perhaps the most prevalent one. It is known as the constants with variables plan (Mauritz Johnson, 1965, pp. 39).

In foreseeable future, schools will continue to offer many practical

subjects, both elective and required. Among them are all subjects taught summarily and explicitly for vocational use, even though they include or are based on, a body of theory. But in addition schools offer, and will continue to offer, some practical subjects for purposes of general education. These include health and physical education, industrial arts and home making, and certain aspects of business and agriculture. These courses are practical in the sense that they are primarily concerned with teaching students to carry out specific life activities more effectively. Secondarily, of course, they also teach or reinforce concepts of wider significance (Mauritz Johnson, 1965 pp. 68, 69).

Many, secondary schools, include, among their general education offerings, four practical arts, that are closely related to vocational programmes: Industrial Arts, Agriculture and Horticulture, Home economics and Business. Several of these subjects are frequently required of all junior high school students, and a comprehensive senior high school may make them available as elective subjects. Students can also take a major sequence of three or four courses in one of the practical arts instead of in academic subject. Courses taught for purposes of general education emphasize the significance of the practical arts in society. Industrial arts classes study the products, procedures, and problems of modern industry. Home economics classes examine the values and problems of contemporary family life. Business courses acquaint students with the functions of management and distribution in the economy. Courses in agriculture stress the relation of that field to industry, business, and family. Each of the practical arts also requires students to apply concepts and skills learned in academic subjects. Mathematics and language skills are essential in all of them. Concepts from science,

economics and other disciplines are also needed. One of the values claimed for these courses is that students improve skill and enlarge concepts by applying them (Mauritz Johnson 1961 p. 71).

The vocational versions of industrial arts are trade and industrial education and technical education. These fields, along with homemaking, agriculture, and distributive education, have been largely recognized as integral part of education system. A distinction is seldom made between trade and industrial subjects. Although the former may be viewed as crafts such as carpentry, plumbing, printing, machine work and dress making, whereas the later include various production activities and repair and maintenance services. This type of vocational education includes more than eighty such specializations. They represent both skilled and unskilled occupations and in general involve a lower ratio of cognitive understanding to manipulative skills than do the subjects comprising technical education. Technical subjects are semi-professional in nature and include such fields as drafting, electronics, instrumentation, airconditioning, and laboratory technology (Mauritz Johnson p. 72). Comprehensive high schools which offer both general and vocational education are favoured in U.S.A, (Mauritz Johnson, P. 73).

Vocational education is expensive. It requires expensive equipment to be replaced frequently if it is not to become obsolete. Moreover, since there are so many possible subjects, clases tend to be small, and hence uneconomical, unless the school has an extremely large enrollment. In a comprehensive school the enrolment must be great indeed, because a relatively small proportion of the students would be engaged in

vocational education aside from business education. It has been estimated that American secondary schools offer some 500 different subjects (Mauritz Johnson p. 74).

Harold C. Hand, (1958) says that a good high school makes a systematic attempt to help students find appropriate vocations for themselves. Long before the senior year, the school seeks to assist each such pupil to make at least a tentative choice of occupation, so that he may direct the rest of his secondary school program towards helping himself as much as possible with his future work (Harold C. Hand, 1858, pp. 215-216).

The increasing diversification of the public high school's programme of studies, concludes Harold C. Hand (1958), represents an attempt to make the high school teachings fill the divergent educational needs of the many different students who now attend it (p. 343).

Two basic reports on high school education have tried to translate educational objectives into curricular structures. One was a report by the *Harvard University Faculty*, General Education in a Free Society. The other was published by the *Educational Policies Commission* called Education for all American Youth.

CHART 3
COMPARATIVE STRUCTURES

Education Policies Commission	*Harvard University*
Common learning 33.3%	Scinece & Maths. 16.7%
Health and Physical Education, 16.7%	English 16.7%
Electives 16.7%	Social Studies 16.7%
Vocational Preparation 33.31%	Foreign Language 16.7%
	Special Education 33.7%

Looking at them comparatively, both plans provide for two thirds of general education and one third of special education. In the Educational Policies and Commission report, however, the special education is more strictly vocational in intent. (Jean D. Grambs/W.J. Iverson/F.K. Patterson, 1958, pp. 84-85).

Anderson, Grim, and Gruhn (1951) quote various studies related to students' problems. That many youth drop out of high school is because the curriculum is not suited to their abilities and interests. In studies of dropouts many youths have indicated their reasons for leaving schools as "tired of school", "subjects too hard" or "did not interest me". The majority of students dropping out of school do so for economic reasons, because of a lack of interest in school or because of desire to work. If all youth were to be served equally, those who plan to enter semi-skilled or skilled occupations should find opportunity for public education beyond high school, (V.E.Anderson/P.R.Grim/WT.Gruhn, 1951, pp. 57-59).

The models of an earlier era, which shaped the secondary education systems of the developing countries, assumed a dichotomy between vocational/Technical education and academic education. This has had the effect of divorcing general studies from work experience, and relegating vocational education to lower status and esteem. The problem has been further aggravated by the massive increase in enrollments during recent years in most countries. Consequently, governments are developing arrangements to enable students to combine general studies with training in some specific vocational and technical skills and period of work experience taken in a block of time spread over different terms. The important point clearly is to ensure a basic vocational education

technology or trade, in combination with general education. The stress should be on cluster of polyvalent skills rather than specific occupations (Raja Roy Sing, 1986, p. 146).

Robert Birnbaum, (1983), discussing ways of measuring diversity, used six variables to define institutional types. These are control, size, sex of students, programme, degree level, and minority enrollments. Institutional control was coded as public, independent, religious or proprietary. Differences in this variable are related to organizational structure, goals, activities and outcomes. The four values that were assigned to an institution's curriculum were liberal arts (institutions whose programmes were primarily in the arts and sciences, with little if any attention to professional preparation); comprehensive (Programms in both liberal arts and professional and technical areas); professional/technical institutions whose programme were focussed explicitly upon preparing for a career in a specific profession or technical area, with few of any degree programmes in traditional liberal arts areas and teacher education (an institution primarily concerned with training persons for teaching profession in elementary and secondary schools). Differences in curricula have clear implications for organizational structures, the preparation and activities of faculty, the motivation and experiences of students, and organizational norms (Robert Birmbaum, 1983, p. 85).

Institutional diversity may be internal or external. Internal diversity is differentiation of mission, programme, clientele, instructional methodology or delivery system, instructor or other characteristics within a single institution. External diversity refers to differences between institutions. External diversity can be programmatic,

procedural systematic, constitutional or reputational and diversity of structure. Institutions can be distinguished on at least five programmatic bases: degree level, degree area, comprehensiveness, mission and emphasis. While programmatic diversity refers to what is offered, procedural diversity is related to how it is offered. At least three types of procedural diversity can be identified, i.e., delivery system, student policies, and administrative processes. The concept of systematic diversity refers to differences in institutional type, size and control. Constitutional diversity is related to differences in the family backgrounds, abilities, preparation, values and educational goals of students. Reputation diversity is related to such factors as undergraduate selectivity, quality of graduate programmes, history of institution etc. Among the structural elements, at least, two can be identified: those relating to the external environment and those based upon internal factors of an institution (Robert Birmbaum, 1983, pp. 32-53).

Federick R. Smith and C. Benjamin Cox (1976) determining a framework for a rationale for secondary education says that the schools are expected to prepare the youth to assume their place in society by teaching them useful skills, requisite knowledge, appropriate ways of thinking and accepted ways of making judgements (p. 27).

The commission on National Education in Pakistan (1959) states that the main weakness of our educational system is absence of full opportunities for training in technical other vocational subjects, and inflexibility and failure to correspond to social needs and individual aptitudes and interests (p. 113). Regarding the main objectives of secondary education, the Commission stressed, that there should be a common core of

subjects, to ensure the development in all pupils of certain basic mental and manual skills and traits of character. This should be supplemented by a diversity of courses which would prepare them for different vocations (p. 45). The Commission thus proposed "for our secondary school, what is now needed, a redefinition of aims, a reorientation of school courses and structures" (p. 116).

National Education Policy (1992) proposed that our general education in order to cause shift from supply oriented to job oriented study programmes, is in urgent need of diversification. The attempts at vocationalization of secondary education have not been pursued with enthusiasm, nor have the desired results been achieved (National Education Policy, 1990).

W.M. Zaki (1975) has the following comments on Pakistan's secondary education: "At the secondary level, too, facilities are awfully inadequate to accommodate the 35 percent of the nation's children coming out of the primary schools. The result is unmanageably large classes and poor academic syllbi. Whatever resources become available to education are utilized in meeting the demands for additional places. Improvements in the qualitative aspects of secondary education require diversification of courses so that students may be prepared for employment in agriculture, industry and business. This vocationalization involves much higher investment than does general education and thus remains unfulfilled (p. 102).

Dr. Mukhtar Ahmad Bhatti, (1987) termed the most basic issue of secondary education in Pakistan to be diversification of instturctional programmes in accordance with the varying abilities and aptitudes of students (p. 75). Every policy on

education consistently recommended introduction of diversification at secondary level. Every time we recognized the necessity of shifting emphasis from aimless general education to more purposeful scientific, vocational and technical education. Pilot schools, technical schools, comprehensive schools, Model schools, agro-tech. scheme of studies could not succeed in their implementation stages. Efforts towards diversification remained half hearted and un-coordinated. If buildings of comprehensive schools were constructed at a huge cost back in sixties, in some there were no teachers of vocational subjects, and if the teachers were appointed, the equipment could not be supplied in time; if both the teachers and equipment were available, there were not enough students to opt for the vocational subjects. These are some of the causes of the failure of vocationalization and technicalization of secondary education. Other factors include lack of sufficient funds, lack of well equipped laboratories and workshops and mal- administration. The elite group eagerly opposed any such effort seeking requirement of compulsion of vocational components and frustrated it. Nothing could derail their children from the path which only prepared students for white collar positions after getting through a University (M.A. Bhatti, 1987, pp. 75-76). Among reasons why vocationalization could not succeed in Pakistan was and is the unwillingness of industry to accept to employ the output, even the diploma holders of polytechnics (p.83). External wage structure also has direct proportionate effect on the choices of subjects in the schools. Unless those getting vocational/technical training are assured of reasonable living standards, enforcement as requirement of studying vocational/technical subjects may be interpreted as ordaining their remaining low on the scale of socio-economic benefits. It, therefore, follows that

in order to successfully diversify school offerings, higher socio-economic incentives have to be provided to those opting for studying these subjects (p. 84).

For smooth transition to industrialization the choice of subjects should further be on the basis of survey of 'Needs Approach'. For harmonious development of any society, balance has to be achieved and maintained in output of personnel trained in various fields. Efforts should be made not to create unemployment by oversupply of persons qualified only in one trade. Provision of guidance is, therefore, important to help students to make their choices consistent with students, tastes and interests and the manpower requirements in various fields. Evening courses, may have to be offered in high schools as the needs of a community for various trades change (Mukhtar Ahmad Bhatti, 1987, p. 86).

Major fields of absorption of second level manpower include: Primary/High school teachers, physical instructors, sub-engineers, superintendents, accountants, cashiers, nurses, homeopaths, hakims, para medical and medical technicians, sanitary inspectors, laboratory technicians, pathologists, textile designers, industrial workers, industrial foremen, banking staff, museum curators, tehsildars etc.

Second level manpower will also be needed in a number of other areas. These persons will include: Electricians, Plumbers, Technicians, Machine Operators, Auto Mechanics, Auto Electricians, Broadcasting and Sound Equipment Operators, Wiremen, Dental Technicians, X-Ray Technicians, Soldiers, Policemen, Constables, Postman, Patwari, Hair Dressers, Tailors etc.

The most common argument advanced against introduction of technical and

vocational programmes in high schools is that enough teachers are not available. This does not appear valid now. According to the data collected by central Bureau of Education, more than 7000 unemployed persons with B.Sc. Engineering, B.Tech. B.Sc./M.Sc. Agriculture and Diploma Associate Engineering are available for recruitment as teachers of technical/vocational stream (pp. 93-94).

Report on the restructuring technical and vocational education in Pakistan prepared by Hawthorn Institute of Education under the auspices of Asian Development Bank (1989) noted that it is commonly thought that introducing a vocational element in the secondary school curriculum, especially in developing countries, is conducive to economic development. But the evidence is conflicting. Some studies claim to demonstrate that the rate of return to investment in traditional curricula particularly mathematics, science and communication studies is greater on average than the return to investment in specialized subjects. However, other studies would seem to show distinct benefit from forms of pre-vocational training. One thing is clear from a review of the available literature. Experience with pre-vocational education is very country-specific and care must be taken in making global judgements, regarding its efficiency or cost effectiveness. Furthermore, a country's degree of success in this field would seem to depend largely upon its capacity to make the appropriate investment to make it work ("Report on the Restructuring Technical Education in Pakistan" p. 183).

In this section, studies on various aspects of diversification and vocationalization of secondary education have been reviewed. Firstly we reviewed the views of the educationalists, experts, especially Mauritz Johnson (1965), who has touched

upon almost all important aspects of the American model. Two basic reports of education policies Commission and Harvard are also very important. These studies confirm that American schools devote almost one third of their time to special or vocational preparation. Anderson and Gruhn (1951) suggest that school drop out may be minimised by introduction of vocational education. Raja Roy Sing, (1986) has highlighted the interface of education and the world of work. Robert Birnbaum describes the ways of measuring diversity in the educational institutions. Provisions of Commission of National Education (1959) and NEP (1992) were also reviewed. Mukhtar Ahmad Bhatti, (1987) elaborated the theme in Pakistan's situation and brought out very important suggestions. In the end a report by Asian Development Bank on the restructuring Technical Educational in Pakistan has left a note of caution that before introducing vocationalization, a research is required to determine its implications, including what is to be included in the curriculum offerings. This we will discuss in the next section.

Curriculum of Secondary Education

Curriculum has a pivotal role in any system of education. This study focuses on the major issues concerning curriculum development in this section. Current practices and technqiues of curriculum development shall be reviewed in order to build up a conceptual framework for the propoposed restructuring of secondary education.

Burten W. Gorman (1971) has rightly warned that "the tide of rapidly rising crime, indifference to environmental problems, and aloofness from internal social

division must be turned. Citizenship is the vocation of all and all must be prepared for it" (p. 296). Regarding curriculum he says that courses of study, curriculum guides, and textbooks all lie in the area of suggested outline. All are designed as means of assuring the attainment of minimum aims. In the last analysis the teacher is the chief curriculum maker. Any guide worth attention urges that the teacher is the chief curriculum maker (p.38).

Theodore R. Seizer (1988) recommends enriched curriculum on relatively small number of themes. Thus students would learn more while being taught less. He argues against compartmentalization and indicates four areas around which the curriculum can be clustered. These are query and expression mathematics and science literature and arts, and philosophy and history (John Morter Rich, p. 25).

Milton Golberg, (1983), Executive Director of National Commission on Excellence in Education, U.S.A, made five recommendations for restructuring curriculum at secondary level. They are as follow:-

1. **Content:** All students seeking a high school diploma be required to lay a foundation in five new basics, by taxing four years of English, three years of mathematics, three years of science, three year's of social studies and one-half year of computer science.

2. **Standards and expectations:** The Commission recommended High schools should adopt more rigorous and measurable standards and higher expectations both for academic performance and for student conduct. The commission recommends, moreover, that efforts be made to improve the reliability of high school grades as indicators of academic

achievement.

3. **Time:** As the level of mastery of curriculum content is directly related to the amount of time that students devote to learning, the available time must be used more effectively.

4. **Teaching:** The Commission recommended that teachers should have high educational standards, demonstrated aptitude for teaching, and competence in an academic discipline. Teachers should have increased salaries, job security and career ladders etc.

5. **Leadership and Fiscal support:** There should be adequate fiscal support for the proper implementation of the reforms. He concluded, "[e]xcellence costs, but in the long run mediocrity costs far more (John Mortin Rich, pp. 123-129).

The Regents Inquiry (1933) recommended that the secondary schools should recognize the needs of the youth today by offering in addition to the college preparatory programme which has been so overemphasized, more specific courses and work to fit boys and girls for useful citizenship, for self support and for a growing individual life. The Inquiry analysed that the present high school failed to enhance social competence among young people just out of high school. The reason consists in the school's failure to give boys and girls a chance to acquire many of the abilities and attitudes which the out of school world will almost certainly demand of them. In any better programme of secondary education a prime essential must be a curriculum more directly focussed on kinds of competence which young people, out of school will surely need (Raubinger, *et al*, 1969 pp. 278-281).

The Inquiry held that the secondary school curriculum should take positive account of the need on the part of most high school pupils to get and hold jobs, once they are through with their schooling. For every pupil who is to complete his formal education in that school, each secondary school ought to provide a necessary minimum of definite preparation for a vocation. The degree of specialization which should be aimed at in the high school vocational courses must obviously be determined by the abilities required of beginning workers in particular fields (Raubinger, *et al*, 1969 pp. 282-288).

Regarding the curriculum organization, Horold Alberty (1953) holds that all of the activities that are provided for students by the school constitute its curriculum. It is by means of these activities that the school hopes to bring about changes in the behaviour of students in terms of their philosophy and purposes (Harold Alberty, 1953, p. 125). Reconcilins the subject centered approach and experience central programme of the curriculum organizations, Harold Albert comments "a curriculum based upon direct, personal experience is much more apt to be meaningful to the students than one based upon the logical organization of subject matters. Such a curriculum, however, must draw heavily upon logically organized subject mater if it is to be effective. However, he says that it is possible to reconcile these two concepts of curriculum organization by developing and applying a consistent theory of learning (Harold Alberty, pp. 155-156).

Resolving the controversy on general and special interest education Harold Alberty (1953) says that in current practice, general education is contrasted sharply with vocational education. All of the activities of the school which are not planned specifically to develop vocational competence are regarded as general education. Again it is held that

any course or activity which has a liberalizing element should be regarded as general education. This interpretation is confusing, because properly taught courses, directed primarily toward developing vocational skills enhance the student's liberal outlook (p.162). General education is that part of the programme which is required of all students at a given level on the grounds that it is essential to the development of the common values, attitudes, understandings, and skills needed by all for common democratic citizenship. Special interest education is that part of the program which is designed to meet the special needs and interests of individuals or groups. This part of the program provides both non-vocational and vocational opportunities (Harold Alberty 1953, pp. 163-164).

He concludes that the general education and special interest education are two interrelated facets of a good programme of high school education. It follows then that the school needs to give special attention to the nature of the programme which it provinces for meeting the special needs of students and groups of students. (Harold Alberty, 1953, pp. 205-208).

Depicting the the current situation of curriculum organization in Pakistan (Mukhtar Ahmad Bhatti, *et al* 1987, in his study says that our placing of much emphasis on general education means that we suffer from lack of emphasis on vocational and technical courses. The study suggests that curriculum in Pakistan is over loaded. It forces and compels teachers to deal with multiple subjects rather rapidly. This calls for reducing the curriculum and selection of essential elements of each subject. Such reduction and condensation of curriculum around essential concepts would enable the

teacher to use his skills better and the students to get more time for independent reading and personal activities. For this evaluation of the curriculum, research based techniques, where teacher and the taught are involved, should be adopted. Fewer subjects studied in greater depth and detail, would raise the level of competence of students by offering them more time and greater choice of concentrating on subjects most needed by them and the society. Over emphasis on general courses and overcrowding the classes negates the priority to vocational training which is vital for economic development of any country, industrialized or not (pp. 115-116).

Regarding provision of facilities the study says that, unlike schools in industrialized countries, most of ours are not equipped with clobbered science and language laboraties workshops, symposia, audio-visual aids centers, computers and other sophisticated equipment. Most of our secondary schools classrooms are also not equipped to receive educational radio and television broadcast. Tape recorders are also not available in most schools. While we have added new school buildings, we still lack well equipped schools. Due mainly to economic constraints the availability of modern teaching material in schools has not been possible (Mukhtar Ahmad Bhtti, 1987 p. 117).

About the methods of instruction, the study comments that most of our teachers continue to rely on verbalism. Talk and chalk are the principal tools of classroom instruction. Large classes, particularly in urban areas, present an obstacle to innovation. Only the teacher training institutions talk about project methods, demonstration, field trips and application of theoretical knowledge by effective use of community resources. The climate of instruction is uninspiring, traditional, rigid and

focussed at goal of securing high percentage of marks, rather than enrichment and growth of personality reacting to the environment with originality and learning to apply theory in practical situation. Considering the general instructional pattern, emphasis needs to be placed on pupils' learning ability rather than on the amount of knowledge to be acquired. Instead of rote memorization of science lessons, conceptual framework of students has to be improved through experiments not necessarily involving a sophisticated laboratory. Assuming the limitations of laboratories, the teacher has to be trained in the use of inexpensive teaching aids. Elements of technology may preferably be used rather than be isolated from technical and vocational training. Teaching at secondary and higher secondary stage tends to be highly compartmentalized into subjects. The interdisciplinary dependence is seldom translated into unified approach which could treat all knowledge as primarily and basically one. (Mukhtar Ahmad Bhatti, 1987, pp. 118-120)

The Education Code of NWFP (1920) prescribed, that the hours for closing and opening schools shall be fixed according to the season, locality or class of pupils by the local bodies and schools management or Headmaster in Government school, subject to the restriction that the total number of hours devoted to secular instruction daily shall not exceed five hours in secondary schools. A holiday may be given on last saturday of every month either for school sports or to enable teachers to attend meetings of teachers associations in places where such meetings are held. The number of miscellaneous holidays should not exceed 43 in a year exclusive of Sundays. Article 21-A (ii), says: "Ordinarily 45 pupils only may be enrolled in any single section of a class and in no case is the number to exceed 50" (The Education Code, NWFP, 1920 pp. 217).

Regarding the courses of study in high school, article 83 of the Education Code of NWFP (1920) says:, They should be "designed to prepare pupils more specially for the class of work which they propose to pursue after leaving school" (p. 27). The Code determined that there should be a floor space of at least 10 sq. ft. per pupil in case of primary schools and 12 sq. ft. per pupil in the of secondary schools. (Article 30). Every secondary school must be provided with a library and reading room for teachers and pupils (Article 32). Schools will not be recognized for the teaching of science unless adequate science apparatus is provided and unless facilities are given for practical work to be done by the pupils (Article 33). (pp. 9-13).

Advisory Board of Education (1949), in its second meeting held at Peshawar from 7th to 9th February, 1949, recommended that a teacher should be required to be in the premises of the school for 33 hours a week in all which should be devoted for teaching and extracurricular work (p. 35).

The review of these historic documents indicates that even the standards set before independence could not be maintained and, instead, have deteriorated considerably. Overemphasis on examinations and classification of students into divisions and grades has overshadowed the objectives of education. Dr.Mukhtar Ahmad Bhatti (1987) thus recommends to do away with all grades and divisions. Instead, in each subject and on composite basis each student's percentile rank should be worked out and announced by the Board (pp. 123-144).

The writing and publishing of textbooks is the responsibility of the Text book Boards. Each Board either commissions a panel of authors for writing the

manuscripts or invites the manuscript through open competition. The manuscrinipts are then edited by the provincial Textbook Board and sent to the Federal Ministry of Education for seeking approval of their Printing/ Publication. The Ministry constitutes review committees consisting of subject experts to make the manuscripts printworthy and to ensure conformity with the national objectives and ideology (Said Rasul Malik, 1992, pp. 28-29). There is considerable doubt within the educational community that this system adequately serves the needs of the country (Louis D. Hayes, 1987, p. 154).

W.M. Zaki (1975) holds that the main criticism leveled against the country's present education pertains to its nature and quality. This in essence can be directed to out of date curricula and syllabi. First, the curricula are generally entrenched in the past and thus have only theoretical significance.

Second, they are dominated by the arts and humanities and, as such, donot take into account the needs of modern times. Third, the meagre scientific, vocational and technological content is bookish in nature and does not lead the student to creative activity and practical application. In short, the curricula are divorced from the world in which the students live and the real day to day issues and problems with which they are faced (W. M. Zaki, 1975, p. 103).

One recent study conducted under the auspices of the World Bank, (1994) says that quality of education at the secondary level largely depends on instructional resources which include teaching methodologies designed to encourage independent thinking; capable, motivated and well trained teachers; well-designed curriculum; effective learning material; and, a reliable evaluation system. Teaching methods, should not be restricted to chalk and talk; rather other effective/suitable instructional methods

be applied for the improvement of academic achievement and quality of instruction. Teaching profession; suits those who are willing to play the role of nation builders and reformers. It is not a paying profession, therefore, selection and promotion of teachers should be made after taking into consideration their competencies and dedication to the cause of education. The good work of teachers should be recognized. The acquisition of basic learning skills and academic competence seem to be indicators necessary for effective school teachers. (Muhammad Iqbal, 1954. pp. 44).

The study (Muhammad Iqbal, 1994) proposes that content of curriculum should be based on the purpose of education which should be spelled out clearly. The selection of content should satisfy the criteria of significance, interest and desirability. A balance between the permanence and change should be maintained by preserving the permanent values and adopting innovations for change. The updating of the curriculum is a continuous process. Learning materials should not be restricted to textbooks only. Other instructional resources should also be used to make the education process more motivating (p. 45).

We have reviewed the available literature on various aspects of curriculum development in general and with special reference to Pakistan. It is very interesting to note the even pre-independence provisions on the curriculum of the secondary education are quite elaborate. We have in fact not maintained even those standards. The proposals contained in a study conducted by the Task force for the development of Secondary education N.W.F.P. are also quite elaborate and need implementation. However, any change in the curriculum must be supported by a survey of manpower requirements of the society. We are going to study this aspect in the next section.

LINKAGE OF SECONDARY EDUCATION OUTPUT WITH MANPOWER REQUIREMENTS

Pakistan's greatest asset are its people. The development, mobilization and utilization of its human resources represent an enormous challenge. In the past we grossly neglected our human resources and in terms of basic socio-economic indicators our achievements are amongst the lowest in the world. At the same time we have the highest growth rates of population and labour force which exerts tremendous pressure on our limited economic resources. The need for an integrated strategy for human resource development is both pressing and urgent. In this section we will review different studies and policies on this issue with special reference to Pakistan, in order to evolve a conceptual framework for the proposed restructuring of secondary education in N.W.F.P.

Manpower utilization and employment problems in any country originate essentially as a long-term process reflecting social factors and structural imbalances generated on the way to development itself. The most important among these in developing countries is a high rate of growth of population unmatched by sufficient investment to ensure new employment and growth in productivity. At 3.1 percent per annum, Pakistan has virtually the highest rate of increase in population in the world. An investment rate of 17 percent of GDP, on the other hand, is substantially below the average of low income countries (29 percent per annum). Pakistan's GDP growth was barely adequate to create additional employment opportunities at a rate of below 3 percent per annum during the early and mid eighties. This growth rate of GDP with no significant decline in population and consequent further reduction in the rate of growth

will aggravate the existing employment situation in Pakistan. The imbalance between the supply of people needing employment and demand for their services is almost certain to grow (Manpower Commission, 1990, p. 1).

W.M. Zaki in an article 'Educational Planning in Pakistan', published in UNESCO Bulletin 1975, remarks: "It is a great paradox that a country with one of the highest rate of illiteracy in the world should also be facing problems of unemployment of educated youth. A society ruled by a privileged class would naturally place a premium on education which prepared individuals for white collar jobs. Hence academic education with a preponderence of Arts and Humanities continued to expand without its limited capacity to enable educated youth to enter gainful employment being questioned. Technical/Vocational education was rediculed and curbed for its requirements of manual work. This distaste for physical work severely restricted the provision of occupational education which could equip an individual to enter and advance in the labour market (W.M. Zaki, p. 112).

An education system reflects a national consensus on basic issues and basic values. Needs of different segments of society and sectors of the economy covnerage to produce a particular system. The basic education system is of crucial significance for manpower planning. In Pakistan, an education system which was designed essentially to produce a limited social elite in the pre-independence period has not undergone sufficient changes to serve as an instrument for producing a large supply of educated and trained manpower for an industrial society. This limitation is clearly reflected in the unemployment of educated persons co-existing with the shortage of a variety of skills as indicated below:

TABLE 25
Unemployment of the Educated in Current Flows:

Education Level	Labour Force (000)		
	Educated Labour Force supply	Employed (Demand)	Un-employed in balance
Matriculation	94	68	26
Intermediate	62	34	28
Graduates	32	29	3
Postgraduates	13	12	1
Others	12	11	10
Total	222	154	68

Source: National Manpower Commission, 1990, p. 81.

The unemployment of educated youth is an expensive and socially disruptive phenomenon. (National Manpower Commission, 1990, p. 81). The economic cost is high because expenses on their education and training are wasted while they are not employed. The chances of their following victim to destructive tendencies are great. The real long term solution of the problem lies in simultaneous reform of the education system and rapid growth and development of the economy. The education system should respond to market demand for skills and emphasize quality at higher levels of education. National Manpower Commission (1990) recommended that for reducing educated unemployment, we must emphasize that the real long term solution lies in radically restructuring and improving the education system. The National Manpower Commission (1990) further suggested that the basic strategy must be to concentrate on what we identify as the hard core problem of the educated unemployed. These are those who pass

matric and intermediate and are not absorbed by the education system and find it extremely difficult to be absorbed in remunerative economy (p. 83).

The cut-off point for the educated manpower is the matriculation examination. The minimum qualification required for an educated person for a job is that he should have passed the matriculation examination.This means that we believe a person has acquired enough education after 10 years of schooling to be able to perform certain duties. In the modern education system in the world today, the schooling required for beginning any career is 12 years. This is 'A' level in U.K. and high school graduation level in the U.S.A. Other countries are following this system. Thus we are providing two years of less education upto high school level than other countries. At the same time we have great emphasis on languages. Every student has to study four languages including local language, national language, English and Arabic. Naturally the student is not proficient in any language. He has no time to acquire other disciplines and skills. The National Manpower Commission (1990) remarked that there is a strange compilation of teaching of subjects which does not meet the requirements of any particular job in life. Therefore most of these matriculates go for higher education. Others feel frustrated because without further training they cannot advance in life. The commission thus recommended that as a long term solution, the high school education should be for four years from class 9 to 12. The emphasis should be on a good command over Urdu and English combined with an attempt to create some skill for a particular job. In addition a value system should be created which would prepare the students mentally for using his hands on a job or using his skills in an enterprise or business. The desk job should

be de-emphasized as a way of life. Media should be used beginning from now, to inculcate new work ethics and dignity of labour. Education system should take this as an abiding theme (p. 85).

The reality is that the government would not have sufficient jobs to offer to the growing numbers coming out of the education system. The only hope is for the private sector to expand and offer employment to the new entrants in the job markets. Private sector would need more educated workers in industry. Presently three quarters of the industrial labour force of the nation is illiterate. To compete with developed and even developing nations we should have 100 percent literate and trained manpower (National Manpower Commission, 1990, p. 94).

Today the Education system of Pakistan faces the structural impalaces. If the output of given system is beyond the absorption capacity of another, we may say that there are structural imbalances. There could be quantitative and maladaptive imbalances. Quantitative imbalances could be due to unproportionate expansion of the system with reference to another. Qualitative imbalances, on the other hand, could be due to the content of the education system, i.e, how far the content of the education system is relevant with the world of work situation. If the curriculum content is not related with the world of work, then we may call it as structural imbalance (Sarfaraz Khawaja, 1996, pp. 116-119).

The role of education as an agent of national development is to contribute towards the achievement of full employment. Dr. Abdul Ghafoor (1986) indicates that education often falls short of this expectation in two ways: one, it turns out people whose

skills do not tally with the manpower needs of the country, second, it produces far more people than necessary in regard to some jobs and not enough in regard to others. In the first situation, what is brought about is an overall imbalance, i.e., unemployment, because the job-seeker has had no education or training suitable for the job. The second situation is described as structural imbalance. The contribution which education could make toward full employment is to ensure the closeness of fit between its output and the national manpower needs (Abdul Ghafoor, 1986, p. 128).

At the present stage of education development in Asia, new approaches and planning concepts are being assembled in many countries, with a view to developing an appropriate methodology or determining how education can best serve its function as supplier of manpower requirements, while at the same time contributing the achievement of full employment. Some of the new ideas now being pursued are: (a) that elaborate matching of educational qualification and occupational requirements is not applicable to the agricultural setting of rural Asia which is largely untouched by such concepts as labour force, wage earnings, sectoral productivity etc. and is not covered by national accounts of occupational statistics; (b) that it is not only the number of educated graduates which determines their employability, but what they have learnt and how it has been taught. A principal ingredient of such reform would be to combine learning and work in a continuation so as to allow the growing labour force to discover its own levels and acquire the requisites skills and, (c) that self-employment is an important educational objective in situations where the absorbing capacity of existing industries is limited. Education, in other words, must be so designed as to generate new employment

opportunities, in addition to supplying manpower, for existing employment openings (Abdul Ghafoor, 1986, pp. 133-134).

Dr. Abdul Ghafoor (1984) in his paper, 'Development of human resources, population, manpower and employment policies in Pakistan' elaborates the relevance of secondary education to national requirements, when he comments that side by side with the expansion of primary education, there has been stress on the expansion of secondary education. This stage is of crucial importance as it is the terminal stage for those who cannot go for college education and enter into the labour market for seeking gainful employment. The quality of education and its relevance to the job market has been under severe criticism from various sources. It could not provide a sound base for scientific and technological developments. Whatever attempts have been made in the past, have been rendered ineffective. For instance, attempts were made to introduce agro-technical education at the secondary level. But this experiment was rendered ineffective due to inadequate logistic support, lack of integration in the curriculum and performance evaluation, as well as non-availability of trained teachers. Prior to the introduction of agro-technical stream, comprehensive schools were set up and they also could not come up to the expectation. Their product was no better than other secondary schools. Dr. Ghafoor thus concludes that what is essentially required is the vocationalization of secondary education so that its products may enter into the labour market with the needed skill for gainful employment. At the same time, there is a need for more emphasis on science and technology education (Abdul Ghafoor, 1984, p. 94).

Demographic characteristics of secondary school age group point out to

a number of implications to be kept in view while planning for future. Projecting the 1981 population at an average growth rate of 3.06%, as determined by the 1981 census, now there would be approximately 15 million adolescents of secondary education. There is preponderence of rural population of secondary age group in NWFP. Out of 1.83 million (1987), 1.57 million lived in rural areas and only .26 million in urban centers. Expansion of secondary education in NWFP, therefore, calls for concerted efforts towards expanding it in rural areas. The extent of female imbalances is also considerable. Against one million male children, there are .83 million females. Neglect of secondary education of the female in NWFP is also evident from the fact that out of 2.66 lakh (1987) of middle and high school students more than 2.37 lakh were male and only 23110 female (including less than 10 thousands enrolled in rural areas (Mukhtar Ahmad Bhatti, 1987, p. 90).

Secondary education is becoming increasingly popular in NWFP in rural areas, in that, against 57619 males (1987) in urban areas, 1,75379 were enrolled in rural schools. Overall urban-rural breakup is also very different in NWFP. School enrolment is highly representative of that proportion. However, it appears that expansion of high school is not keeping pace with the outflow from the middle stage. As in Sindh, all girls middle schools in NWFP need to be upgraded to high schools so that girls already enrolled in middle schools do not give up studies simply because high classes are not added to middle schools in which they are already enrolled. Although out of 1.83 million (1987) of the secondary age group, only .226 million were enrolled. Yes there is strong possibility of smoother expansion of secondary education in NWFP, provided the, level

of class VI intake is maintained and drop out is kept minimal. The system has the potential for rapid and smooth transition to expansion and growth of secondary education in NWFP (Mukhtar Ahmad Bhatti, 1987 pp. 26-27).

TABLE 26
Expansion and Growth of Secondary Education, (1987)

Enrolment (1987)	Classes	Total No.	%
Pakistan	VI - X	28 Lak	100
N.W.F.P	VI - X	27 lak	10
Pakistan	VI - VIII	20 lak	100
N.W.F.P.	VI - VIII	2 lak	10
Pakistan	IX - X	8 lak	100
Punjab	IX - X	5 lak	64
Sindh	IX - X	2 lak	23
N.W.F.P.	IX - X	62 thousands	8
Balochistan	IX - X	12 thousands	2
Federal Area	IX - X	6 thousands	1
F.A.T.A	IX - X	4 thousands	5
F.A N.A.	IX - X	2 thousands	3
Cant & Eas	IX - X	18 thousands	2

Source: Mukhtar Ahmad Bhatti, 1987, p.26.

The National Education policy 1992-2002 has pointed out that the type of general education imparted to the bulk of our youth is not suitable for the job market. Nor would it be helpful in future because of the changing pattern of economic activity. For this reason, change in curricula which would make them compatible with market needs, is an essential part of educational development. More so, the production of

manpower should be related with appropriate manpower forecasting, that is, the type of work force required and the type and level of skills in which proficiency is to be achieved. The policy admits that this process has not been institutionalized (National Education Policy, 1992-2002, p. 64).

The analysis of two foregoing studies has revealed that the annual growth rate of GDP is below 3% while population is growing at the rate of 3.1%. Therefore, the imbalances between supply of the jobs and demand of the people seeking the jobs is almost certain to grow. It is also revealing, as brought out by W.M. Zaki, that our educational system of pre-independence era has not undergone sufficient changes to serve an independent state. The National Manpower Commission (1990) remarked that subjects taught do not meet requirements of any particular job in life. One main reason for the failure of government policies/reforms has been lack of proper administrative structure of education. We will deal with this subject in the next section.

Management and Administration of Secondalry Education

Management of education is a process which is designed to ensure the cooperation and participation of different groups in the effective and timely achievement of educational objectives with available resoruces. In this section we will review the prevailing administrative structure of secondary education and identify its strengths and weaknesses.

Burton W. Gorman (1971) presents a set of principles to test the

soundness of orgnaization of the seocndary school, where the leadership seeks to provide its students with a proper educational opportunities. It includes indiviaualized instruction, communication between students, teacher's initiative, active participation of students in educational activities and priority of student's interest over that of the institution (pp. 106-125).

Describing power structure and administrative organization, Thut and Adams (1964) state, that the decisive role played by philosophical commitments in shaping social institutions and practices is nowhere more evident than in the forms of administratiove control employed by societies in their educational systems. According to him, it is very important that the policy making functions, as well as higher adminsitrative posts, are in the hands of persons with the proper intellectual qualification. In contrast to the highly centralized system, he suggests that decentralization of administrative authority indictes the presence of a social philosophy that attributes dignity to all individuals and values their active praticipation in the decision-making functions of government and other aspects of their common life. Such commitments understandably have produced unique forms of educatinal administration and control (pp. 15-16).

According to a report by National Steering Committee on Issues in Secondary Education (1994). "[t]he education system is working under a rigid system of civil service rules which are of overriding importance. Education Department, displays many of the featurs of a mechanistic model of administration. The organization resembles a multi-layered pyramid with only a vertical flow of information and command. There is no co-ordination between Educcation Department and its auxialiary departments. Even

with in the auxiliry departments the capacity of co-ordinated activities is minimal" (pp. 30-31).

Louis D. Hays, (1987) comments on the present education system of Pakistan, that the problem with education in pakistan is that we do not make academic decisions, we make political decisions in academic areas (p. 80). Constitutionally Pakistan is a federal system. Federation is a constitutional arrangement whereby political authority is divided between a central government and various states or provinces. Under this federal scheme formal authority over education is divided between the provinces and the central government. The subject of education is mentioned at ten places in the Constitution of 1973. There are six references under the federal and four under the concurrent list. The central government has exculive jurisdiction over:

A. Libraries, museums, and similar instituions controlled or financed by the central government.

B. Federal agencies and institutes concerned with research, professional or technical training, or the promotion of special studies.

C. Education as it relates to Pakistani students in foreign countries and foreign students in Pakistan.

D. National Planning and economic coordination including planning and coordination of scientific and technological research.

E. Copyright, inventions, designs, trade marks, and merchandise marks.

F. Corporations, such as the printing corporation of Pakistan and the National Book Foundation.

Under the concurrent list, the central government and provincial governments share authority over.

A. Mentel illness and retardation, including places for reception or treatment of the mentally ill and mentally retarded.

B. Curriculum, syllabus, planning, policy, centers of excellence and standard of education.

C. Islamic education.

D. Inquiries and statistics for the purpose of the matters in the list.

In the event of a conflict between the laws of the central governments and those of the provinces, the authority of the central government takes precedence. The central government has overall policy, coordination and advisory authority, where it has no controlling authority. Provinces are responsible for policy implementation, organization, administration and the management of school systems. The central government plans curricula, sets educational standards and controls a very sizeable budget. Project implementation, recruitment and supervision of personnel and the day to day operating budget are the responsibility of the provinces. Textbooks are produced by the provincial governments under guidelines set down by the central Ministry of Education (Louis D. Hayes, 1987, p. 82.

The Ministry of Education of the central government is headed by a Minister who is a political appointee. The second ranking officer is the Education Secretary who is a civil servant. The Ministry is divided into eight wings each headed by a joint secretary or Joint Education Advisor. Each wing is sub-divided into various

sectors. In 1976 the central government assumed control of all course content through the Act for the Federal Supervision of curricula, textbooks and maintenance of standards of education. The reason this concentration of authority was considered necessary was to "ensure that nothing in introduced into education that may be incompatible" with the basic national ideology (Louis Dhayes, 1987, p. 84). A Bureau of Educational Planning was established to coordinate planning between the national and provincial levels. In an effort to check the accumulation of power by the central government and expand authority at the local level, there emerged a scheme to create Eductaion Councils at various levels, composed of elected reprsentatives of the people, educationists and scholars, representatives of parents and other community organization (School Education in Pakistan, 1977, p. 12).

The dual structure of policy making and planning at the centre and implementation in the provinces has not worked well. There has been a growing recognition of the fact that a centralized system of decision making leads to delay, inefficiently and corruption (Louis D. Hays, p. 85). Among other things, the arrangement exacerbated the tendency on the part of lower levels of administration to resist or disregard policy guidelines set by the centre. For example, the implementation of new curricula developed by the centre was often delayed by the lack of textbooks and teacher training. Many management problems arose because of the lack of training or familiarity at the operational level with responsibilities assigned by the centre. Functions transferred to local levels, sometimes lacked the corresponding administrative and financial wherewithal to carry them out (Louis D. Hays, p. 85).

Provincial Education departments are headed by education Ministers who are political appointees and senior executive civil servants who are called provincial education secretaries. Administratively provinces are divided into regions or divisions, headed by divisional directors. These in turn are divided into districts headed by District education officers with girls schools having a lady District officer who may administer two district because of the small number of girls schools. Provincial educational administration for the most part structurally parallels that at the national level. Department of education deals with general education at the primary , secondary, college and technical levels, each having its own directorate, headed by a director. The administrative set-up of directorate of secondary education is attached as per Charts 4 ,5 and 6. (NWFP Education Statistics, 1995, pp. 1-6).

Constitutionally provinces enjoy full autonomy in the management and operation of educational system in their respective administrative territories, albiet, persusing the policy guidelines of the federal government. The present administrative structure in the provinces are the outcome of the implementation of recommendations of education policy of 1972. (Said Rasul Malik, 1992, p. 38).

It is interesting to note that even after forty eight years of independence, we have retained faithfully almost the same colonial administrative structure with some cosmetic changes only (Said Rasul Malik, 1992, p. 41). For example, the Education Code of the NWFP (1921) gave the following administrative structure of the Education Department:

A. i. Director of Public Instruction.

CHART 4

ORGANIGRAM DIRECTORATE OF SECONDARY EDUCATION N.W.F.P

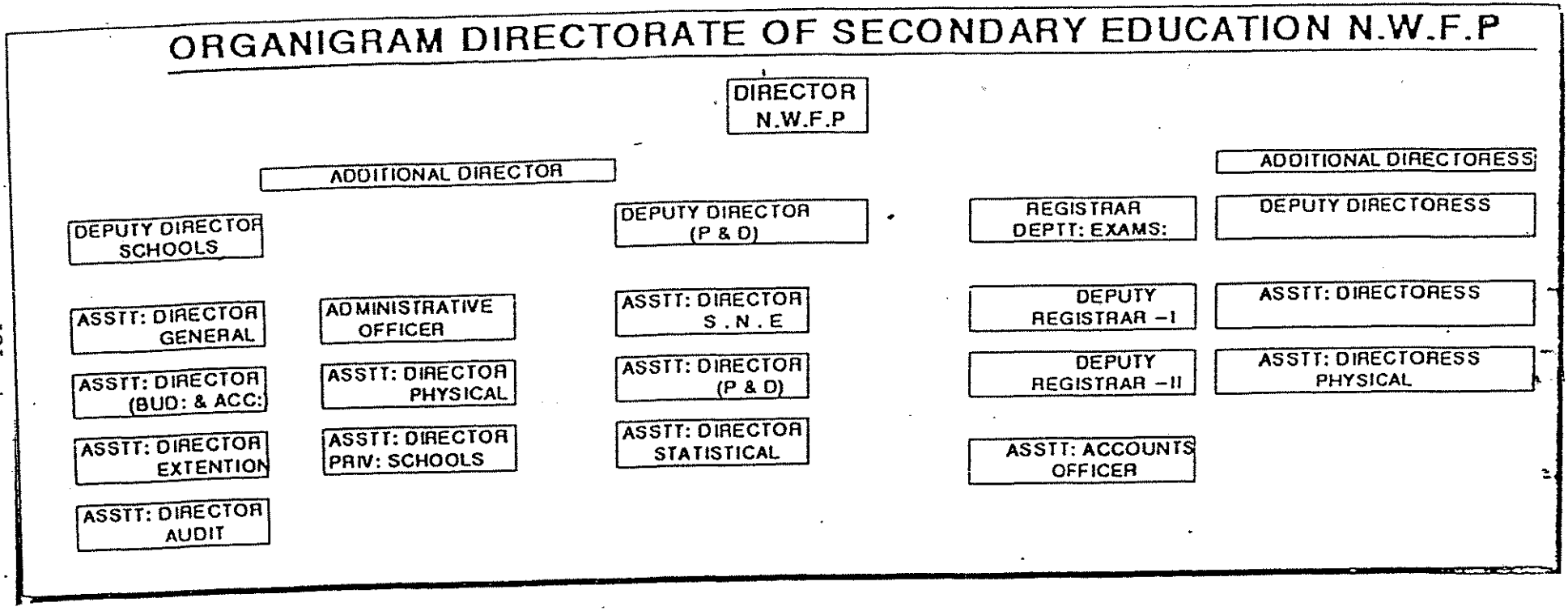
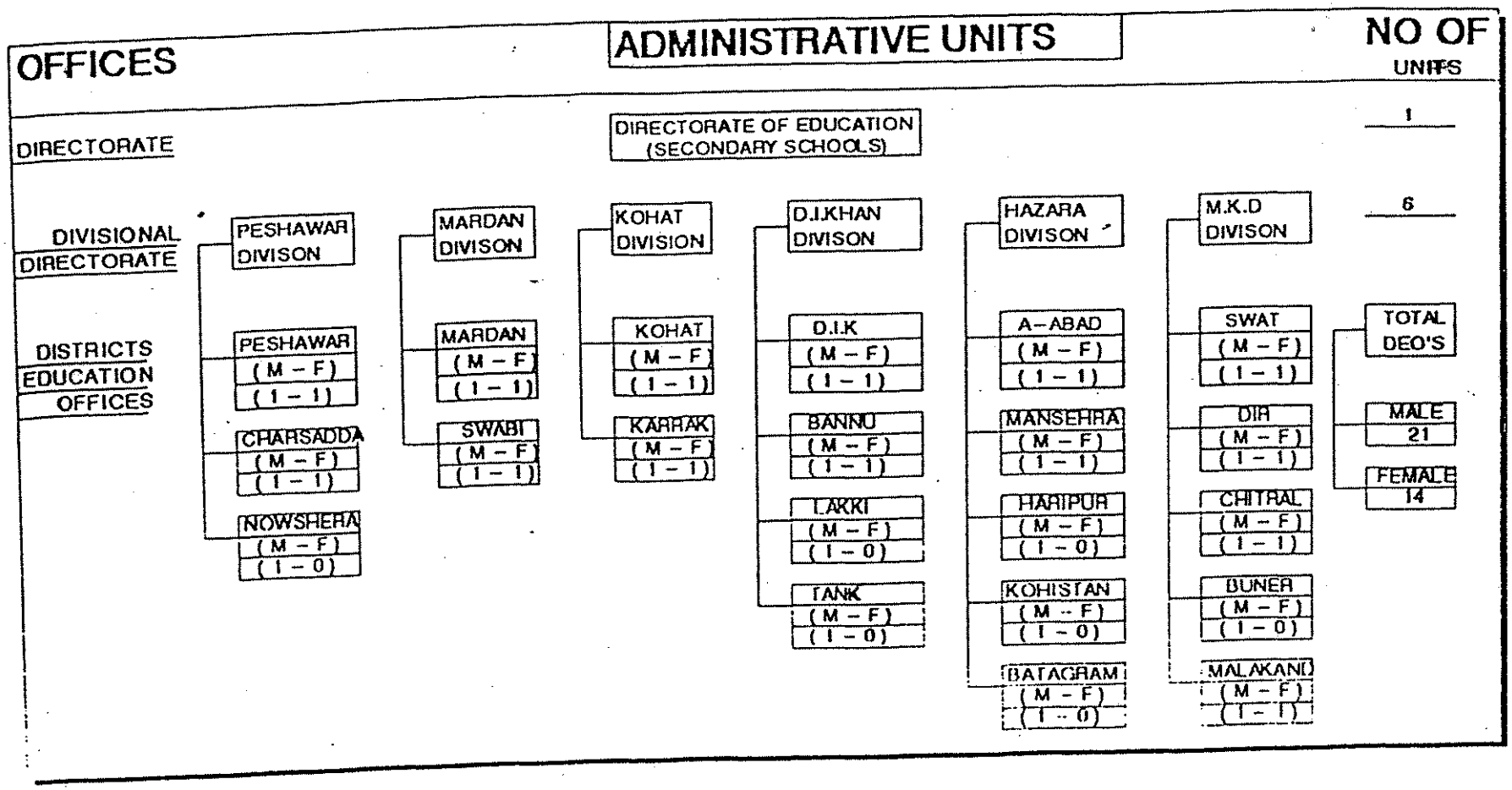
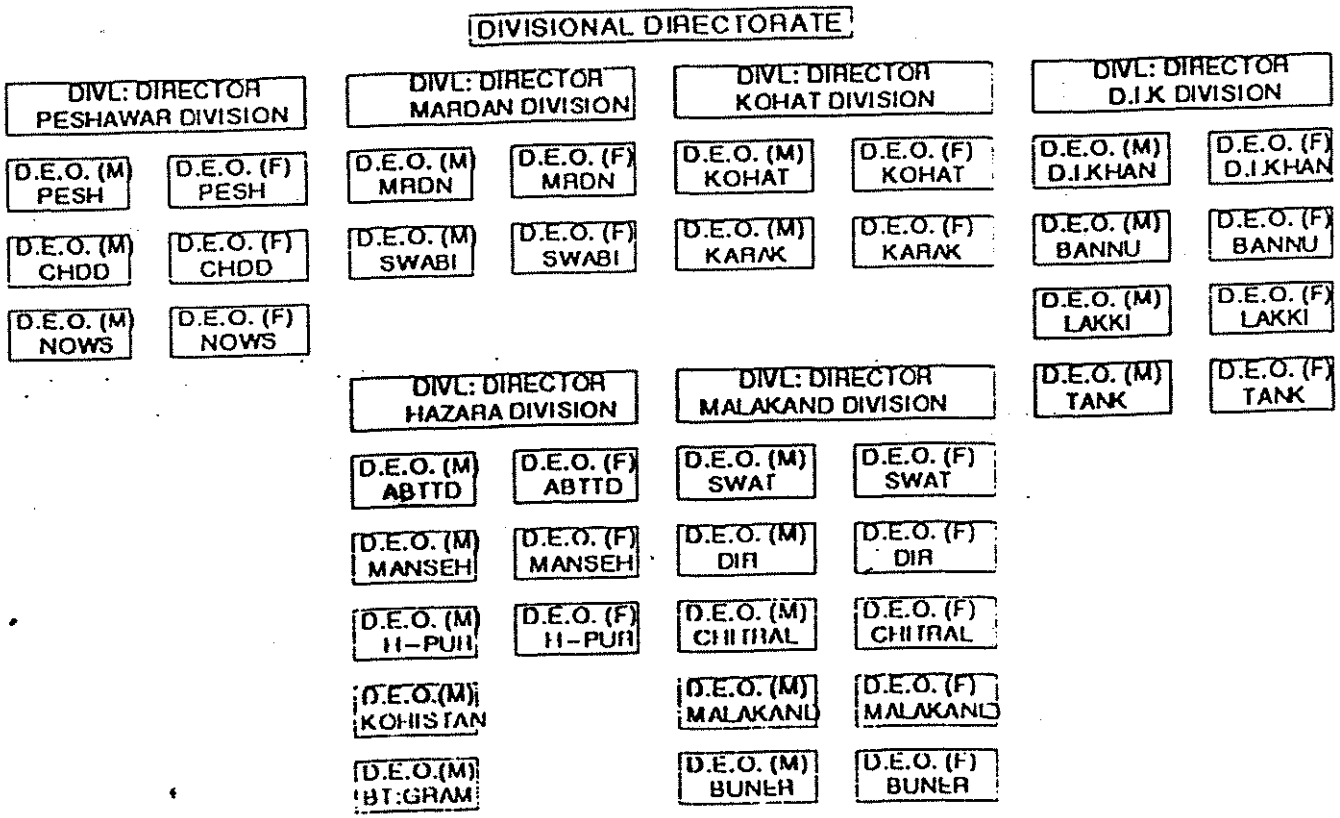


CHART 5


OFFICES
ADMINISTRATIVE UNITS
NO OF UNITS
DIRECTORATE
DIRECTORATE OF EDUCATION (SECONDARY SCHOOLS)
1
DIVISIONAL DIRECTORATE
PESHAWAR DIVISON
MARDAN DIVISON
KOHAT DIVISION
D.I.KHAN DIVISON
HAZARA DIVISON
M.K.D DIVISON
6
DISTRICTS EDUCATION OFFICES
PESHAWAR (M – F) (1 – 1)
CHARSADDA (M – F) (1 – 1)
NOWSHERA (M – F) (1 – 0)
MARDAN (M – F) (1 – 1)
SWABI (M – F) (1 – 1)
KOHAT (M – F) (1 – 1)
KARRAK (M – F) (1 – 1)
D.I.K (M – F) (1 – 1)
BANNU (M – F) (1 – 1)
LAKKI (M – F) (1 – 0)
TANK (M – F) (1 – 0)
A–ABAD (M – F) (1 – 1)
MANSEHRA (M – F) (1 – 1)
HARIPUR (M – F) (1 – 0)
KOHISTAN (M – F) (1 – 0)
BATAGRAM (M – F) (1 – 0)
SWAT (M – F) (1 – 1)
DIR (M – F) (1 – 1)
CHITRAL (M – F) (1 – 1)
BUNER (M – F) (1 – 0)
MALAKAND (M – F) (1 – 1)
TOTAL DEO'S
MALE 21
FEMALE 14

ADMINISTRATIVE STRUCTURE OF EDUCATION DEPARTMENT

(SECONDARY SCHOOLS) N.W.F.P



ii. The Inspector of Vernacular Education

iii. The Inspectorerss of Girls Schools.

iv. The Personal Assistant to Director of Public Instruction

v. All District Inspectors of Schools.

vi. All Assistant District Inspectors of Schools.

vii. Official staff.

B. i. The Headmaster of Government High School, Peshawar (IES)

ii. The Principal of the Training College Peshawar (PES)

iii. All the Head Masters of Government High Schools other than Peshawar.

iv. Staff of Training College and Government High Schools.

C. .The Registrar of Departmental Examination for examinations (NWFP Education Code, 1925, p. 3).

According to NWFP Education Code (1925) the Director of Public Instruction or the Head of the Education Department was responsible for the organization of public instruction in the province and insepcts all high schools at least once a year (NWFP Education Code, p. 12). But most Directors of Education tend to remain too far away from schools. On their visit the school had to be decorated and fancies exhibited. The Directors of Education/DPIs remaining pre-occupied with posting and releasing grants, may become incapacitated to think of and solve the actual problems hindering instructional process. They do not internalize facts and do not coordinate the system they head. Relationship between theory of educational administration and the practice remains week. (Mukhtar Ahmad Bhatti, 1987, p. 251).

According to Mukhatar Ahmad Bhattai, (1987) the headship of a high school or principalship of a college is mostly linked with seniority of educational personnel. Before assuming administrative responsibilities, the concerned individual may not know how to prepare budget, make purchases, administer financial problems and prepare developmental schemes for expansion and growth of institutions. Curriculum and textbooks being prepared by somebody else, he may have no experience in planning and curriculum development. Courage may have been killed by authoritarianism of the bosess, "With vision gone, link with new developments in the field of educational theory and practice broken, courage weakened, professional competence reduced, age having taken him over, expanded family demanding more money while his purchasing power has been reduced by inflation/low pay, his zeal and vigour for providing leadership in education may be pressed under his own depression. The worst consequence is the lack of interest in the growth of student and the teaching-learning process (Mukhtar Ahmad, p,252):

Educational administration has thus to be so reviewed and re-organized as to facilitate desirable change. Makhtar Ahmad Bhatti (1987) has recommended following measures to bring the desired change in this area.

1. Separate Directorates may be established in each province for the administration of secondary education having two wings, one for supervision and the other for technical and vocational education.
2. Liaison between the Director and the Heads of Schools should be increased.

3. Younger persons with demonstrated leadership qualities may be inducted as Headmasters/Principals.
4. A manual for the guidance of school Head should be developed.
5. School budget should be placed at the disposal of the Head and he should be held responsible for all financial matters.
6. Heads should be given management training to enhance their supervisory/ organizational capabilities.
7. Groups of subject experts should be organized to visit the schools frequently and provide guidance and counselling to improve the effectiveness and expertise of the teachers.
8. Heads should be trained in the techniques of community support/ development so that they may be able to involve the community in the school programmes and allowed to raise funds from the community in times of difficulty to run the school effectively.
9. Heads should be given the authority to fill up leave vacancies.
10. Head of the school, where new teachers are to be appointed, should be a member of the selection committees.
11. As far as possible, transfer of teachers should be made with the agreement of Heads (Mukhtar Ahmad Bhattai, 1987, pp. 253-54).

In the foregoing review, it has been indicated that issues emanating from the problem of management are closely related to the education planning, policy, organization, direction, and control factors of education. The Education Department is

loosely organized organisation and there is a need for the establishment of an efficient framework for carrying out plans. Policy initiatives guiding educational reforms should be carefully taken. Management training of educational administrators in NWFP, needs to be institutionalized. Moreover, there is a need for the creation of Evaluation and Monitoring Cell in Education Department for appraising performance and correcting deviations. Present criss-crossing of administrative domains, especially at the high secondary level, need to be objectively resolved. There is no coordination between the Education Department and its auxiliary departments and even within auxiliary departments. Some institutional framework is required.

GUIDANCE AND COUNSELLING AT SECONDARY LEVEL

In view of the proposed scheme of vocationalisation and diversification at the secondary level, there will be a requirement of a well-designed system of Guidance antd Counselling at the secodary level to guide students in the selection of choices on the basis of standardised tests. Here we review its various aspects and suggest an organisational plan.

The adolescence period, i.e., 12-18 years of age is very cruicial in the sense that it presents greater challenges to the developing individual. Children at this stage symbolize excitement as well as tension and pleasurable anticipations of life. Due to wide variations, development of maturity is attained by different students at different levels. Some may just talk, hope and dream instead of doing or planning. Many waver

quite a lot. The process of self-discovery is heightened. The adolescents want to be aware of their abilities and limitations. With complexity of life ahead and his future plans and prospects still unsure, a typical adolescent worries a lot during this age. Physiological and psychological changes among the adolescents also demand proper adjustments in social life. To sum up then, the period of adolescence is marked by uncertaities, hopes, idealism, self-discovery and the need to understand the society around.

In Pakistan, where literacy rate is only about 34 percent, adolescent does not receive adequate help and guidance from elders. It is futile to blame the illiterate parents for not providing guidance to their children. However, the authoritarian teacher needs to be questioned about the inadequate performance of his role. Usually a secondary school teacher seems to be more concerned about covering the curriculum content in over crowded classes than developing rapport between him and the taught. The affection of elders and teachers help the adolescents to communicate and discuss their problems. If neither the home nor the school provide such an opportunity, the problems of adolescents increase. The advice of illiterate parents about selection of future careers, vocations and subjects is often based on hearsay and lack of proper information. This, therefore, is the context within which the concept of guidance and counselling need to be viewed. Students need help and guidance. They need to know their strengths and weaknesses, their interests, aptitudes and potentials. The school system need to provide them an assessment of all these areas and thus help them in the process of self-discovery. The school should identify and diagnose, through valid instruments, the strengths and weaknesses of students. It should not remain concerned merely with transmission of

knowledge prescribed in the curricula and included in textbooks (Mukhtar Ahmad Bhttai, 1987, p. 244).

According to Dr. Mukhtar Ahmad Bhatti (1987), availability of guidance and counselling services in Pakistani schools is rare. Most high schools do not have a guidance worker or a counsellor on their staff. Uptill now standardized testing instruments have also not been developed. No intelligence/diagnostic test has been fully standardized. Interest inventories and such other instruments which could help the student judge his personality are also not available (Mukhtar Ahmad Bhatti, 1987, p. 245).

The absence of student aptitude assessment leads to wastage at both extremes of highly intelligent/talented and the slow learner. The case of borderline students needs equal attention. One has to remember that all above average students are not scientic-minded and, therefore, they should not be pushed into medicine and engineering and, similarly, all below average and average students with scientific and technical aptitude need not be pushed into liberal arts stream. In fact it is generally the slow students possessing technical aptitudes who prove to be more reliable skilled workers or contented politechnicians which really form the hard core of industry (Mukhtar Ahmad Bhatti, p. 246).

Guidance is for the total person. Talking about vocation cannot be done in isolation. The person's health, extra-curricular activities, aptitudes, achievements, work habits, and socio-economic surroundings have to be taken into account if the child has to be made to work to the optimum level. Our curriculum is college oriented where a very small percentage of our school population, i.e., 2% to 3%, goes to study.

Students should be guided in high schools about the vocation they can take up. Female students should be guided about jobs suitable for them such as medical care and teaching etc. Dr. Iftikhar-un-Nisa Hassan (1991) recommends that vocational guidance can be taken right to primary school by talking about home or community, e.g., talking about bus driver, gardener, teacher etc. In the secondary school from 7th and 8th grade the child's aptitude should be measured for preliminary channelling. Aptitude tests, she recommends, should be administered again in class X (p. 10).

A seminar on the introduction of vocational guidance programme in secondary schools in Pakistan, organized by National Bureau of Curriculum and Text books, Curriculum Wing, Ministry of Education, Islamabad from 5-10 October, 1991, in collaboration with UNESCO, Bangkok, adopted the following recommendations:

1. Develop a separate stream of vocational courses from class IX onward. This separate stream may lead to secondary school/matriculation or correspondence certificate.

2a. Comprehensive schools/Pilot schools/Model schools should cater the education of various trades.

b. Separate trade schools may be developed as a network.

3. Agro-tech based component be shifted to High Schools system. Middle schools be raised to secondary school level. Agro-tech may form part of the proposed scheme for secondary school certificate so as to have practical utility.

4. For developing awareness among students, parents and the community,

specific cells be developed for compiling an inventory of occupations, job analyses, evaluation methods etc.

5. A post of counsellor be created to meet the demands of 21st century; until then one teacher may be chosen to provide counselling services. Additional allowance for extra work be provided.

6. The counsellor must arrange visits to local factories, cottage industries and other vocational units having potential for self-employment.

7. Valid tests be developed by the forthcoming National Education Testing Service (NETS) to assess capabilities and aptitudes of students.

8. Specialized Training Programmes for vocational guidance be developed in addition to specialized courses leading to certification and diploma course to establish the credibility.

9. Proper workshops in the skills/vocations for training of students be established.

10. Placement, evaluation and feedback be given optimum attention, so that institution should feel pride in the placement of the student in the market. Follow-up services should provide feedback to improve the system.

11. There should be close collaboration between the Ministry of Education and Manpower Division to have better planning for training of personnel in different vocations leading to proper placement.

12. Intake of vocational planning Institute should closely match with the job opportunities to reduce un-employment of skilled labour. This will check

un-necessary exodus/outflow of skilled labour from the country.

13. Resource Centres be established at Divisional level for providing occupational information.

14. Cumulative record card of every student be maintained for better vocational guidance.

15. Multi-media be used for providing upto date information regarding newly introduced vocations like computer technology.

16. Close collaboration be ensured between institutions of vocational and technical education in countries of the region for sharing experiences, providing a resource base, for research and development in innovative instructional technology, thus leading to a unified and improved guidance and counselling.

17. There should be exchange of counsellors between good institutions of the region (UNESCO, 1981, pp. 89).

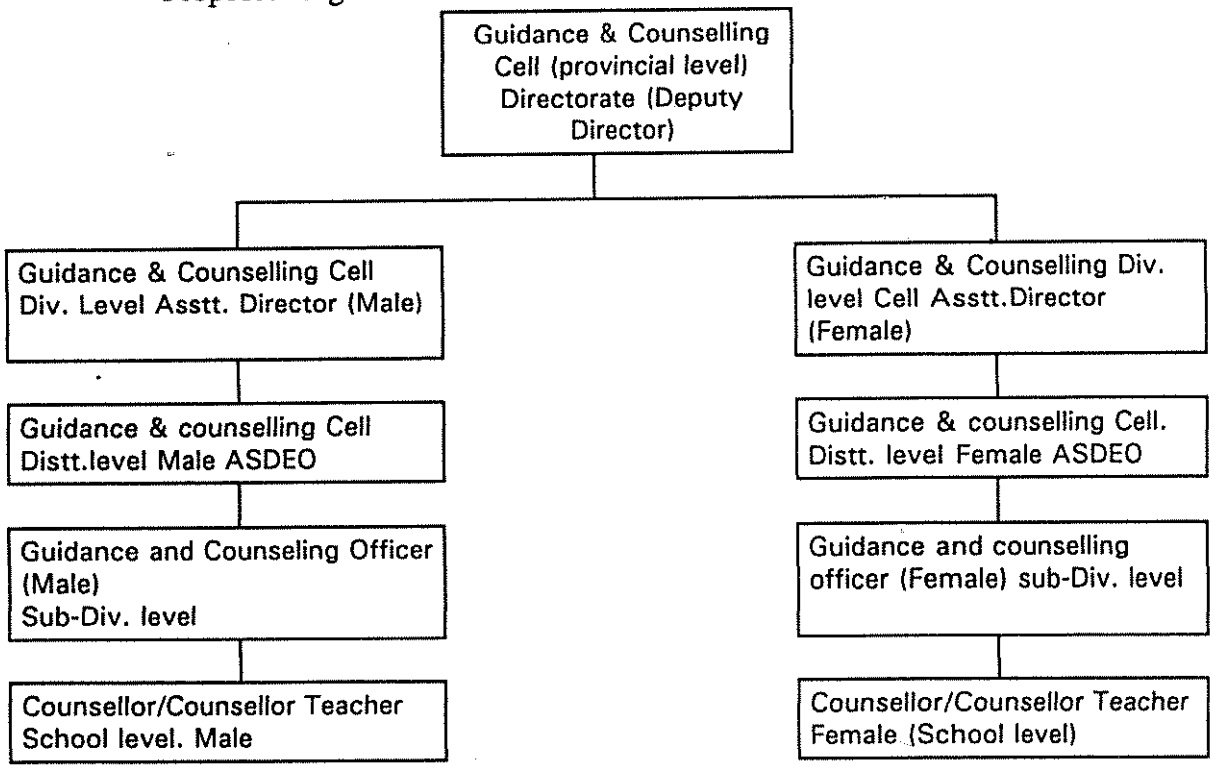
Suggested plan for the organization of Guidance services in secondary schools of Pakistan

While preparing the programme, emphasis must be placed upon working with parents in order to get awareness about the socio-economic backgrounds of the child. Difference of sex may also be kept in mind while organizing a guidance programme. The cultural ethos and religions beliefs may also be considered while embarking upon a programme.

There can be three levels of the guidance programme: Teacher based, Trained Teacher based, and full time Counsellor for every school. To have a full time counsellor for every school is an ideal. But the question is can the government afford it? Following is the suggested plan for organizing guidance and counselling services in the secondary schools of Pakistan.

CHART 7

Proposed Organizational Structure of Guidance and Counselling



The first and most important element of the suggested scheme is the training of the counsellors. For this purpose the suggested provincial guidance and counselling cell should co-ordinate with the universities, Institutes of Education and Research and Education Training Colleges to organize and conduct of the specialized courses to train the master trainers. The second important aspect of the guidance and counselling service is the collection of the data regarding job opportunities and proper dissemination of this information to all levels. For this purpose the divisional and district cell may act as liaision agents between the government and the market/industries. No plan can be successful with out proper supervision and its evaluation. This task can be assigned to the District/Divisional and Provincial Guidance Cells to keep a track of the ongoing guidance activities in the schools. The whole plan depends upon the individual counsellor teacher for its implementation. It has to ensured that he is properly trained and motivated.

The main function of the guidance and counselling cells at all levels will be to find out aptitudes and potentialities of the students and bring them in line with the available job opportunities in the labour market and harness them for the national development.

FINANCING THE SECONDARY EDUCATION

In this section, the study reviews the official policy of the government regarding allocations to education department. These policies will then be aligned with international standards as well as the actual requirements of our education sector. The study will also recommend corrective measures.

Ever since independence in 1947, Pakistan has been endeavouring to expand education system so as to equalize access to educational opportunities to the specific age group children of the population. This expansion did not correspond to the growth of population which has been increasing at the rate of 3.1% per annum, (World Bank, 1994). Pakistan is now the ninth most populous country of the world. Its total population on January 1, 1990 was estimated as 110 million, (World Bank, 1991). According to 1981 Census, Pakistan had a literacy rate of 26.2%. The participation rates at Primary level is within the range of 50-55% which are the lowest in the Asian Region. Similarly, the participation rates at Secondary level are also within the range of 20-25%. There are numerous factors for this low level of participation but the main factors are inadequate availability of teaching, learning and financial resources.

Education has to compete with other sectors of the economy for the allocation of resources. It could hardly get 2% of the GNP whereas UNESCO recommends allocation of 4% of the GNP for the countries passing through similar stages of development (Abdul Ghafoor, 1991, p. 10).

Despite the enormous increase in the number of schools and the dramatic increase in enrolment, Pakistan compares poorly with other countries in enrolment percentages and amount of money spent on education. Even in comparison with its four South Asian neighbours (excluding Afghanistan because of its unique situation since 1979), Pakistan ranks at or near the bottom in most categories. From 1970 to 1980, Pakistan moved from fourth to last in enrollment ratios at the primary level, was in fourth place in 1970 at the secondary level and tied Bangladesh for the last place in 1980 and dropped from second to the last in higher education in educational expenditures. Pakistan remained in third place throughout the period and has consistently ranked last in expenditure on female education (Louis D. Hayes, 1987, p. 131).

There has been substantial increase in GNP, but inflation usually paralleled and often exceeded increase in GNP. This combination of statistics is not encouraging while public expenditures have increased, the impact of this increase is offset considerably by high inflation rates. Moreover, growth in government expenditures has consistently exceeded growth in GNP which means that government is taking a larger share of national wealth. Increases in educational expenditures have come about only as a function of increases in overall government outlays. When the increases in educational expenditures are readjusted for inflation plus population growth, the overall impact is substantially diminished.

TABLE 27
Education Budget

(Rs. in Million)

Year	Education Budget	% Increase	As % of Budget	As % of GNP
1970-71	790	87	6.46	1.73
1971-72	797	87	5.90	1.61
1972-73	1001	25.59	5.63	1.63
1973-74	1269	26.77	5.46	1.56
1974-75	1744	37.43	5.26	1.64
1975-76	2488	42.66	5.19	1.99
1976-77	2803	12.66	5.11	1.96
1977-78	3301	17.76	5.24	1.89
1978-79	3875	17.36	5.44	1.99
1079-80	4153	7.17	5.37	1.79
1980-81	4619	11.22	5.01	1.69
1981-82	5602	21.28	5.10	1.76
1982-83	6470	15.49	5.58	1.76
1983-84	8165	26.20	8.16	1.98
1984-85	9174	12.34	7.80	1.98
1985-86	11318	23.37	8.45	1.16

Source: Louis D. Hayes, 1987, p. 134.

Education outlays have increased since 1970-71 from 790 million rupees to over 11.3 billion rupees in 1985-86. The ratio of education expenditure to total budget has not changed significantly, remaining at approximately 5%. The ratio of education expenditure to GNP has been less than 2% throughout the period. The allocation of money within education is revealing. In 1975-76 development expenditures

amounted to 43.3% while in 1985-86, they were 27.1% which reflects the declining emphasis upon construction of new schools (Louis D. Hays, 1987, p. 135).

Pakistan does not compare favorably with other less developed countries in the financing of education. The average percentage of GNP devoted to education among LDCs is 3.5%. For Pakistan it has historically been less than 2% (School Education Pakistan, pp. 21-22).

The distribution of money has been inversely related to the size of the student population. More money has been spent per student at the upper levels of the system than at the lower levels. From 1972 to 1977 Primary education received 13.2% of the development budget as against 16.2% for secondary and 34.7% for higher education. From 1978 onwards efforts were made to reverse the emphasis (Louis D. Hayes, 1987, p. 137).

The financing of education is highly skewed torward Public subsidy. Students attending public instituion pay almost nothing toward their education at any level of the system. Children of rich parents pay the same as the poor. Since the financial burden of education is so great and the per unit costs so high at the upper levels, it might be appropriate for those who can afford it to pay a larger share for their education (Louis D. Hayes, 1987, p. 137).

TABLE 28

Government Expenditure on Education by Level (1970-71 to 1985-86)

(Rs. in Million)

Year	Total Expnd.	Primary Educ.	Secondary Educ.	CollegesEduc.	University Educ.	Tech. Educ.	Teacher Educ.	Other items
1970-71	789.1	221.9	93.8	45.3	92.0	81.9	24.4	230.9
1971-72	796.8	275.3	103.7	49.80	69.3	79.8	20	189.9
1972-73	1000.7	315.4	113.5	85.6	81.8	79.9	15.9	309.4
1973-74	1269.3	399.2	189.7	166.8	107.9	152.0	17.7	236.0
1974-75	1744.5	451.5	290.0	162.3	124.0	191.8	29.5	495.4
1975-76	2482.2	767.3	4310.3	249.4	174.3	326.1	38.5	501.3
1976-77	2862.6	853.1	577.9	274.6	210.7	338.5	42.2	505.4
1977-78	3300.7	823.6	464.7	672.4	258.0	323.1	58.5	700.4
1978-79	3875.9	305.1	731.7	367.8	324.2	575.2	73.3	558.6
1979-80	4153.5	1604.4	820.4	387.5	426.2	518.7	71.0	325.3
1980-81	9619.1	1570.5	918.8	427.6	459.2	546.5	57.5	639.1
1981-82	5602.0	1820.0	986.9	493.8	611.3	748.8	83.5	857.9
1982-83	6469.5	2096.2	1256.0	462.0	665.5	952.7	100.3	756.8
1983-84	8165.1	2706.4	2339.4	857.7	701.7	530.7	146.6	882.1
1984-85	9173.6	3284.8	2368.8	1034.0	870.5	522.2	310.8	791.5
1985-86	11,317.7	4051.7	2886.0	1199.7	1075.2	690.4	2490	1165.7[8]

Source. 1. Federal Bureau of Statistics.

2. Ministry of Education

3. Louis D. Hayes, 1987, p. 136.

During the second Plan period only .262% of GNP was spent on secondary education which constituted 18.09% of the total expenditure on education. During the third plan the percentage of GNP allocation to secondary education was reduced from .26% to .2% only, which equalled 15% of the total expenditure on education. During the fourth Plan, period, while the share out of GNP increased upto .266%, the expenditure on secondary education as percentage of total expenditure was

15.96%. During the fifth Plan period, an average .312% of the GNP was spent on secondary education which amounted to 19.07% of the expenditure on education. Since 1983-84 the expenditure on secondary education has registered sizeable increase from .312 to .496% of GNP or 26.5% of the total expenditure on education. The recent trend, therefore, is toward higher percentage of allocation as well as expenditure on secondary education. However, even 26.5% of the education expenditure is not sufficient for expansion and growth of secondary education. Keeping the demands of introducing diversified curricula and vocationalization of secondary education, Dr. Mukhtar Ahmad Bhatti (1989) recommends that a minimum of 30% of the expenditure on education must be incurred on secondary education (Mukthar Ahmad Bhatti, 1987, p. 24).

The annual expenditure per school in 1947-48 was only Rs. 2078.5. From 1980-81 to 1982-83 the annual expenditure was more than Rs. 1 lac per annum. The present annual expenditure per secondary level institution has gone up to Rs. 265819.3. There has, therefore, been sizeable increase in annual expenditure per school. Most of this increase appears to be on the recurring side.

As far as expenditure per student per month is concerned, it was only Rs. 1.6 in 1947-48. The average continued to remain less than Rs.10 per month upto late 1960s. The present estimated expenditure per student per month has risen to more than Rs. 93. (Mukhtar Ahmad Bhatti, pp. 273-274).

Pakistan spends the least percentage of total Government expenditure on education. In 1983 according to UNESCO Statistical Year Book, Pakistan was spending only 5.1% of total Government expenditure on education. While Algeria spends 24.3%,

Egypt 9.4%, USA more than 18%, India more than 9%, Turkey 10.5%, Japan 19.1% and Korea 21.5%. Unless Government expenditure on education is increased, quality of education in general and that of secondary education in particular cannot be enhanced. Germany spends more than 10% of the total Government expenditure on education. Out of this expenditure 54% is incurred on improvement of secondary education. Dr. Mukhtar Ahmad Bhatti (1987), thus recommends that to begin with a minimum of 3% of GNP should be spent on education. There is a need to realize the necessity and priority that education sector deserves and we must resolve to spend, in the near further, at least upto 4% of GNP on education. As a nation we are way below even among the less developed countries. Even to keep in the race with less developed countries, the financing outlay must be doubled straight away, (pp. 279).

Louis D. Hayes (1987) suggests that it is high time that the private sector in Pakistan is encouraged to take responsibility for establishing educational institutions. In case of technical education the industries and big commercial organizations should share the cost of education. The investment made by the industries makes sense becaue they will be utilizing the graduates coming out of technical institutions (p. 52).

To appreciate fully the fiscal system of Pakistan let us see how it functions. The fiscal year begins in July and ends in June, while the academic year begins in April and ends in March. The Ministry of education asks for the budget proposals by the middle of the fiscal year. The development budget must relate to already approved development schemes, which themselves must be approved within the context of Annual Development Plan that includes projects in all fields. The recuring budget is

based on projections of actual operating costs. The establishment of educational priorities by the government has an effect on costs. Since budgets are based, at least in part, on enrollments, increases or decreases should be reflected in financing. Changes in the previous year are taken as the base for the next year. In addition, the cost of inflation has to be factored in which significantly increases costs on a year to year basis. Budget allocations do not necessarily correspond to stated policy priorities.

Almost all educational expenditures are borne out of tax revenues, only nominal funds are obtained from tuition fees, donations and other miscellaneous sources. Budgets are initiated at the lowest level institutions. These budget requests are based on the previous year expenditure and estimates for new items. The institutions send their demands usually showing the maximum figures in order to get the real demand met after the cut imposed by higher level administration.

Budgets are prepared separately for primary, secondary and college education. At the primary and secondary level, budgets are examined by the Districts and forwarded to Divisional Headquarters for their consolidation. They are then sent to the Provisional Finance Departments where they are processed together with other requests and more changes are made. Given the limited and often inaccurate statistical data available, the budget process must necessarily rely heavily on estimates rather than on solid quantitative information. Joint planning between the centre and the provinces involves the formulation of proposals by the provinces based on their needs which are then examined by the planning wing of the Ministry of Education and the Education section of the Ministry of Finance. There is a feeling that manpower planning as a basis

for educational planning does not work because of the unforeseen developments and longtime frame involved in managing educational institutions.

Many criticisms are made of the high cost of educational overhead. But many feel that this is actually the weakest part of the system. According to this line of reasoning, Pakistan's educational shortcomings are due largely to the lack of trained management personnel. There are not enough supervisory personnel and those that are serving are not properly trained for the job. Thus programme development and implementation suffer. Educational planning and administration also suffer from a lack of effective feedback loop. Regular input of information from the bottom up in lacking. Hence, planning and decision-making are based on the best judgement of political biases of the higher ups. What comes out of the system often bears little relationship to actual needs and opportunities at the operational level.

According to L.D.Hayes (1987), Pakistan has not been able to develop the basic administrative infrastructure for an effective planning process. As it exists, planning is based too much on the ideas of the government officials. Plans that come from the provinces are really the plans of provincial governments; they are not what the people who implement plans and programmes want or need. There is little gross root involvement which is needed not only to improve the planning process but also to better represent and promote the interests and involvement of educational practitioners (pp. 93-97).

TABLE 29

Recurring Budget estimates, 1992-93, NWFP Education Department

(Rs. in millions)

Sub-Sector	Budget Estimates 1992-93	Revised Estimate 1992-93
Admn. (School, Colleges & Technical)	155.021	166.427
Primary Education	1784.169	1774.812
Secondalry Education	962.197	962.197
College Education	273.051	304.747
Technical Education	184.270	180.555

Source: ADPs 1992-93 NWFP

TABLE 30

Seventh, Eighth, Five Year Plan Allocation for Education (Sub-Sector Wise).

(Rs. in million)

Sub-Sector	Utilization 1988-93	Allocation 1993-98	% Allocation 1993-98
Primary Education	1584.93	1993.98	70.8
Secodnary Education	1192.335	1300.080	13.2
College Education	304.817	760.775	7.7
Technical Education	209.136	625.089	6.3
Teacher Education	83.284	108.871	1.1
Scholarships	62.713	86.037	0.9
Misc	63.878	-	-
Total	3500.892	98500.00	100%

Source: 7th, 8th Five Year Plans

It has been indicated in Table 29 that major allocations were made for the primary education. The policy remained to ensure sustained growth at the secondary level. The sub-sector wise utilization during the 7th Plan (1988-93) and the proposed allocation during the 8th Five Year Plan (1995-98) is reflected in Table 30. It is, therefore, suggested that share of secondary education may be rationalized to enable this sector to provide for absoption of incoming pressure from elementary level.

REVIEW OF RESEARCH STUDIES DONE IN THE FIELD OF SECONDARY EDUCATION IN PAKISTAN

Our research reviews the following studies done in the field of secondary education in Pakistan, including NWFP.

1. Mukhtar Ahmad Bhatti, *et.al* (1987) *Secondary Education in Pakistan*, National Education Council of Pakistan.
2. David Smith and Jamshed Khan (1994), *Acess to Education in Grades 9-12* The World Bank Islamabad.
3. Mukhtar Ahmad Bhatti (1994) *The Appointment, Employment Conditions, Career Prospects and Evaluation of Teachers, and Heads of Secondary Schools and Colleges*. The World Bank, Islamabad.
4. Lynn Davies and Talat Khurshid (1994) *Restructuring Secondary Education and Intermediae Education* Ministry of Education, Govt of Pakistan Islamabad.
5. The World Bank (1991) *Review of Secondary and Intermediate Education*"

Pakistan.

6. National Steering Committee, Secondary Education Reform Project, (1994) *Report on Issues in Secondary, Higher Secondary and Intermediate Education* British Council, Islamabad.

7. Dr. Muhammad Iqbal (1994), *Identification of issues, Strategies and Studies* Intermediate and Secondarly Education Reform Project, Government of NWFP.

Main provisions/findings and suggestions/recommendations have been summariesed as under:-

Aims and Objectives of Secondary Education

a) Secondary education should actually become a complete terminal stage for majority of pupils. Students completing secondary education should acquire useful skills enabling them to join local trade and readily become earning members of the family (1, p. 6).

b) Quantitative expansion has to be considered only as an auxiliary aim. The main priority should be given to quality (1).

c) To prepare students to enter the world of work and to instill in them the ability to adjust to a new environment (6).

d) To develop an appreciation of good workshmanship (6).

e) To promote an awareness of opportunities and the requirements related to specific fields of work and to develop the ability to use information and

counselling services in choosing a particular occupation (6).

f) To prepare students for industrialization of the country by imparting modern scientific and technological knowledge (6).

Issues

a) Demand for education is also going to rise as a result of population pressure. (The estimated annual population growth rate in Pakistan is 3.1%) (6).

b) There is low enrolment at higher secondary schools inspite of the fact that places at colleges are insufficient to cater for the demand.

c) There is overcrowding in urban institutions, typically classrooms designed for 35 students are occupied by 50 or more students (6).

d) There is a need to identify clearly the needs of the society on the one hand and to relate these needs to the process of education that goes on in school, on the other (6).

e) Secondary education should be goal oriented, productive and work oriented. It should have relation to the requirements of the job market (7).

f) Other important issues are mismanagement of the education institutions, indiscipline of students, absenteeism of teachers, poor academic achievement, unreliable evaluation system, irrelevant curriculum, lack of proper facilities, issues of access, and quality and improvement of education management information system, which need to be addressed urgently (7).

Access/Equity

a) At present (1987) about 21.9% of our secondary age group are enrolled in schools (1).

b) There is preponderance of rural population of the secondary age group in NWFP Expansion of secondary education in NWFP, therefore, calls for concerted efforts towards expanding it in rural areas (1).

c) The average number of teachers per school (1986-87) in NWFP is 14 and student teacher ratio is 13 to 1(1).

d) Average enrolnemtn per school in NWFP (1986-87) is 189.

e) New facilities catering for secondary stage should be located in small towns and rural areas and be equitably distributed for the boys and girls (5).

f) There is imbalance in the demand for and provision of education for girls at secondary level (6).

g) There is inequality between urban and rural areas in supply of teachers, equipment and physical facilities etc. (6).

Female Education

a) Neglect of the secondary education, of female in NWFP is evident from their low enrolment level (1).

b) For female education, more schools should be set up at reasonable distances. Ten percent of female primary schools should be upgraded as middle schools per year and ten percent middle schools as high schools

per annum (1).

c) Transport facilities should be provided for the lady teachers serving in rural areas.

d) To make up the prevailing deficiency, new secondary schools should be opened more for girls as compared to boys (1).

Vocationalization/Diversification

a) Vocationalization of secondary education has not been successful in Pakistan because of the unwillingess of the industry to accept to employ the output (1).

b) The choice of subjects should be upon survey of the job market, individual abilities, aptitudes, tastes and interests (1).

c) In NWFP education after class viii tends to become terminal; As such, popularization of secondary education in NWFP would require changes and its diversification/vocationalization according to socio-economic conditions of the province (1).

Structure of Secondary Education

a) The research endorses the 1979 education policy regarding structural organization of education system in Pakistan. It recommends three tier system. Secondary education should usually be of 4 year duration offering diversified courses (1).

b) The research proposes three streams at ix and x classes, i.e., Science, Arts and Vocational/Technical Stream (1).

c) A comparison of higher secondary schools and colleges suggests that the former are the more cost effective. The outputs of colleges are slightly better than the schools but at a considerable additional cost. So increasing the quality of inputs in the higher secondary schools is likely to produce greater returns. (2)

d) New higher secondary schools should be opened subject to the availability of appropriate number of students.(4)

e) Colleges are considered more prestigious and successful in examination achievement; hence, pressure from politicians and parental demand led to intermediate colleges still being opened (4).

f) The second barrier to change is the problem of different Directorates, different administrative controls and different teaching cadres or pay scales for 9-10 and 11-12 classes (4).

g) The study recommends proper three-tier system recomended with the following strategies (4)

   (1) the encouragement of the growth and upgrading of High secondary schools but with adequate facilities.

   (2) The compulsory use of feasibility studies to assess needs for higher secondary schools.

h) Restructuring secondary education, as is envisaged by 1979 National Education Policy, has not been achieved due to inadequate financial provision (6).

i) There are many vested interests at stake, such as the scope and authority of the Directorates responsibile for colleges, primary and secondary education and the career structure of the teachers (6).

j) Grades 11 and 12 should be made school grades and intermediate colleges should be converted to intermediate schools (5).

Administration/Management

a) At the provincial headquarters the planning cell of the Education Department should be led by a professionally qualifeid educational planner with the status of Deputy Secretary or Additional Secretary (2).

b) With the adoption of the second shift the class size can be reduced upto 50%. Present class sizes are much larger in many institutions and teachers are underutilized (2,3).

c) Heads of the institutions require training in the management to enhance their supervisory/organizational capabilities (1,2).

d) Despite the identification of relevant reform areas and useful recommendations for secondary education, the implementation has been faulty and provision of public finance has been inadequate (6).

e) Education Departments display many of the features of a mechanistic model of administration, in which an internally oriented organization adapts in an uncontroled way as things happen to it, and, in which the consumers of education, the studetns, are only passive recipients of the

service (6).

f) The capacity to carry out professional work/research within the discipline of education is minimal (6).

g) The current pay scales of secondary education teachers are in every respect commensurate with the qualification and experience at different levels. The counterparts of these teachers in other government departments are not getting scales higher than those of the teachers (3).

h) Younger persons with demonstrated leadership qualities may be inducted as Headmasters/Principlals(1).

Examination/Evaluation

a) Top priority must be given to redesigning the procedures for developing and grading public examinations (5).

b) Reforming the public exmaination system by establishment of National Testing Service, improving accountability, improving examination security and diversifying and strengtheining university selection criteria (5).

c) Malpractices in exmaination are rampant and, hence, examination reuslts are unreliable (1).

d) Annual examination may be connected with summer vacation so that while the students are on their vacation the results are announecead and the next class starts (1).

e) Research should be undertaken to suggest the way to do away with all grades and divisions. Instead percentile ranks of students should be

worked out and announced by the Board in each subject (1)

f) Political will is essential for putting a stop to corruption in examination, and nothing can be achieved unless political will is on the side of the Board (6).

g) Most of the Boards had surplus budget which had not been used to improve the working of the Boards or improving the quality of examinations or on research (6).

Curriculum

a) The curriculum of the secondary education should be diversified in accordance with the manpower requirements identified by the survey of the needs (1).

b) The Report suggests renovating and overhauling curricula and improving textbooks (5).

c) There is need to improve the quality of educational inputs and thereby, enhancing the quality of students emerging from schools (6).

d) Teaching in Pakistani secondalry schools is entirely lecture/recitation model (5).

e) Teachers are often poorly motivated and have few opportunities to keep up to date in content or methodology (5).

f) Curriculum is out-dated and poorly disseminated (5).

g) Textbooks do not match curriculum objectives, are badly organizaed and of low production quality (5).

h) Learning materials except for the textbooks are scarace (5).

i) Over-crowded general courses are offered at the high and higher secondary stages to the detriment of vocational/technical education (1).

j) The organization of school time-table follows a traditional pattern (1).

k) The schools are not equipped with elaborate science and language laboratories, workshops, audio-visual aids and computers etc. (1).

l) Drastic revision in respect of curricula for teacher education is needed (1).

m) To check the drop out rate, curricula need to be skilled oriented. Job-oriented curricula will enhance the motivation of the students (1).

Private Enterprise

a) The private sector can play a significant role to supplement the effort of the public sector in quantitative expansion and qualitative improvemnet of secondary education. The Frontier Education Foundation needs to be activated to motivate private sector's involument in secondary education. (7).

b) Private enterprise may be encouraged to establish more secondary level institutions, particulalry in rural areas and for the female. Government may give grants to encourage private enterprise in education (1).

c) Participation of the private sector in providing schooling should be encouraged by facilitating access to credit, removing regulatory barriers and provision of scholarships to needy students (5).

Teacher Training and Teacher career

a) Deficiency of teachers in science and vocational/technical subjects should be made up by establishing separate institutions on the pattern of Faisalabad. Around 10,000 science graduates unemployed can be employed as science teachers provided adequate incentives are offered to them (1).

b) All the teachers must get an opportunity for orientation courses and not a selected few who are nominated every time (3).

c) 20 percent quota should be kept for the teachers getting higher professional diploma or degree for upward mobility in their careers (3).

d) Job rotation may be provided to all the teachers (3).

e) Performance standards need to be developed for teachers working at different levels. Separate ACRs forms are needed for teachers to assess their teaching capabilities (3).

f) Career opportunities for subject specialists should be equal to those of grade 11 and 12 lecturers in colleges (2).

g) There are enough unemployed engineers, diploma holders in different trades who may be available for recruitment as teachers of Technical/Vocational Stream (1).

Finances

a) Government should increase financial allocations for education at the rate of 8 to 9% per year for the provision of access to secondary education

(1).

b) We should spend at least 4% of GNP on education (1).

c) Total allocation to secondary education for the years 1993-98 (7th & 8th FYP) is 13.2% as compared 70.8% for primary education. This needs rationalization.

d) The average unit cost estiamtes in higher secondary schools is Rs. 2,758 while that in collges is Rs. 5710. The wide difference in cost is against 5% more passes. There should be saving of more than Rs. 453 million if all the intermediate students are shifted to higher secondary schools (3).

Co-ordination

a) Bureau of curriculum, Board of Intermediate and Secondary Education and Textbook Board, Institutes of Education and Research are isolated from the regular activities of the Education Department. Indeed the Directors of Education and District Edudation Officers are mainly confined to hiring, filing and transfer of teachers.

b) At present Board of Intermediate and Secondary Education are working in isolation from other bodies such as Ministry of Education, Textbook Board and Teacher Training Institutions. A closer linkage between these bodies could be highly valuable.

c) A common approach for the development of entire education sector would develop through the proper coordination of the implementation of development strategy (6).

Education Management Information System

a) The education management information system need to be made more effective in the dissemination of relevant information.

Guidance and counselling

a) It is essential to develop standardized tests of intelligence, scholastic aptitude, interest inventories, vocational preference scale and such other psychological tests on the norms of Pakistani childern (1).

b) At least one guidance worker/conuseler need to be provided in each school.

c) Cummulative record of each student should be maintained.

CHAPTER III

METHODOLOGY AND PROCEDURE

This study is primarily descriptive in nature. The study revolves around three basic issues:

a. Secondary Education.

b. Restructuring.

.e. Strategy

The study explains the importance of secondary education in Pakistan's educational system. It also explains why we have selected IX and X classes for our research. It links the secondary education downward with primary education and upward with higher Secondary education. Through analysis of related literature this research brings out the rationale of its own scope. We highlight the policy initiatives of the government on the subject. Besides, we traces out the history of secondary education in the Indo-Pak sub-continent. The intention is to trace out the genesis of the present secondary education. The researcher also describes the present official policy of the government on the subject. This research has provided answers to the following questions.

a. What is the present organizational structure of our educational system?

b. How many tiers our present structure possesses?

c. What is the present trend in the world regarding structure of secondary education?

d. What innovations have been introduced in the present administrative structure of our education system?

e. What is the significance of IXth and Xth classes in the field of of secondary education?

f. What are the effects/problems of introducing XI and XII classes in secondary schools?

The study firstly gives a brief literary meaning of restructuring, and then a detailed discussion on the practical implications of such restructuring. He gives a detailed survey of the National Education Policies, Commissions and government development Plans on this issue. The study also surveys the available literature bringing out the techniques and procedures how the restructuring is done elsewhere in the world. The researcher has interviewed the key personnel in education field to solicit their expert opinion on this issue and to highlight the need and extent for restructuring secondary education to accommodate the current needs of the society.

The study also defines the terms strategy in the literary sense, followed by a brief explanation of what it means in the policy making procedures. While formulating the final strategy, important social, administrative, organizational, educational, financial and technical aspects have been taken into consideration. During the survey of the related literature efforts have been made to highlight the examples of various models where different strategies are being adopted for restructuring secondary education.

So the research encompasses the following three important dimensions:-

a. What are the present conditions of secondary education of Pakistan?

b. What do we want? What are the suggested changes in the present structure of secondary education?

c. How to achieve our goals? Can we do so by following the steps suggested by experts, and experiences of other nations?

Procedure

The research problem is descriptive in nature. Hence, it involves the study and survey of the available literature on relevant themes. It also includes the review of the official policies, plans, reports of various studies, seminars, commissions and other related official/semi-official and private documents. The research also involves seeking the opinions of experts, who presumably know best how to research the goal. So a number of sources of information and data have been identified to obtain the required data on significant aspects of this study.

Sources of Data

1. The data has been obtained from the following sources

   a. Related literature.

      i) Official documents such as official/semi-official files, reports, papers, addresses, letters, calendars, Annual Development plans

and Annual Reports of the Education Department and other related agencies;

ii) National Education Policies, Plans, Reports of various Commission/Reforms on education and training in Pakistan.

iii) Researches done on themes related to our topic.

iv) Proceedings of seminars, symposia, courses, discussions on the subject.

v) Non-official material including books, journals and newspapers.

This is mainly a documentary study, that is why it has looked into the important relevant material and summerised the main points/findings at the end.

Interviews

The interview with key personnel in the education field, including Secretary Education NWFP, Director of Secondary Education, NWFP, Director Technical Education, Director Science Education Project, NWFP, Director Pakistan Academy for Rural Development, Peshawar, Chairman, BISE Peshawar, Chairman Board of Technical Education NWFP Peshawar, Chairman Textbook Board and Chief of Planning & Development, Department of Education NWFP.

Questionnaire

Questionnaire has been admistered to Deputy Secretaries Education, Deputy Director Secondary Education Officers of P&D Cell, Department of Education

NWFP. Principals of the Higher Secondary/Secondary Schools, Training institutions, and University teachers.

The main points of the interviews have been summerised as findings/views and suggestions/recommendations. Findings/recommendations based on responses to the questionaire have also been given accordingly.

Preliminary Preparations

The following steps have been taken as a preliminary preparation for the construction of interview schedules and questionnaire.

a. **Study of the Related Literature:** The research has made an extensive review of available related literature on the major areas of the secondary education. The study of literature coveres mainly the diversification of subjects including science, humanities vocational and technical education. However, the study is oriented towards the theme of vocationalization of secondary education. As a result of the review of related literature various important issues/aspects of secondary education have come to light and used in the construction of instruments for data collection.

Informal Interviews

.To solicit the experts opinion on the main issues of the research, the researcher has visited various institutions including Institution of Education Research, University of the Punajb, Lahore, Allama Iqbal Open University, Islamabad, Natinal Education Council, Islamabad, curriculum wing, Ministry of Education Islamabad, National

Institute of Psychology, Islamabad, University Grants Commission, International Islamic University, Islamabad. Management Unit for System Training Peshawar, Pakistan Academy for Rural Development Peshawar, Board of Intermediate and Secondary Education, Peshawar, Science Education Project, Textbook Board Peshawar, Primary Education Project Peshawar, Directorate of Technical Education, Technical Training Centre, Peshawar and certain other institution like Government Elementary College Peshawar, Agro-Tech Teachers Training College Peshawar, Government Technical High School Peshawar, Education Department NWFP Peshawar, Directorate Secondary Education and had informal interviews/discussions on various important issues of the research topic. These talks have helped the research, in further bracketing the key problem areas and the relevant agencies who are involved in formulating and implementing the educational policies and plans.

Study of the Official Files and Reports

The Directorate of Secondary Education and the Education Department NWFP, the curriculum wing Ministry of Education, Islamabad, University Grants Commission, Islamabad, National Institute of Psychology, Islamabad, Allamma Iqbal Open University, Islamabad, and Directorate of Technical Education NWFP have provided the relevant official files, and reports of various studies conducted by experts in educational field. The study of these original documents has provided us with insight for appreciation of important issues/problems and has also helped in the construction of the research tools.

Construction of Instruments

An interview schedule is the main data collecting tool to be used in collecting the requisite data in a study like this one. Thus the schedules for interview of key personnel have been prepared, encompassing important relevant aspects of the study. These are semi-structured instruments asking for opinion/view on specific and general aspects of the research areas. A total of eleven schedules have been devised.

A questionnaire, containing 15 questions having more than 100 expected responses, has also been prepared. Each question covered a specific area of the study. This has been administered to the administrators, planners, experts, teachers of the Universities, principals and officials of the implementing agencies of the education policies and plans.

Try out (Pre-testing)

To ascertain if the interview schedules will work well in the actual situation, pre-testing has been done and some minor modifications have been made accordingly.

Content/Concepts to be Covered

Following key concepts are covered in the interview schedules and questionnaire.

a. Restructuring secondary education as done these days.

b. How to channelize students into different streams.

c. How is it possible to integrate the efforts of Labour/Manpower Department with those of Education Department for the effective vocationalization and diversification of secondary education.

d. How can private sector/Industry be associated in the task of vocationalization of secondary education.

e. Reforming the existing examination system/evaluation system at the secondary level.

f. Enhancing education standards through various inputs.

Selection of Agencies/Departments/Institutions

To study their role in the implementation of the education policies and their expected involvement in restructuring secondary education following are included:-

a. Education Department NWFP.

b. Directorate of Secondary Education NWFP.

c. Directorate of Technical Education NWFP.

d. Board of Intermediate and Secondary Education Peshawar.

e. Textbook Board NWFP Peshawar.

f. Science Education Project NWFP, Peshawar.

g. Labour Department, NWFP.

h. Board of Technical Education, NWFP.

i. National Education Council Islamabad.

j. Curriculum Wing, Ministry of Education, Islmabad.

Preparation of List of Interviewees

A tentative list of the subjects had been drawn up for the following interviewees:

a. Secretary Education, NWFP.

b. Director, Secondary Education, NWFP.

c. Deputy Secretary, Education, NWFP.

d. Additional Director, Secondary Education, NWFP.

e. Deputy Director, Secondary Education, NWFP.

f. Chief of Planning and Development Cell, Education Department, NWFP.

g. Director, Technical Education, NWFP.

h. Director, Training, NWFP.

i. Chairman, B.I.S.E., Peshawar.

j. Chairman, Board of Technical Education, NWFP.

k. Director, Science Education Project, NWFP.

l. Director, Agro-Tech Teachers institute, Peshawar.

m. Chairman, Textbook Board, NWFP.

The interviews have been conducted according to pre-determined schedules and proceedings recorded in writing accordingly. However, readjustments in the scheduled timings were to be made as per the availability of the interviewees. Their views/comments and recommendations have been summarized for the development of

policy guidelines. Later, these have been aligned with the findings and recommendations of the study of related literature.

Collection of Data

The data on the selected themes of the research has been collected with the help of semi-structured interview schedules, questionnaire, information acquired through Directorate of Eduation NWFP (from the District Education Officers). Study of the official files of the Chief of Education NWFP, relating to secondary education. Annual Development Plans NWFP and Annual Reviews, Review of the results of Matriculation, Board of Intermediate and Secondary Education, Peshawar. Review of the studies on secondary education including that of the World Bank, Asian Development Bank, Government of NWFP, Federal Government, study of the reports of Intermediate Boards seminars on examination and study of various other related/available documents. The data collected have been tabulated and processed accordingly.

Surveys

A survey of the following institutions has been carried out:

a. Government Technical High School Peshawar Cantt.

b. Government Technical Training Center, Peshawar.

c. Institute of Agro-Tech Teachers Training, Peshawar.

The data on the following aspects has been collected:

i) Course offerings

ii) No. of students/Total capacity

iii) State of Trained Teachers.

iv) State of Physical Facilities.

v) Student's choices of Trade/Courses.

vi) Their total outputs and its linkage with the job market.

The findings of this survey have been aligned with those of related literature and interviews/questionnaire for the adoption of recommendations and strategy for restructuring secondary education in NWFP.

Treatment of Data

The data collected through study of related literature, interviews, questionnaire, and survey of training institutions has been processed and organized into various tables and graphics to give answers to following questions.

a. How can we rationalize the distribution of students in various streams?

b. What are the administrative and financial implications of vocatianlization of secondary education and how to address them?

c. What incentives will be required for its successful implementation?

d. What curricular changes are required to make secondary education job oriented?

e. What institutional arrangements are required for effective coordination of agencies responsible for the conduct of secondary education?

Both types of data, that from documents plus related literature and inferred (based on interviews and questionnaire/surveys) have been organized in a way that the former usually proceeds the latter under each step and sub-step leading to the growth, development and maturation of the strategy for restructuring secondary education in NWFP. The data has been presented mainly in descriptive and partially in tabular form. Simple statistics such as number, percentages, curves and graphics have been used, where appropriate and necessary.

Finalization of Report

The strategy developed on the basis of study of related literature, experts' opinions, questionnaire, and survey of technical training institutions has been used in the formulation of final policy guidelines for restructuring secondary education. The final report contains major findings, suggestions, recommendations for the proposed reforms in secondary education in NWFP.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The data have been collected with the help of semi-structured interview schedules, questionnaire, proformae, survey of training schools/institutions, review of the official records of the Education Department and Examination Results of BISE, Peshawar.

First we will take up the interviews, the schedules of which are placed at Appendix A to K as under:

1. Secretary Education, NWFP (Appendix A)
2. Director Secondary Education NWFP (Appendix B)
3. Director Technical Education NWFP (Appendix C)
4. Chief of P&D Cell, Education Department, NWFP (Appendix D)
5. Director, PARD, Peshawar. (Appendix E)
6. Chairman, Board of Technical Education. NWFP (Appendix F)
7. Chairman, Textbook Board. NWFP (Appendix G)
8. Chairman BISE, Peshawar. (Appendix H)
9. Principal Government T.T.C., Peshawar City (Appendix I)
10. Principal, Agro-Tech Teacher Training Centre, NWFP (Appendix J)
11. Deputy Director, Science Education Project, NWFP (Appendix K)

The questionnaire had been devised to solicit the opinions of a wider range of Educational Administrators, University Professors, and Managers of secondary education in NWFP. The questionnaire is placed as Appendix 'L'. The list of subjects who were administered is appended at Appendix 'M'.

The data on the following aspects of secondary education has been collected from the DEO's (both Male and Female through Additional Director, Secondary Education. Forwarding letter and proforma is placed at Appendix 'N'.

1. Number of Male/Female High Schools
2. Number of Urban/Rural High Schools.
3. Number of Teachers.
4. State of Physical facilities including Science Laboratory, i.e, libraries, workshops etc).
5. Enrollments (total as well as in Arts and Science separately).

Details of data received from DEO's, official files and record of the Statistical Officer, Directorate of Secondary Education, NWFP have been reviewed in this research. The data collected and processed is placed in tables 31 to 39.

Chief of Education NWFP has provided ADPs of the last seven years alongwith the Annual Reviews. These have been reviewed and the data is organized in Tables 40-42.

We have reviewed reviewed the annual results of the Matriculation Examinations held under the auspices of BISE Peshawar. The record of last eleven years has been scanned and the data/deductions so derived are placed in Tables 43-46.

The researcher has also visited the Directorate of Technical Education NWFP and reviewed some recent studies conducted in the field of Technical Education and Vocational Training in Pakistan under the auspices of Asian Development Bank. The Deputy Chief of Planning and Development, Department of Education, NWFP, has provided the researcher access to latest studies on the issues of secondary education by the federal government and the provincial government of NWFP research has reviewed the World Bank Report on the re-organization of the secondary education in Pakistan. Now we shall take all these facets one by one.

(A) Interviews

In this research we have interviewed the key personnel responsible for the conduct of secondary education in NWFP. They also include experts in educational field. The main purpose of these interviews is to get first hand knowledge about the nature and extent of problems in secondary education. Moreover, attempts have been made to highlight the difficulties faced during the implementation stage of the government policies. These interviews have been revealing because they brought out the hidden facts which could otherwise not be known. The persons who have been interviewed include the following.

1. Secretary, Education, NWFP.
2. Director, Secondary Education, NWFP.
3. Director, Technical Education, NWFP.
4. Chief of P&D Cell., Education Department, NWFP.

5. Director, PARD & Ex Secretary Education, NWFP.
6. Chairman, Board of Technical Education, NWFP.
7. Chairman, Text Book Board, NWFP.
8. Chairman, BISE Peshawar.
9. Deputy Director Staff and Principal T.T.C. Peshawar.
10. Principal, Teacher Training Centre, Agro-Tech Education Peshawar.
11. Deputy Director, Science Education Project NWFP.

The main findings/recommendations derived from the interviews are as under:-

a. Present Administrative Set up of Secondary Education

i) Present administrative set up is working satisfactorily. However, there is room for improvement (1).

ii) Management system of secondary education is defective. It is more centralized and lacks accountability (3).

iii) Present administrative set up of education system at secondary level is designed to impart liberal/general education only. It has to be restructured to meet the specialist demand of vocational/technical education (9).

iv) There is lack of co-ordination among agencies responsible for the conduct of secondary education in NWFP (1-11).

b. Main Drawbacks in the Present Secondary Education System

i) Lack of physical facilities (1,6-11).

ii) Ineffective in-service training of teachers (1,11).

iii) Present examination system (1,11).

iv) No provision of guidance and counseling (2,8,11).

.v) There is no Research & Development body at the Directorate level (2).

vi) Lack of Transport facilities (2).

vii) Ineffective implementation of curriculum (3).

viii) Shortage of qualified teachers (3,6).

ix) Shortage of science teachers (3).

x) Lack of dedication on the part of teachers (3).

xi) Lack of interest by students (6).

xii) Secondary education is not linked with the world of work (9,11)

xiii) There is more thrust on languages at the secondary level (9).

ix) Present curriculum is more theoretical (11).

C. Problem Areas in the Implementation of Government Policies

i) Scarcity of financial resources (1,2,6,8)

ii) Provision of equipment, machinery, workshop etc. (1,2,6,8)

iii) Lack of trained staff (1,6,11)

iv) Students do opt for vocational/technical subjects (1,6)

v) Inflation and rise in prices (2)

vi) Growth in population (6)

vii) Lack of political will in the government (6,11)

viii) Lack of proper infrastructure (6.8,11)

ix) Lack of legislation for effective implementation (8)

x) Lack of information/motivation,of students/parents (8)

xi) Lack of proper service structure for technical/vocational staff (8)

xii) No pressure/demand by the public (11)

xiv) Lack of employment opportunities (11)

d. Reasons for the failure of Agro-tech scheme in NWFP

i) Reluctance of parents and students (1,6)

ii) Lack of physical facilities such as workshops, equipment etc. (1,6)

iii) Lack of Trained Teachers (1,6)

iv) Social attitude towards certain professions (2,7)

v) Agro-Technical subjects were not examined by BISE (7).

vii) Planning defect (7)

viii) Defective curriculum (7)

ix) Absence of infrastructure (1)

e. Issues in Secondary Education

i) Learning what, how and for what purpose? (6)

ii) Should education be limited to Three 'Rs'? (6)

iii) Should it have vocational/job related? (6)

iv) Should it create an environment for self development? (6)

v) What should be the balance between science and humanities? (6).

vi) What should be its content? (6)

vii) How and by whom these decisions are be made? (6)

viii) Urban/Rural and Male/Female disparities (6)

f. Curricula/Content of Secondary Education

i) Religious/ideological motivation, study of modern sciences and technology, modern trends, issues of community, and new social order of democratic principles should form an integral part of our education system (2).

ii) Historically our education system had three important components:-

a. Ideological education based on creed

b. *Akhlaqiat* or character building; and

c. *Iktisab-e-Kasb* (Vocational training) (5)

iii) Presently there is need to revise the existing courses and syllabi. Changes must be brought keeping in view the current trends and new developments and felt needs of Pakistani labour market (6).

iv) Study of science is a pre-requisite for vocational/technical education (6)

v) Core courses of general education must form the integral part of technical/ vocational education (6)

vi) All subjects having common elements, such as Islamiat, Pakistan Studies, History, Civics, Geography etc. may be integrated into one major area. Similarly we may adopt integrated science at the secondary level (7).

vii) There is a need for the scrutiny of different subjects for the elimination of duplication and overlapping. (7)

viii) We can adopt project methods, home assignments, and second shift system for vocational subjects (7).

ix) School buildings are underutilized. These are used only for 6-8 hours. Second shift should be considered to overcome the over-crowding in the morning shift. Teachers who are hard pressed financially may be given extra pay for working in the second shift (7).

x) Vocational/Technical subjects carry 250 marks but are not examined by BISE (8).

xi) Without assigning any good reason the subject of Technical Drawing has been dropped which is an essential pre-requisite for Industrial Arts and Trades (10).

xii) Present curricula is more theoretical in nature and lacks practicability and relevance with the world of work.

g. Forces/Factors determining diversification

i) Pressure/demand of the society (4)

ii) Demand of the job market (4)

iii) Employment opportunity (4)

iv) Parent's/Students' choice (4)

v) National interest (4)

vi) Financial allocations/resources (4)

vii) Separate administrative infrastructure (4)

viii) Availability of trained teachers (4)

ix) Government's will to implement (7)

x) Availability of physical facilities such as workshops, equipment etc. (7)

xi) Local Trade/Local Industrial requirement (8)

xii) Availability of raw materials (8)

h. Co-ordination among various agencies of Secondary Education

i) There is a need for co-ordination between Labour and Manpower Division and Education Department (1)

ii) There is no institutional set up for effective co-ordination. There should be a co-ordination council comprising Heads/Directors/ Chairman of Education/Training departments for better co-ordination (2)

iii) It will be desirable to have a co-ordination council revolving chairmanship (4).

iv) Director, Technical Education, NWFP is ready to co-operate with Directorate of Secondary education in the following ways:-

a. Supplying technical knowledge and expertise in the preparation and conduct of vocational/ technical studies.

b. Helping in construction/establishment of workshops and installing machinery etc.

c. Conducting examination in technical/ vocational subjects (6).

v) For better co-ordination there should be a Deputy Secretary who may be an expert in vocational/technical education (6)

vi) There should be a co-ordination committee of four institutions with revolving chairmanship:

a) Directorate of Secondary Education

b) Bureau of Curriculum Development

c) Textbook Board (7)

d) BISEs.

vii) Secretary Education may chair the proposed co-ordination council (9)

i) Vocationalization/Diversification of Secondary Education

i) Department of Education NWFP is in favour of vocationalization and diversification of secondary education from Class VI to Class X (1)

ii) There is no agency, responsible for secondary education which conducts surveys to determine the occupational choices of the students nor they have the capability of doing so. (1-11).

iii) At least one vocational subject be made compulsory. (1)

iv) Students should be motivated to opt for vocational/technical subjects (1).

v) We recommend that some modern trades and skills should be taught, after thorough research/survey of the job market and public attitude (2).

vi) There is no guidance and counselling set up at the secondary level. No aptitude test is administered. The performance of students in the annual examination is the only yardstick for taking Science or Arts. (2-11).

vii) World Bank and Asian Development Bank have not approved the scheme of vocationalization (4).

viii) Vocatinalization of secondary education will require more funds, separate administrative set up, workshops equipment, and teachers etc. (4).

ix) One aspect of diversification is that we should have multi-dimensional educational goals (4).

j) Strategy for the Voctionalization/Diversification of Secondary Education.

i) Before introducing any such scheme like vocationalization and diversification of secondary education, we should have the resources including, human, material, financial, conceptual and organizational. Firstly we would determine what we want to achieve and how. Secondly,

we should have requisite administrative structure to undertake the job. Thirdly we should have skilled personnel, and fourthly there should be enough students who opt. All this could be done in following order:-

a) Recruitment and Training of Teaching Staff

b) Construction of workshops.

c) Provision of equipment/machinery

d) Preparation of Packages and programmes of studies.

e) Motivation and guidance of students to opt for such courses (2)

ii) Research to ascertain the demands of the labour market is a pre-requisite (6, 9),

iii) Secondary education has an important role in providing second level manpower. It must meet the skilled manpower needs of the country. (6)

iv) Vocational/Technical education must be introduced as a third stream of studies besides Science and Humanities (6).

v) It must be binding on private schools as well (6)

vi) While introducing the scheme, wide publicity on the mass media emphasizing its importance and highlighting its utility must be done.

vii) The scheme may be introduced in phases, in a few districts, with specific trades as a pilot project. After success it may be generalized to whole of NWFP (7).

viii) Lessons learnt in Agro-Tech. scheme must be considered.

ix) There is a need for the political will of the national leadership to implement the scheme. Legislation is required for the effective implementation of the scheme. (7,8).

x) An effective administrative structure is required for the effective implementation of the scheme (8)

xi) There should be proper service structure for the teachers of the vocational/technical education at the secondary level (8)

xii) The scheme should be reinforced by well organized guidance and counseling services at the secondary level (8).

xiii) Legislation is also required to make the industries/employees bound to keep the skilled workers. Every factory must have a job master (9).

xiv) Restructuring of the content to create time for the vocational/technical education will be required (9)

xv) B.Ed. (Tech) should be started at IER, Peshawar

xvi) Close co-ordination between Directorate of Secondary Education and Directorate of Technical Education is required for the utilization of mobile training units (9).

xvii) Board of Technical Education should conduct the examination in technical/vocational subjects at secondary level (8).

Strategy for Restructuring Secondary Education

1) Present administrative structure of the secondary education is designed to impart liberal/general education only. It has to be restructured to meet the specialist demand of Vocational/Technical education (9).

2) In western countries due weightage is given to the duration of schooling and it is considered a qualification for admission to various other courses. Hence, ten years schooling in Pakistan should suffice for entry into any vocational/technical training. This will solve the problem of heavy wastage/dropout at the secondary level which is as high as 71%. (9).

3) There should be a third stream of studies as vocational/technical for those who do not want to continue beyond matric. (1,2).

4) Religious, ideological scientific and technological humanities and democratic principles should form an integral part of our education (2).

5) Keeping in view the number of high/middle schools, i.e, 2400 only, and that of primary schools, i.e, 20,000, there is a dire need to rationalize the growth of secondary education in NWFP (4).

6) Prevailing four systems of education should be combined into a single system (5).

7) For restructuring three areas are important which should be made clear:

   a) What should be the aims and objectives of the new system?

   b) What are the areas to be included in the new system.

   c) How to cater for the financial implications? (5).

8) Our educational system, historically speaking, had three important components, i.e., ideological education based on creed, character building, and vocational training. This can be the best model for restructuring the entire educational system (5).

.9) Restructuring secondary education would demand enhanced financial allocations.

10) Urban/rural disparities in the distribution of facilities should be rationalized (6).

11) Present ratio of Science vs. Arts students, i.e. 33:66 should be reversed.

12) A team of experts may examine the Matric Technical Scheme which is in operation in the Sindh province.

13) Second shift should be started for vocational/technical education in the buildings of high schools (7)

14) Special effort will be required, utilizing mass-media, to bring about a positive change for the social attitude of the people towards manual work (8).

15) Private sector may be involved to impart secondary education

16) Our examination system needs re-structuring

17) Present curricula is theoretical and lacks relevance with the world of work. There is a need for a change, but change must be based on research.

18) Teachers Training should be methodology oriented.

(B) The Questionnaire

The second important method of collecting the data/opinion of experts, used by us, is the questionnaire. This was administered to a random sample comprising educational expetrs, administrators, planners and teachers representing almost all the universities of Pakistan. Fifty seven experts responded to our questionnaire. The researcher, first of all, tabulated the responses in Yes/No percentages and then represented these responses through various graphs placed at figures 1-14.

In response to question no.1, about 77% of the subjects do not opt for general education. That means only 23% favour general education. However, this ratio further improves in question 2, where 81% favour the vocational/technical education at the secondary level and the support of general education further declines to only 19%. The data is represented by fig.1 as well.

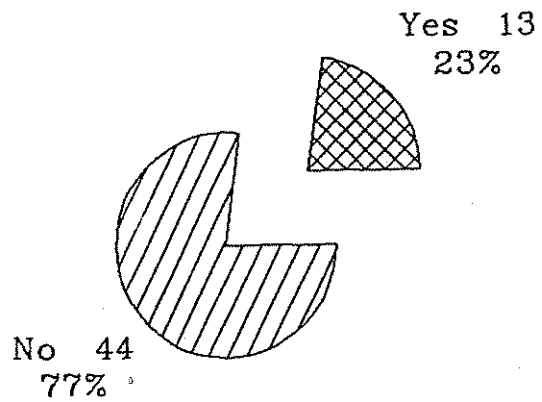
Question three has three options. The question is asked as to what should be the methodology for introduction of vocational/technical training at the secondary level. In response number one, 70 percent say that, besides Science and Arts, there should be a third stream as vocational/technical, which students may be allowed to opt for. Forty percent of the respondents support the proposal that one vocational/technical subject may be made compulsory for every student. Only 37% say yes to the provision of vocational/technical subjects as optional. The data has been used in the construction of pie chart, placed at fig. 2.

In questions four and five, possible reasons are suggested for the non-implementation of Government policies regarding vocationalization and diversification

Analysis of Data
Should Secondary Education be?

Fig. 1

general only



vocational/technical as well

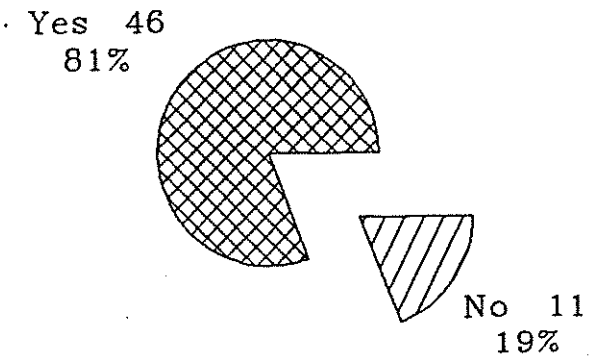
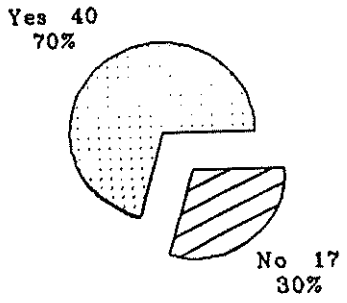


Fig.2

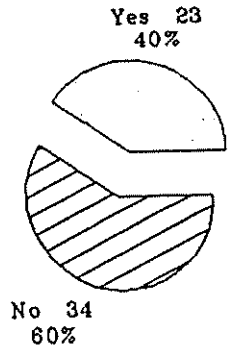
Analysis of Data

What should be the methodology for the introduction of vocational/tech.training

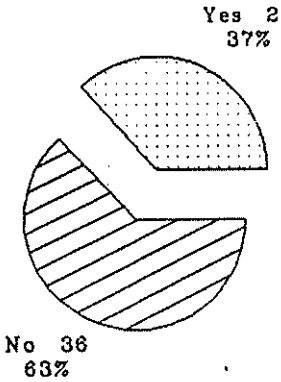
Third stream as tech./voc.



one voc./tech. subject



Optional voc./tech. subject



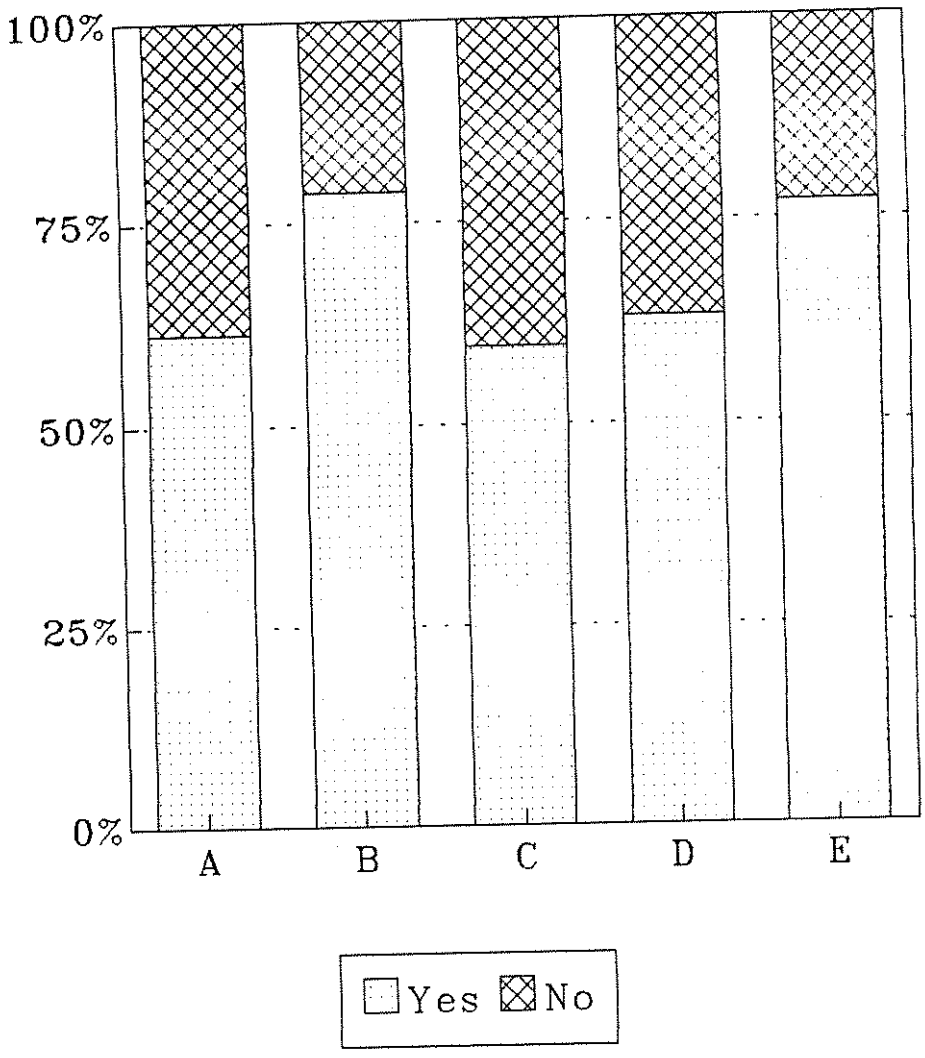
of the secondary education. More than 60 percent subjects respond positive to these reasons. However, lack of co-ordination among different government agencies and lack of manpower planning has received maximum support, i.e., more than 80%. The other three reasons, lack of infrastructure, lack of trained teachers and lack of financial resources are also well supported. The data is highlighted by fig. 3.

In question five three major inputs are offered for the motivation of students to opt for vocational/technical subjects at the Secondary level. Information about better employment opportunities, guidance and counselling services and proper selection of subjects based on intelligence/aptitude tests. The positive responses are 84%, 80% and 77% respectively. This shows that the availability of employment opportunities will force the students to opt for the vocational/technical education. Fig. 4 gives a clear picture of the responses.

As indicated in the interviews, no agency claims that they conduct surveys to determine the demands of the job market. So the question is asked as to who should conduct such surveys. Three options are given to question six. Sixty eight percent opt that there should be a separate Liaison Officer for this purpose. Whereas 42% suggested that Industries, Labour and Manpower Department should do it. Only 31% favour that it should be done by the Education Department. Data is demostrated by fig. 5.

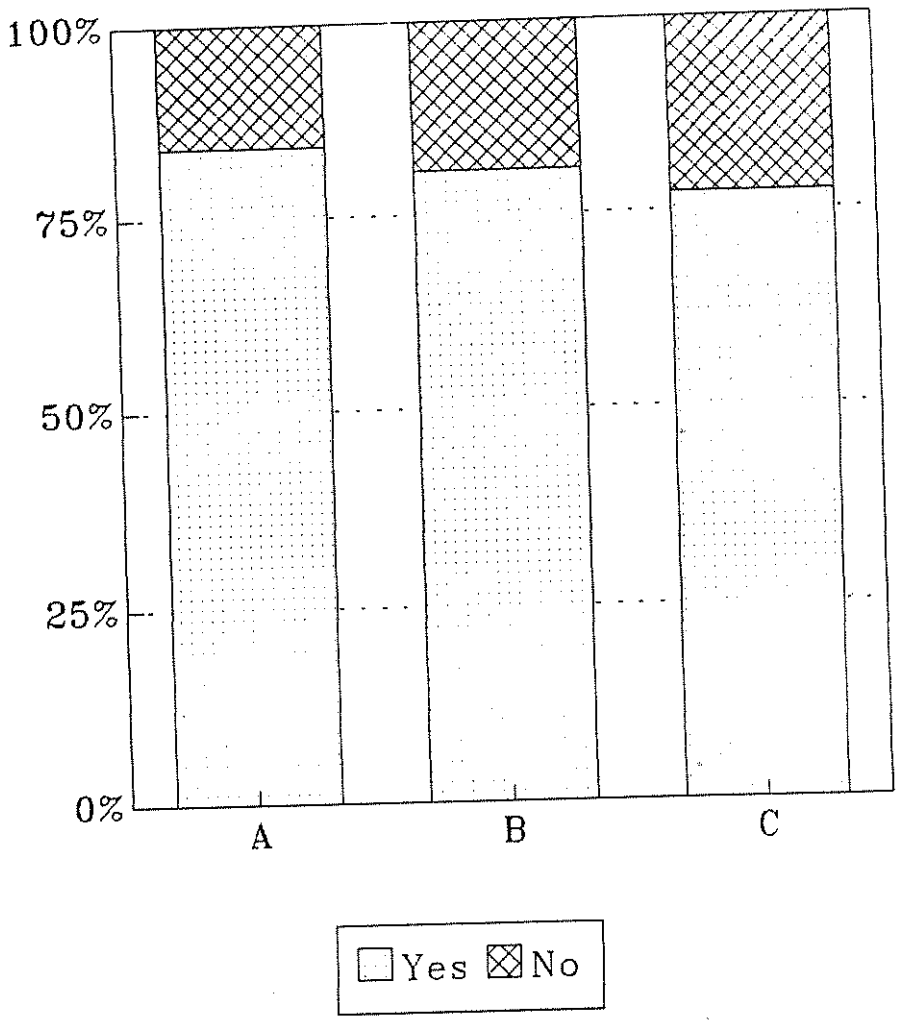
One of the major reason for the ineffective implementation of government policies of vocationalization/diversification of secondary education has been lack of adequate financial resource. So question number seven is asked as to who should finance the vocational/technical education at the Secondary level-Industries, Department of

Fig. 3 What are the reasons that govt. policy regarding diversification & vocationalization could't be implemented properly?



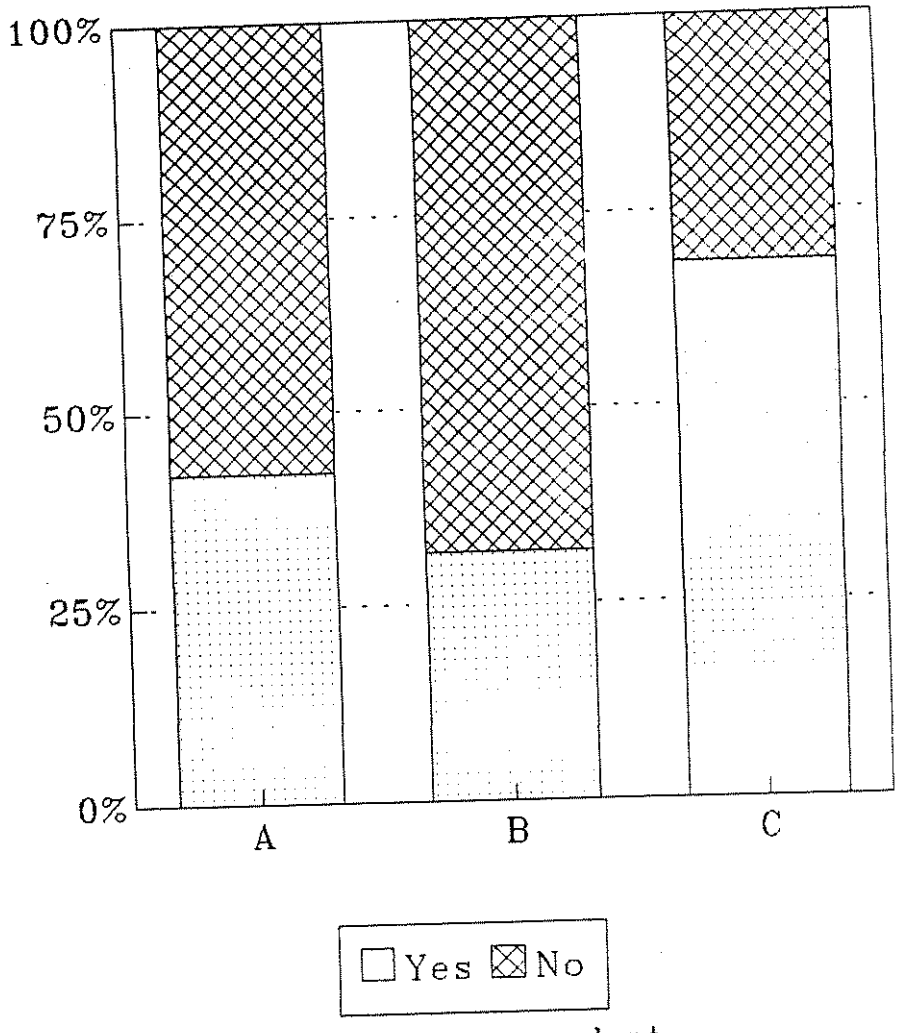
Lack of:
A:Infrastructure B:Co-Ord. C:Trained Teachers. D:Finances E:Manpower Planning

Fig. 4 How can be the students motivated to opt for vocational /technical subjects at the secondary level?



A:Info. about better emp.opportunities
B:Guidance and counselling services
C:Use of intelligence/aptitude tests

Fig. 5 Who should conduct the surveys liaison to determine the demands of the job market?



A:Industries,labour and manpower dept.
B:Education dept.
C:A separate liaison officer

Industries, Labour and Manpower, Education Department or a Joint venture of all the above agencies. About 75% opt that it should be a joint venture of all agencies as is clearely projected by fig. 6.

Presently, the vocational/technical subjects are not being examined by the BISE and mainly this has been attributed as reason for failure of the agro-technical scheme. So question 8 asks, who should conduct the examination in vocational/technical subjects at the Secondary level. About 75% recommend that Board of Technical Education be made responsible to conduct the examination in vocational/technical subjects at the secondary level. The data been used in the construction of fig. 7.

In question nine comments are solicited regarding the main reasons for the present low achievement level of the students at Secondary level. Six reasons are attributed. The positive responses have been offered as under:-

a. Lack of interest by students = 58%

b. Lack of interest by teachers = 65%

c. Erosion of merit system = 53%

d. Lack of Physical facilities = 63%

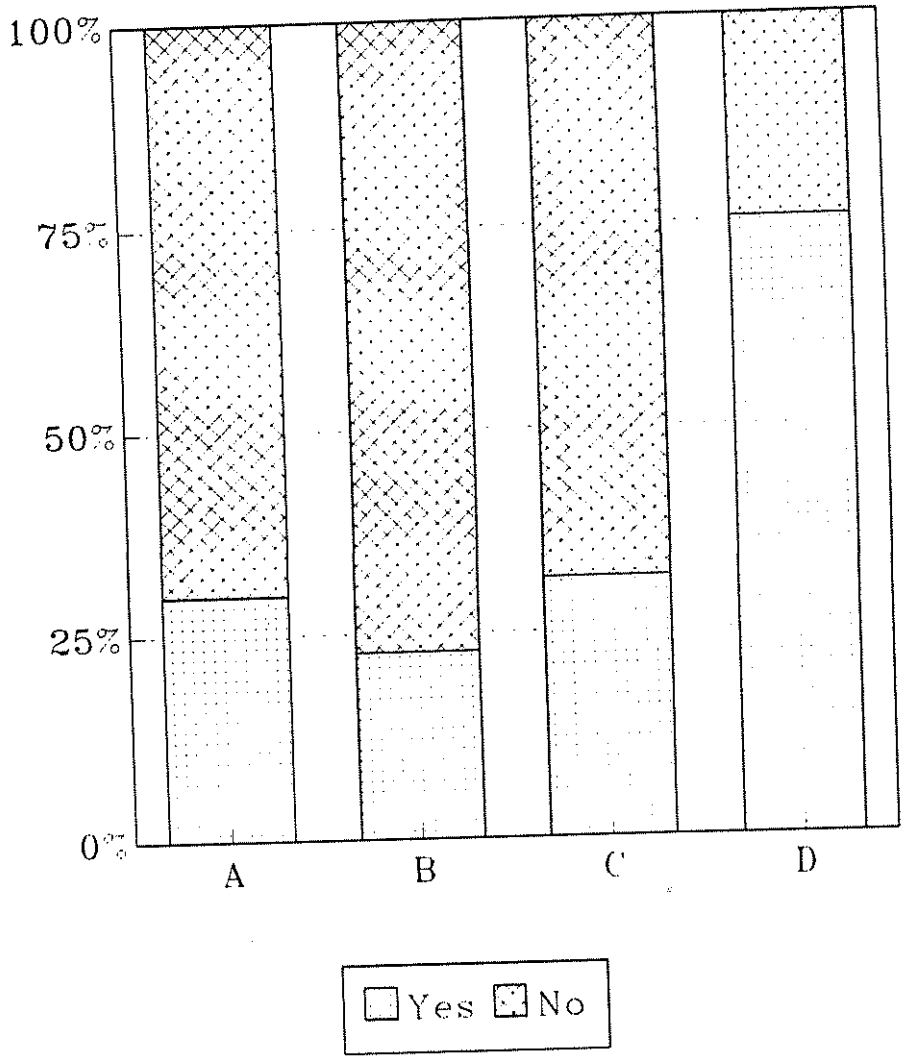
e. Lack of better texts = 45%

f. Useless general education = 59%

The above data has been given a graphic representation in figure 8 which shows that all the responses are closely related.

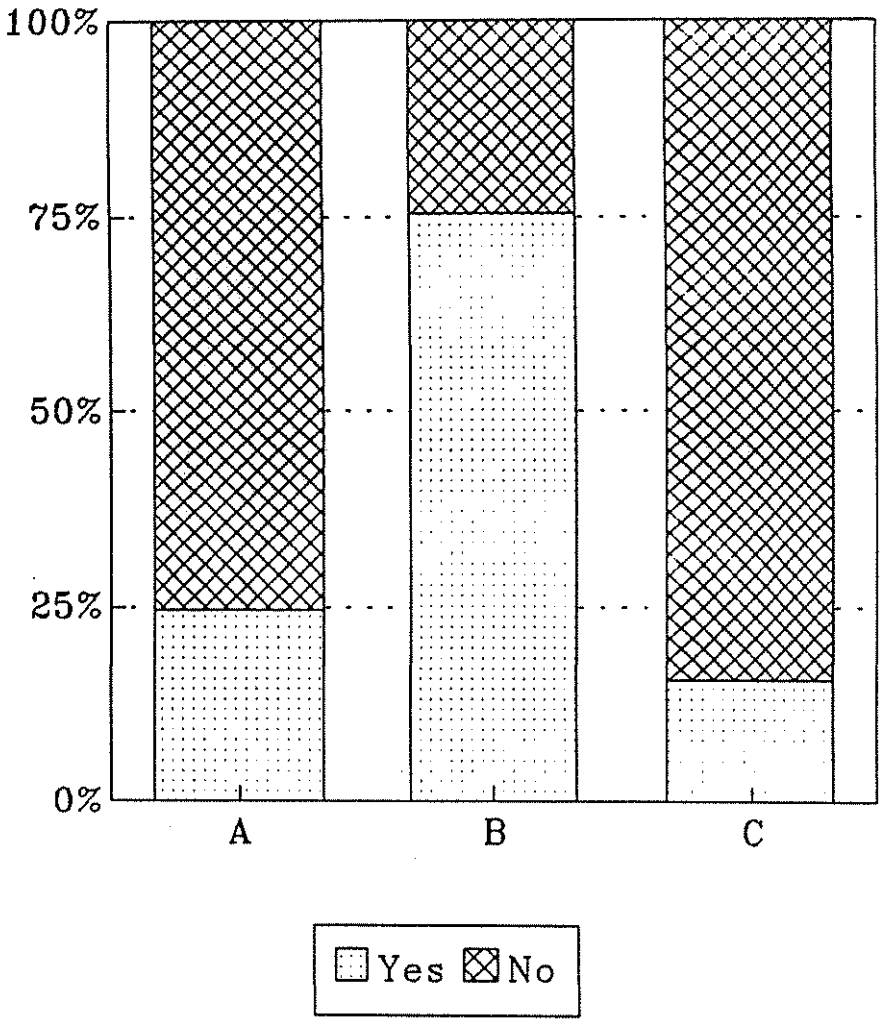
Textbook writing is a specialized job. Question ten inquires about the best method for writing text books at the secondary level. Four possible options are provided

Fig.6 Who should finance the vocational / tech... (education at secondary level?



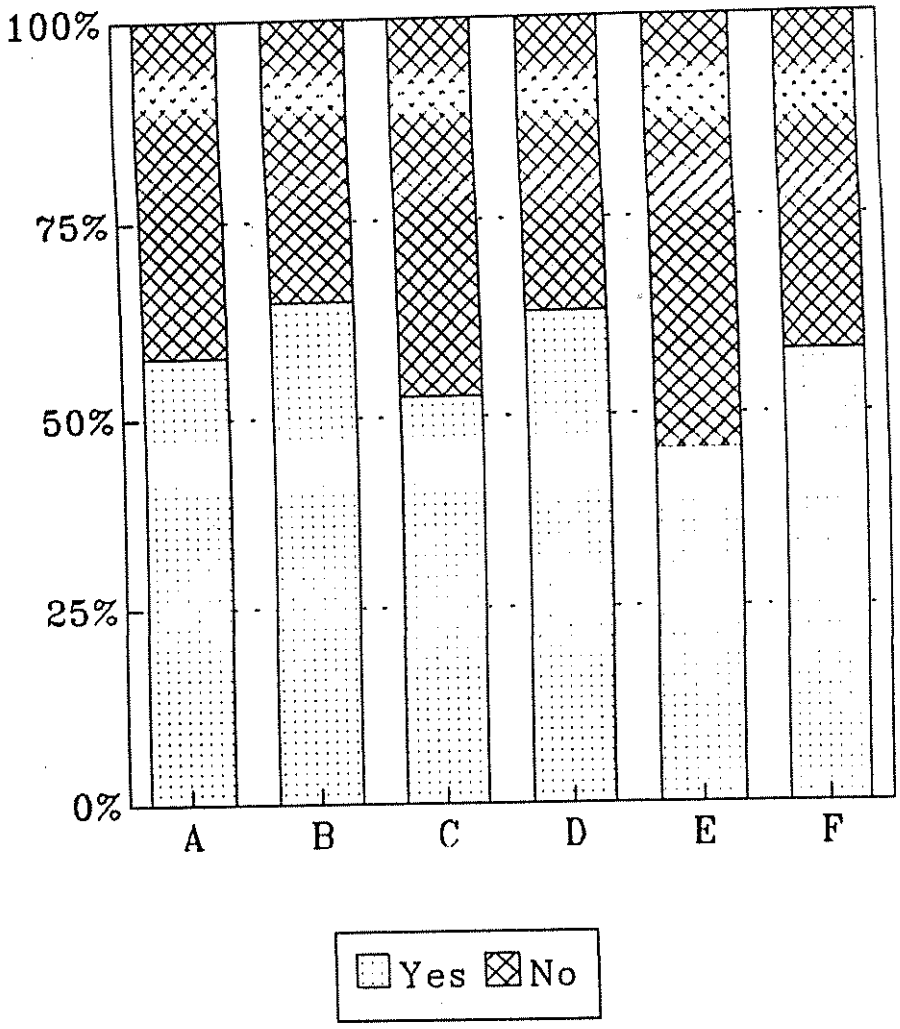
A:Industries B:Industries,labour and manpower dept. C:Education dept. D:A joint venture of all agencies

Fig. 7 Who should conduct the examination in vocational /technical subjects at secondary level?



A:Board of Intermediate & Secondary Edn.
B:Board of Technical Education
C:Any other authority

Fig.8 What are the reasons for the present low achievment level of students at secondary level?



Lack of interest: A:students B: Teachers
C:Erosion of merit sys.F:Useless gen.Edn
Lack of D:Phy. Facilities E:Better Text

and the subjects are allowed to recommend more than one option. Almost 60% recommended the Research Based Technique. Nearly 58% support the option of the syndicate of experts. 47% favour the open competition. Surprisingly only 7% support nominated writers. Bar chart at figure 9 gives a comprehensive picture of the situation.

Present examination system has been criticized for various reasons. Question eleven gives four options and the positive responses of the subjects are as under:-

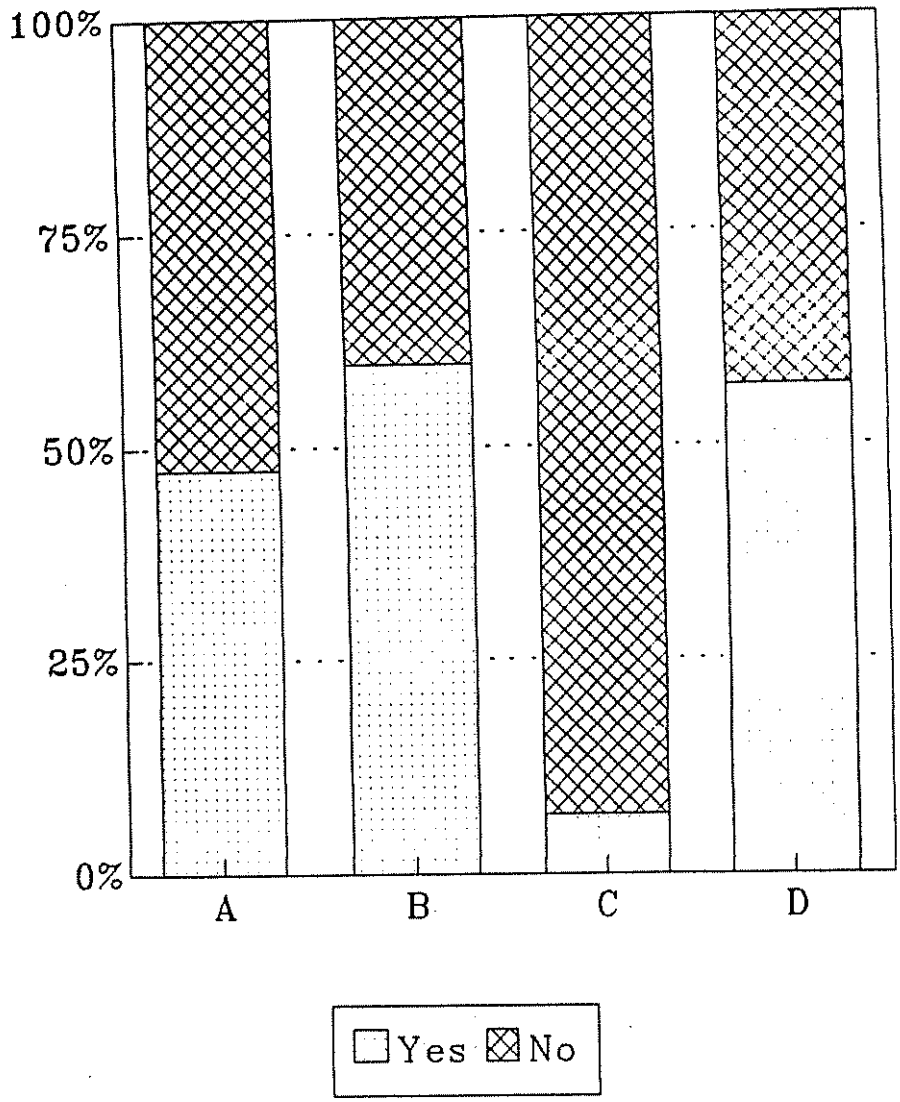
a.	Present annual examination	=	8.7%
b.	Assessment by Teachers	=	22.8%
c.	Semester system	=	33.3%
d.	A combined system	=	75.4%

So more than seventy Five per cent of the subjects favour a combined system, having fixed marks for teacher assessment, annual examination or performance in semesters. This would be a system of checks and balances. The data is reflected by figure 10.

Question twelve is based on the tools and techniques of testing student's achievement. Four responses are offered. The subjects are allowed to favour more than one response. The responses are as under:-

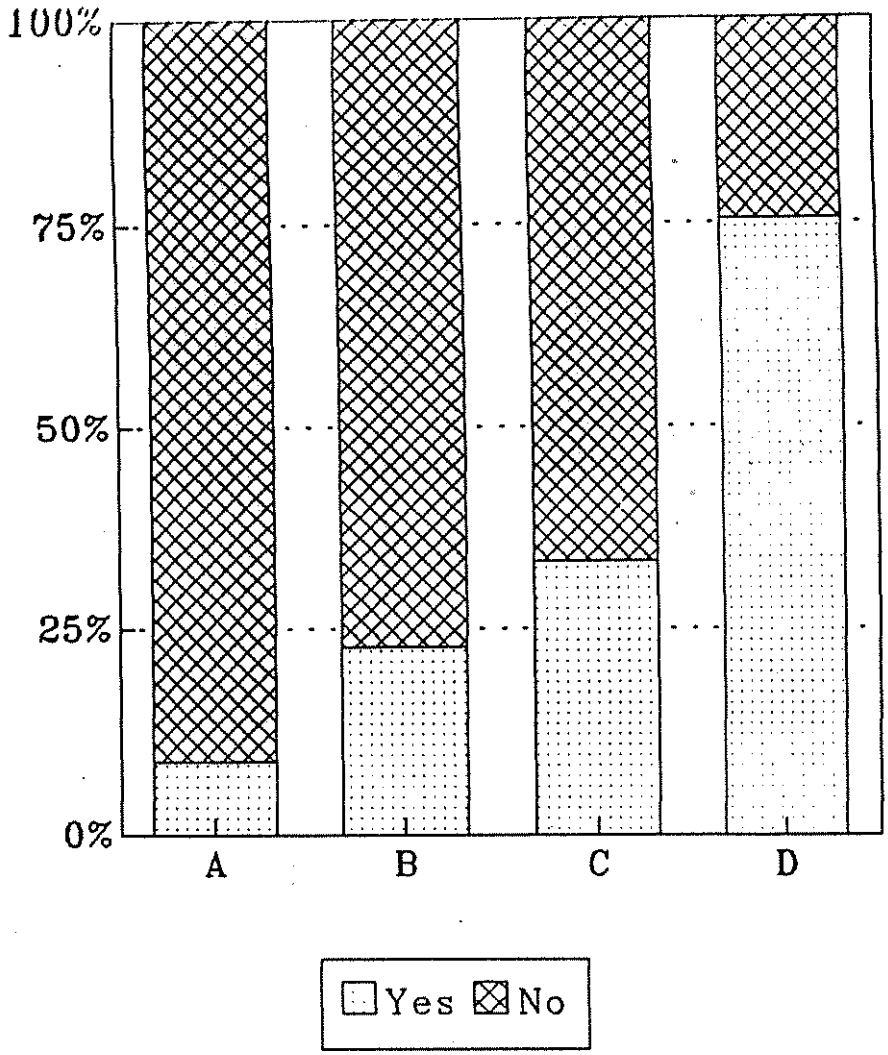
a.	Essay type examination	=	19%
b.	Objective type examination	=	52%
c.	Test of ability to apply knowledge	=	88%
d.	Test of rote memory	=	3%

Fig. 9 What is the best method for writing text books at the secondary level?



A:Open Competition B:Research based tech
C:Nominated writers D:Synd. of experts

Fig.10 What is the best method of evaluation of students performance/achievments at secondary level?



A:Present annual B:Assessment by teacher
C:Semester sys. D:Combined sys. of exam.

As expected the test of rote memory is not favoured by vast majority, i.e. 97%. Rather 88% said that the test of ability to apply knowledge is the desired criterion for the assessment student's achivement level as shown at figure 11.

Effective school management is the most important aspect of secondary education. In question thirteen, six possible steps are offered to the subjects as inputs for the effective school management. The Yes responses are as under:- Through

a. Giving management training to Head Masters/Principals = 84%

b. Financial incentives = 24%

c. Greater local autonomy = 26%

d. Academic competition = 54%

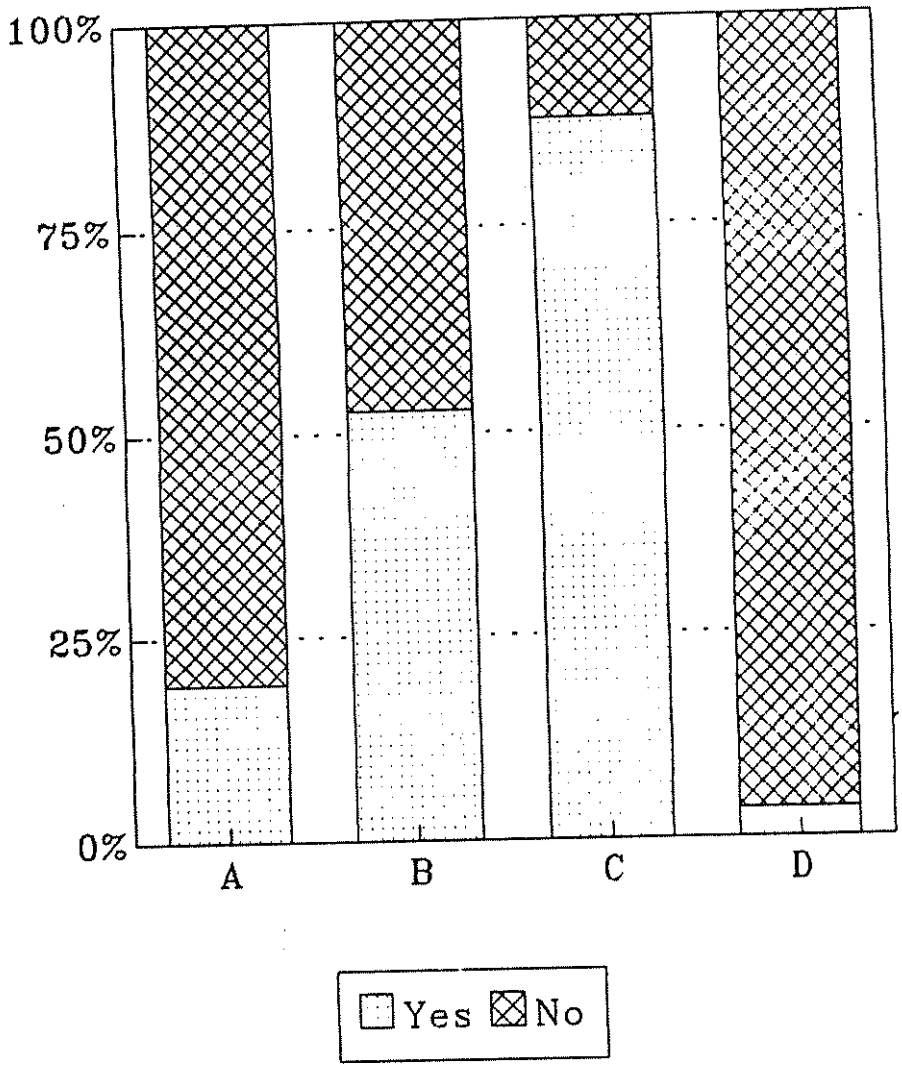
e. Involvement of Local bodies = 10%

f. Better coordination between various agencies. = 51%

So the management training to the headmasters and principals is on top priority followed by holding academic competition and better co-ordination among various agencies and the schools. Figures 12 gives a clear view of the proposals.

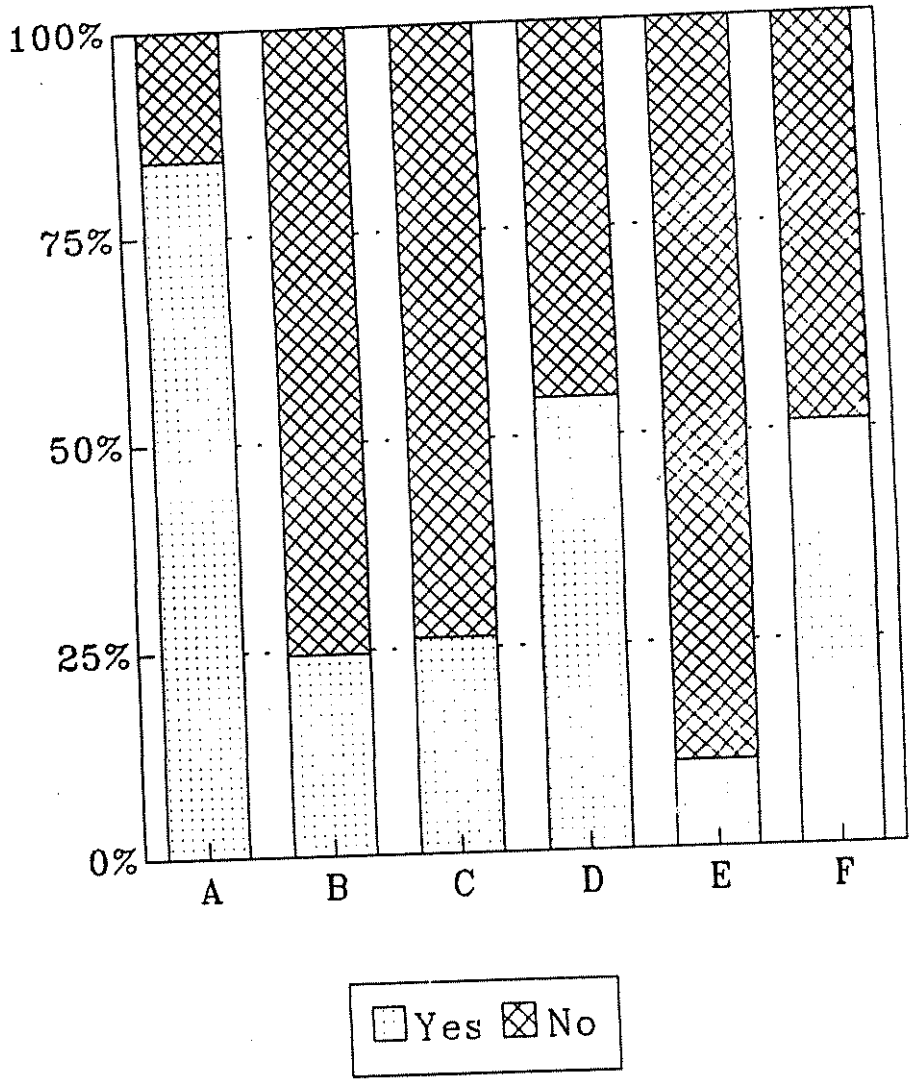
Teachers play a pivotal role in any educational system. Everything depends mainly upon the teachers performance. So in question fourteen four possible inputs are suggested for better output. Professional training and attractive incentives like good salary/better service structure has received equal response, i.e., more than 82%. High academic qualification is favoured by 65% subjects and 54% say yes to aptitude. So all

Fig.11 How best can the achievment of students be tested?



A:Essay type B:Objective type exams.
C:Test of ability to apply knowledge
D:Test of rote memory

Fig.12 How can we make school management more effective?



A:Management Trg B:Financial incentives
C:local autonomy D:Academic competition
E:Involvement of L.Bs. F:Better Co-ord.

the inputs have received well above 50% positive responses and are of equal significance as indicated by figure 13.

During the interviews almost all the interviewees including Secretary Education, NWFP, and other top brasses have admitted that there is lack of co-ordination among different agencies and there is no institutional setup available for such co-ordination. So question fifteen presents three options. The positive responses are as under:-

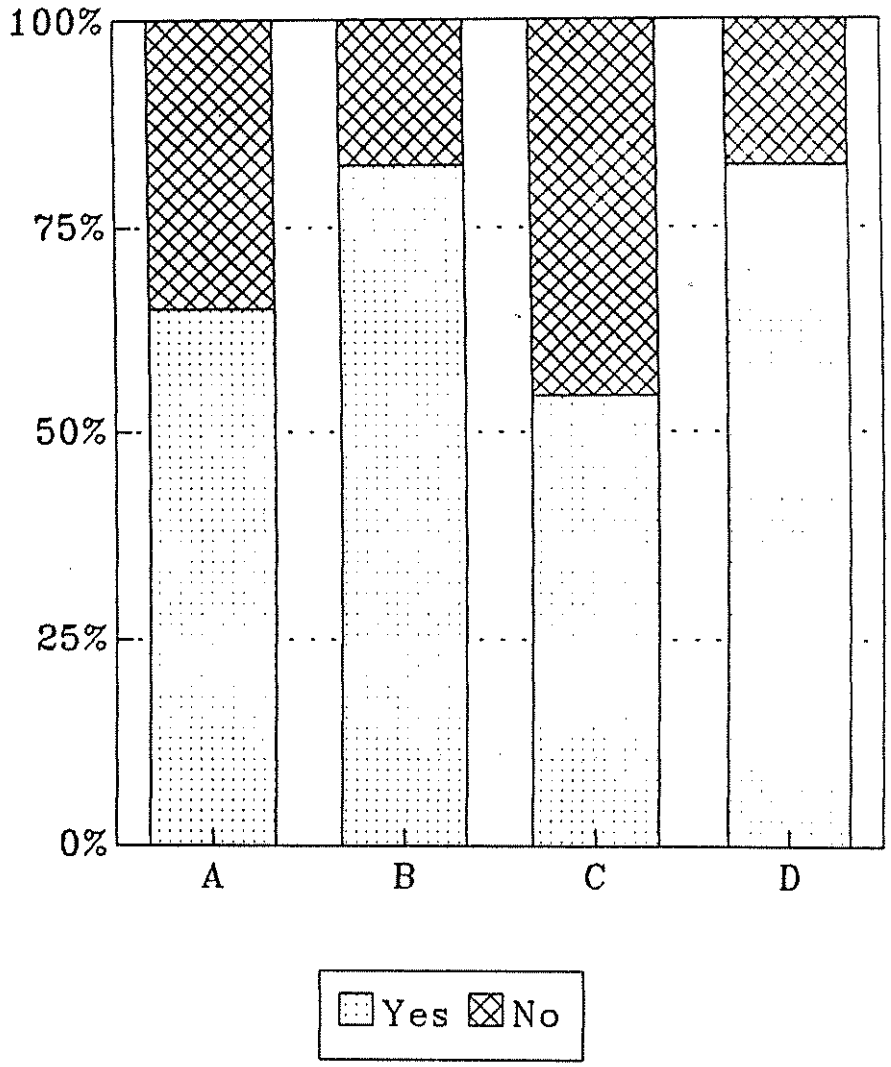
a. Creation of a new post at the apex, i.e., Director General of Education. 17%

b. Constitution of Provincial Education co-ordination council comprising the Heads/Directors of various key Educational institutions/Departments. 53%

c. Constitution of District Co-ordination committees comprising representatives of agencies responsible for the conduct of Secondary Education. 58%

So both b and c has received almost equal support. It will thus be more appropriate to have co-ordination councils both at the provincial level as well as at the district level as represented by Figure 14.

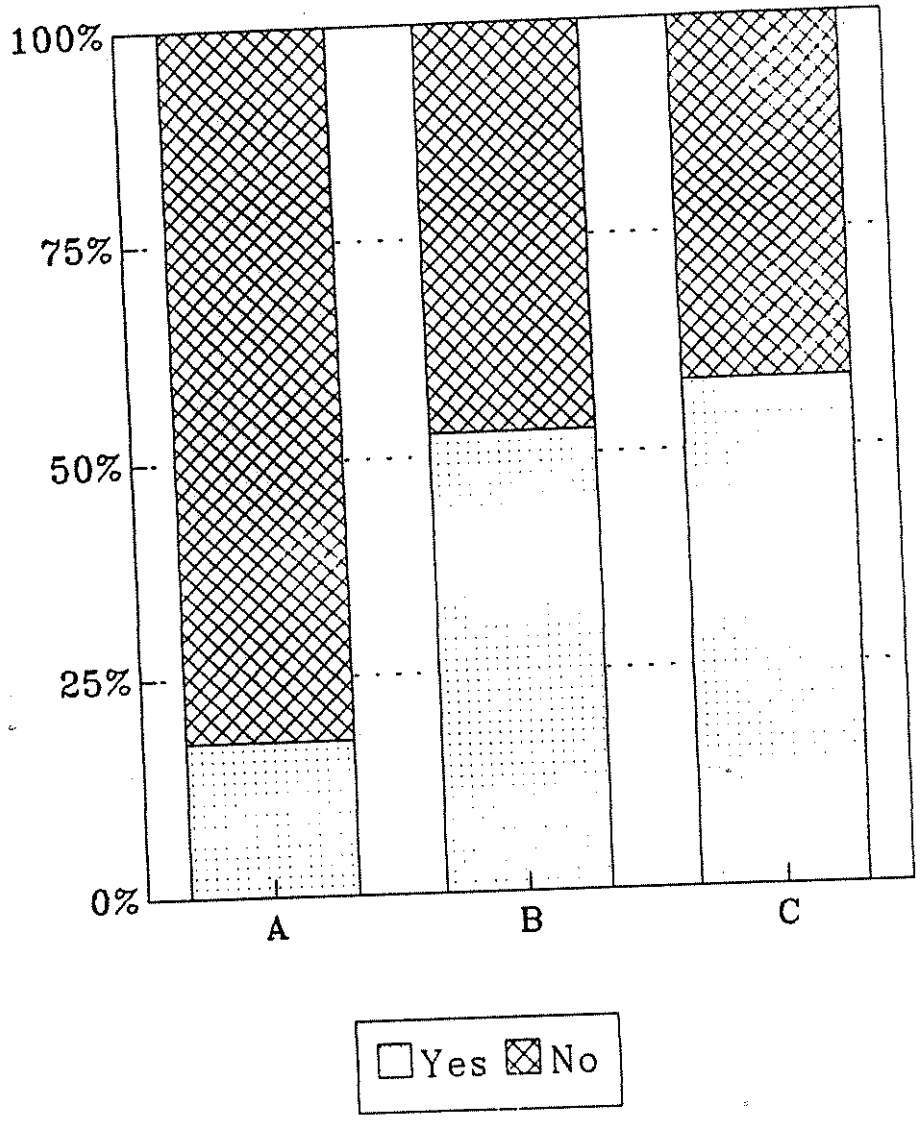
Fig.13 How can we motivate teachers for better academic output?



A:Higher academic qualification
B:Professional Training C:Aptitude
D:Incentives

Fig. 14

What will you suggest for better co-ord?



A:Creation of a post of director general
B:Constitution of Prov. co-ord. council
C:Constitution of dist. co-ord.committee

Based on the proceedings of the data analysis of the questionnaire following are the main findings and recommendations.

1. Besides science and humanities, there should be a third stream as vocational/technical which students may be allowed to opt for.
2. Secondary education should be vocational/technical as well.
3. For the effective implementation of vocationalization and diversification of the secondary education following inputs are the prerequisites.
   a. Manpower Planning based on survey of the job market.
   b. Adequate financial resources for the provision of requisite physical facilities.
   c. Institutionalized mechanism for the effective co-ordination among various different government agencies for the vocationalization of secondary education.
   d. Separate infrastructure for the vocational/technical education at the secondary level.
   e. Provision of Trained Teachers for different trades/vocations.
4. Students/Parents must be informed about the employment opportunities and the required skills for them.
5. Guidance and counselling services must be organized at all levels, including secondary education.
6. Channelization of students into different streams must be based on intelligence and aptitudes tests.

7. There should be a separate liaison officer who should conduct the surveys to determine the demands of the job market.

8. Vocational/Technical education should be financed jointly by Industries, Department of Labour and Manpower, and Education Department.

9. The Board of technical Education should be given the task to conduct the examination in the technical/vocational subjects at the secondary level.

10. Following are the main reasons for low achievement level of students at Secondary level:-

    a. Lack of interest by students as well as by teachers.

    b. Lack of adequate physical facilities such as science laboratories, classrooms, libraries etc.

    c. Lack of purpose in General Education.

    d. Erosion of merit system at the national level.

11. Textbooks must be written by a syndicate of experts based on research based technique.

12. There should be a combined system of examination having fixed marks for teacher assessment, annual examination and performance in semesters.

13. The examination must aim at testing the ability of the students to apply the acquired knowledge to solve the everyday problems.

14. Objective type tests are favoured for the secondary level examination.

15. School management should be made more effective through giving management training to the Head Masters/Principals.

16. There should be academic competitions among schools of the same district as well as inter-district competitions for better output at the secondary level.

17. Teachers may be motivated for better academic output by attractive incentives like good salary and better service structure, higher academic qualification and adequate professional training.

18. There should be a co-ordination council at the provincial level comprising the Heads/Directors of various key educational departments/institutions for better co-ordination.

19. Constitution of coordination committees at the district level comprising district heads of different departments responsible for education and training at secondary level is also recommended.

(C) Findings/Recommendations based on the data analysis of the Data collected through Director Secondary Education NWFP

Data collected on the following aspects of Secondary Education in NWFP is placed at Tables 31-39 in this section.

a. Number of government High Schools both urban/rural and male/female

b. Statement of Teaching Staff.

c. Enrolment of students-subject-wise/District wise.

d. Achievements over the last 10 years.

e. Statement of Physical facilities, e.g., workshops, science labs., libraries, offices, class rooms, water supply, electricity play grounds, boundary wall, stores etc.

Following are the findings/recommendations.

1. At Middle level, i.e., class VI to VIII, the percentage of male students studying Agriculture and Industrial Arts is 19% and 13% respectively. Rest of the students are in general stream. (Table-31).
2. Approximately 75% to 76% girls study Home Economics at Middle level. (Table-32).
3. 51.4% boys of Middle classes join Matric classes, i.e, ix, x, whereas the turn out of girls is very low, i.e., 27% (Table-31).
4. The ratio of Science vs. Arts among the boys at (ixth and xth) Matric level is 44:56 whereas the ratio of girl students is as low as 18:82. (Table-31).
5. The distribution of school age population indicates that out of all age population of NWFP, the age 5-19 years population is approximately six million. Whereas secondary school (10-14) population is 2.1 million. Out of total secondary schools population 57% are male (1.2 million) and 43% are female (.9 million) (Table 33).
6. The urban/rural analysis indicates that out of the total secondary age population in NWFP, i.e., 2.1 million, .3 million live in urban areas (.16

million male and .14 million female), whereas 1.8 million (1 million male and .8 million female) live in rural Areas. (Table-33).

7. As 14% of the total secondary school age population lives in urban areas and as 86% lives in rural areas, therefore distribution of High schools and other facilities needs to be rationalized accordingly (Table-33).

8. Looking at the total number of Primary schools and that of Middle and High schools, reveales that only 17.7% of the Primary school children have a chance to get admission in Middle/High School (Table-34).

9. There are 57 colleges in NWFP and, thus by institution standard, only 7% of the matriculates can get admission in any college. This also means that 93% are compulsorily dropped out (Table 34).

10. The data indicates that Technical/Vocational Colleges/Institutions are not evenly distributed among the districts, and they were only 27 in number. Hence, there are very few chances for matriculates to get Technical/Vocational training in those institutions (Table-34).

11. Almost all Technical/Vocational Institutions are located in the urban areas (Table-34).

12. Tables 35 and 36 indicate that achievement/improvement made over the last 10 to 15 years, i.e., 1979-1993, has considerable.

13. Number of teachers per school has also improved (Table-35-36).

14. Though the overall participation rate at the Secondary level in NWFP has improved, i.e., 19%. However, 4.38% (1989) female participation rate is much below the desired standards (Table-35).

15. Catchment Area for the girls High School is nine times more than the boys which need to be rationalized (Table-35).

16. It is indicated that increase in enrolment also increased the student/teacher ratio. This meant that adequate number of teachers are not provided (Table-36).

17. In all 1164 High Schools is NWFP there were only 127 workshops/sheds. The number of workshops instructors (WI) and assistant workshop instructor is 40 and 227 respectively. Hence, generalized introduction of vocational/technical education at Secondary level in NWFP, with this input may not be possible. It has to be in phases (Table-36).

18. The data indicates that there is shortage of science teachers. Again it is revealed that there is no separate staff nomenclature as science teacher. They are covered by Senior English Teacher. It is recommended that there should be separate authorization of science teachers per school/per number of science students (Table-36).

19. Despite good effort on the part of Science Project, NWFP, there is severe shortage of science laboratories. It is recommended that in all new construction of high schools provision of workshop and science laboratory must be made integral part of the building (Table-37).

20. State of classrooms has improved only marginally, i.e. 1%. To overcome the problem of over-crowding evening shifts must be initiated (Table-36).

21. The state of provision of physical facilities must be improved on priority basis. It is recommended that before any further expansion in the secondary education in NWFP previous gain must be consolidated (Table 37-38).

22. Table 39 describes the Division wise detail of physical facilities in Government High Schools (Male/Female) in NWFP for 1994-95 in four major areas, namely, Number of schools, classrooms, teachers and enrolment. Based on data analysis it reveals the following:

a. The co-efficient of variation $\left\{\frac{Standard\ Deviation \times 100}{Mean}\right\}$ among divisions for the number of schools for Male in urban is 52.04% and for male in rural areas is 41.5%, while for female in urban is 58.2%. and for female in rural is 44%. These figures imply that the number of schools for females in urban areas have more dispersion as compared to other combinations.

b. The co-efficient of variation among divisions for the number of class rooms for male in urban is 48.1%, for male in rural is 35.8% while, for female in urban areas is 74.5% and female is rural is 46.8%. This indicates that variation in the number of classroom for female in urban areas of different divisions is very high.

c. The co-efficient of variation among divisions for number of teachers for male in urban areas is 42.5%, male in rural areas is 41.6%, female in urban areas is 48.83%, female in rural areas is 53.5. This indicates that the dispersion for female in rural areas is comparatively higher than other combinations.

d. The co-efficients of variation among divisions for the number of students enrolled for male in urban areas is 57%, for male in rural areas is 49.6%, for female in urban areas is 64.9%, and for female in rural areas is 66.8% which indicate that disparity among divisions for female in rural areas is compratively high.

To sum up then, it shows, that the dispersion among the students' enrolment as compared to the number of teachers, number of schools and classrooms is higher. So it is recommended that the number of female students in high schools be rationalized. Moreover, provision of physical facilities should also be improved to minimize the dispersion rate in NWFP.

Table 31

Subject wise/Distict wise Enrolment of High Schools (Male) NWFP 1995.

S. No.	District	Class-VI			Class-VII			Class-VIII			Total	Class-IX		Class-X		Total
		Agr.	Ind.	Gen.	Agr.	Ind.	Gen.	Agr.	Ind.	Gen.	VI + VII + VIII	SC.	Arts.	SC.	Arts.	
1.	Peshawar	1495	1039	7487	1385	1127	7381	1173	668	5371	25765	2850	4244	2334	3197	12623
2.	Charsadda	2257	4865	5400	2318	4353	5015	2435	1958	4131	14546	2168	2805	1938	2193	9104
3.	Nowshera	735	432	4323	551	332	4170	604	410	3748	15305	1250	2305	1178	2218	6951
4.	Mardan	1643	793	6599	2003	820	6656	1401	631	5122	24165	2459	3032	1328	2801	9626
5.	Sawabi	789	358	4680	758	356	3967	876	363	3650	15604	1462	2323	1456	2191	7573
6.	Kohat	1889	724	2882	1289	564	2257	1305	607	1606	31124	1799	1309	1583	1007	5693
7.	Karrak	155	107	1042	165	119	1084	145	122	1044	3983	353	570	172	426	1771
8.	D.I. Khan	620	451	2558	810	348	1887	1138	269	1480	9490	1226	1452	1221	1435	5334
9.	Tank	86	224	1004	67	249	862	32	248	732	3504	226	461	286	476	1762
10.	Lakki	425	282	1921	480	361	1771	550	217	1328	7335	749	1708	647	11202	4306
11.	Bannu	1457	581	870	1105	655	733	1032	246	644	7323	826	1241	749	878	3694
12.	Abbottabad	1845	502	3763	1223	418	2488	1590	352	2442	12778	2606	2442	2840	2164	10052
13.	Haripur	716	545	4864	733	505	4511	803	311	3823	16816	1985	2742	1828	2490	9045
14.	Manshera	1218	778	3875	1167	876	3352	1188	678	3022	12279	2754	2322	2384	1831	9291
15.	Batagram	-	24	548	49	45	415	38	58	459	1636	198	344	155	234	931
16.	Kohistan	-	-	218	-	-	263	-	-	213	694	46	90	47	121	304
17.	Swat	1401	1020	4392	1008	823	3397	1259	783	5955	20036	2676	2634	2560	2158	10028
18.	Bunair	289	22	1907	188	18	1301	225	11	967	4928	566	842	574	865	2847
19.	Malakand	543	222	2736	446	174	2470	433	134	2122	9106	897	1191	929	119	4216
20.	Dir	1105	248	5233	735	269	4181	825	118	3566	16450	1895	2355	1935	1895	8330
21.	Chitral	570	413	2502	374	307	1763	429	349	1540	5982	241	1565	215	1296	3122
	Total	19238	13630	58190	16854	12719	59924	17482	8533	52893	259463	29232	37979	26657	32273	126136
	Percentages	21%	15%	64%	18.8%	14.1%	66.9%	19.8%	10.8%	67%		43.5%	56.5%	45.3%	54.7%	48.6% of Middle

Sourse: DEOS Secondary Education, NWFP

TABLE 32

Subject wise/District wise Enrolment of Govt. High Schools Female NWFP 1994-95

S. No.	District	Class-VI			Class-VII			Class-VIII			Total	Class-IX		Class-X		Total
		Drawing	Home Economic	Arabic/ Pushto	Drawing	Home Economic	Arabic/ Pushto	Drawing	Home Economic	Arabic/ Pushto		SC.	Arts.	SC.	Arts.	
1.	Peshawar	-	3708	-	-	3119	-	-	2349	-	9276	587	2186	455	1645	4765
2.	Charsadda	168	1259	1191	120	1029	859	52	745	693	3153	109	766	94	539	1515
3.	Nowshera	33	1596	215	-	961	150	-	967	-	3889	169	994	159	686	2009
4.	Mardan	-	2716	-	-	2283	-	-	1685	-	6765	306	1462	243	1134	3145
5.	Sawabi	-	2012	-	-	1286	-	-	1020	-	4320	128	819	134	618	1699
6.	Karrak	-	647	-	-	530	-	-	465	-	16642	45	460	42	244	791
7.	D.I. Khan	-	955	-	-	898	-	-	569	-	2422	185	676	167	592	1620
8.	Bannu	194	372	178	159	300	141	111	249	130	1726	68	236	33	213	547
9.	Lakki	171	358	181	139	287	148	125	267	142	1808	57	177	42	134	410
10.	Abbottabad	1989	2342	816	1749	2037	767	1200	1467	591	12958	214	1038	168	789	2209
11.	Haripur	1993	2268	728	1610	1976	333	1267	1733	433	12141	269	1556	196	1212	2233
12.	Manshera	-	1834	-	-	1263	-	-	947	-	4044	165	1019	107	587	1878
13.	Swat	-	1804	-	-	1517	-	-	1003	-	4324	275	543	230	666	1714
14.	Malakand	-	847	-	-	732	-	-	467	-	2046	73	557	112	373	993
15.	Dir	-	924	-	-	628	-	-	536	-	2078	-	340	-	304	705
16.	Chitral	-	153	-	-	131	-	-	104	-	388	-	232	-	374	606
	Total	4548	23525	2809	3777	18979	2398	2755	14605	1989	75385	2650	13061	2182	10110	28003
	Percentage															27% of Middle

TABLE 33

NWFP School Age Population

Age	Total			Urban			Rural		
	M+F	Male	Female	M+F	Male	Female	M+F	Male	Female
All Ages	15,475,781	8,060,861	7,414,921	2,330,397	1,256,974	1,073,423	13,145,385	6,803,887	6,341,498
5-9 Years	2,647,419	1,373,933	1,273,486	360,139	185,101	175,039	2,287,280	1,188,832	1,098,447
10-14 Years	2,139,280	1,167,919	971,361	300,198	159,551	140,648	1,839,081	1,008,368	830,713
15-19 Years	1,394,547	767,862	626,686	240,333	135,512	104,821	1,154,215	632,350	521,864
5-19	6,181,246	3,309,714	2,871,532	900,670	480,163	420,507	5,280,576	2,829,551	2,451,025

Source: 1981 Census Report

EMIS Projection 1992 as per 3.1 pa (increase)

(Establishment of Management Information System NWFP)

TABLE 34

Districtwise Number of Government Educational Institutions NWFP (1986-87)

S.No.	Level of Institution	Peshawar	Mardan	Kohat	Karrak	Abbotabad	Manshera	Kohistan	Bannu	D.I.Khan	Chitral	Dir	Swat	Malakand	NWFP
1.	Primary Schools	1179 (16.06)	1008 (12.02)	393 (4.68)	358 (4.27)	1067 (12.72)	976 (11.64)	119 (1.41)	748 (8.92)	705 (8.40)	194 (2.31)	647 (7.71)	806 (9.61)	184 (2.19)	8384
2.	Middle Schools	96 (14.87)	57 (0835)	28 (4.10)	22 (4.69)	92 (13.49)	88 (12.90)	3 (.44)	53 (7.77)	48 (7.03)	28 (4.10)	57 (8.35)	83 (12.17)	17 (2.49)	682
3.	High Schools	143 (17.65)	105 (12.96)	45 (5.55)	24 (2.69)	112 (13.82)	67 (8.27)	3 (.37)	53 (6.54)	63 (7.77)	27 3.33)	55 (6.79)	84 (10.37)	29 (3.58)	810
4.	Inter Colelges	4 (16)	5 (20)	1 (4)	-	4 (16.00)	2 (8.00)	-	1 (4.00)	1 (4.00)	1 (04.00)	1 (4.00)	3 (12.00)	2 (8)	25
5.	Degree Colelges	6 (18.75)	4 (12.50)	3 (9.37)	1 (3.12)	4 (12.50)	2 (6.25)	-	2 (6.25)	3 (9.37)	1 (3.12)	1 (3.12)	3 (9.37)	2 (6.25)	32
6.	Colleges of TECH/Poly Technicics Institute	3 (50)	-	-	-	1 (16.66)	-	-	-	1 (16.66)	1 (12.50)	-	1 (16.66)	-	6
7.	Commercial Institutes/ Colleges	1 (12.50)	1 (12.50)	1 (12.5)	-	1 (12.50)	1 (12.50)	-	1 (12.50)	-	-	-	-	1 (12.50)	8
8.	Vocational Institute	2 (11.76)	3 (17.64)	2 (11.76)	-	3 (17.64)	1 (5.88)	-	2 (11.76)	2 (11.76)	-	1 (5.88)	1 5.88)	-	17
9.	Technical Training Centres	1 (20)	1 (20)	-	-	1 (20)	-	-	-	1 (20)	-	-	1 (20)	-	5

Note: Figures in brackets indicate the percentage share of each district with NWFP.

Source: Bureau of Statistics, Planning and Developoment, Government of NWFP 1988.

TABLE 35

Comparative Analysis Statistical Indicators 1978-79 - 1987-89
Secondary Education NWFP

S.NO.	Indicator	1978-79		1988-89		Achievements	
		M	F	M	F	M	F
1.	No. of High Schools	388	77	784	161	396	84
2.	No. of Teaching Staff	6482	1035	16294	3091	9862	2056
3.	Participation Rate	18.95	2.90	24.65	4.38	5.70	1.48
4.	Envolment 9th & 10th Classes	44934	5780	79466	11850	34532	6070
Average Catchment Area (Sq. Km)		176.17	980.59	95.05	462.8	81.12	517.68

Source: Year book 1988-89 Directorate of Secondary Education NWFP

TABLE 36

Comparative Analysis Statistical Indicators (1988-89/1993-94) Secondary Education NWFP

S.No.	Indicator	1988-89			1993-94			Achievement/Increase		
		M	F	T	M	F	T	M	F	T
1.	No. of High Schools	747	158	905	957	207	1164	210	49	259
2.	No.of Higher Secondary Schools	37	3	40	64	17	81	27	14	41
3.	Enrolment 9th 10th	79466	11850	91316	135029	27990	136019	55563	16140	71703
4.	No. of Teacher (SET)	3690	736	4426	4945	1144	6089	1255	408	1663
5.	Students Teacher ratio (SET)	18.50	14:60	-	273	24.4	-	8.78	9.77	-
6.	Participation rate	-	-	15.40	-	-	19.1	-	-	3.7
7.	Science Labs.	156	33	189	581	106	586	425	73	498
8.	Workshops	86+48 (Sheds)	5	88	126	1	127	40	-	39
9.	Class Rooms	6605	1350	7955	8906	1514	10420	2301	164	2465
10.	Water Supply	543	140	683	766	185	951	223	45	268
11.	Electricity	608	118	726	765	191	956	157	73	230
12.	Boundary Wall	430	123	553	560	194	754	130	71	201
13.	Stores	269	105	374	506	133	639	237	28	265

Source: Year books (1988-1994) N.W.F.P. Directorate of Secondalry Education

DEO's of Directorate of Secondary Education

TABLE 37

District Wise Detail of Physical facilities in G.H. NWFP 1994-95 (Male)

S. No.	District	No. of Schools	Total	Class rooms	No. of Teachers	Enrolment	Offices	Lib	Sc. Labs	Hall	W/Shop Shed	Play ground	Store	Staff room	Water supply	Electri-city	B.Wole
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Peshawar	U 19	53	210	347	12755	27	10	19	16	8	2	18	20	19	19	19
		R 34		291	499	10853	40	18	25	6	-	5	17	26	33	34	29
2	Charsadda	U 9	43	151	215	6389	11	3	7	4	-	3	2	4	9	9	9
		R 34		344	502	14160	34	8	33	5	-	11	17	27	43	34	43
3	Nowshera	U 9	47	116	217	2601	13	8	9	8	2	4	9	9	8	9	9
		R 38		347	506	4350	44	14	22	11	6	10	21	38	34	36	32
4	Mardan	U 12	63	163	302	8367	15	2	12	71	3	1	8	10	12	12	11
		R 51		584	962	25570	80	5	28	12	10	11	38	40	51	50	47
5	Swabi	U 7	60	130	210	1099	8	-	6	4	4	6	7	6	7	7	6
		R 53		575	566	8815	52	-	37	9	10	24	27	40	52	52	44
6	Kohat	U 8	51	129	261	2935	8	4	7	4	3	7	3	8	8	8	8
		R 43		366	541	3792	61	6	26	2	3	16	27	34	29	38	31
7	Karak	U 1	44	14	28	643	1	1	1	1	1	1	1	1	1	1	1
		R 43		115	661	15284	40	22	16	8	7	21	11	31	33	33	28
8	D.I.Khan	U 6	52	81	166	3128	8	3	5	4	3	2	6	5	6	6	5
		R 46		466	666	9708	55	3	27	7	10	22	31	32	34	37	29
9	Tank	U 2	17	21	58	1434	1	-	1	1	1	1	1	1	2	2	2
		R 15		90	174	3132	20	3	4	1	1	9	7	13	9	14	7
10	Laki	U 3	31	38	67	1308	3	-	2	1	01	3	2	3	3	3	3
		R 34		227	490	8814	37	2	19	4	3	17	15	26	26	31	23
11	Bannu	U 4	30	88	152	4217	10	3	4	4	4	-	3	4	4	4	4
		R 26		308	394	7179	38	5	18	8	10	5	19	25	13	26	15
12	Abbottabad	U 8	60	116	224	6253	8	6	8	4	1	2	5	8	8	8	8
		R 52		359	688	18922	52	5	22	8	1	10	29	40	42	29	11

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
13	Haripur	U 6	62	89	157	3838	8	-	5	2	4	4	4	6	5	5	5
		R 56		428	720	19064	51	-	25	8	7	20	27	37	44	40	23
14	Mansehra	U 2	65	40	33	850	2	-	2	-	-	2	1	1	2	2	1
		R 63		562	948	19745	56	11	31	1	3	21	15	34	46	48	9
15	Batagram	U -	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		R 18		120	89	2588	25	-	7	-	1	4	10	17	13	6	1
16	Kohistan	U -	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		R 7		53	57	253	7	-	6	3	-	2	7	3	5	3	-
17	Swat	U 7	80	76	158	3728	7	3	6	4	3	1	4	7	6	7	6
		R 73		568	1179	2303	71	23	34	15	3	45	29	66	63	50	12
18	Buner	U -	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		R 27		248	373	7046	25	1	9	8	1	6	12	21	23	17	12
19	Malakand	U 1	35	11	22	665	2	-	-	-	-	1	-	1	1	1	1
		R 34		320	628	12005	46	2	12	4	2	18	21	32	34	32	31
20	Dir	U 4	85	29	18	501	5	1	2	-	1	2	1	3	4	4	2
		R 81		547	1014	19561	81	20	28	20	8	26	28	32	49	36	17
21	Chitral	U 3	39	32	57	1231	4	2	1	1	1	1	2	3	3	2	2
		R 36		248	205	7882	30	3	10	10	-	6	21	53	5	1	14
	Total	U 111		1534	2686	61942	141	46	97	65	42	43	77	89	98	109	102
		R 864		7372	20562	241726	945	151	484	150	84	194	429	659	668	656	458
	Total	975		8906	23248	303668	1086	197	581	215	126	237	506	748	766	765	560

Sourcce: DEO's Directorate of Secondary Education

TABLE 38

District wise Detail of Physical facilities in Government High Schools 94-95 (Female)

S. No.	Districts		Nos. of Schools	Class Room	Enrolment	Teachers	Offices	Lib.	SC. Lib.	Hall	W/Sup	W/Shop Shed	Store	S. Room	B.Wall	Electri-city	Play ground
1.	Peshawar	U	15	144	9578	308	5	7	12	11	5	-	9	15	5	5	2
		R	4	29	1225	55	14	2	2	1	14	-	4	4	14	14	2
2.	Charsadda	U	4	38	2642	65	8	1	2	1	4	-	-	4	4	9	2
		R	6	40	2006	60	7	4	4	-	6	-	5	5	6	6	3
3.	Nowshera	U	6	72	1430	96	6	-	2	2	6	-	3	6	6	6	3
		R	5	59	374	68	5	-	3	2	5	1	1	3	5	9	2
4.	Mardan	U	5	66	3778	116	9	1	4	2	5	-	7	3	5	5	3
		R	11	79	3927	126	19	1	9	3	11	-	8	7	11	10	7
5.	Sawabi	U	4	41	2629	64	4	1	3	1	4	-	2	4	4	4	1
		R	14	100	4913	160	13	3	3	-	14	-	8	8	14	14	1
6.	Karak	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		R	6	44	1981	78	9	1	3	-	6	-	3	4	6	6	4
7.	D.I. Khan	U	10	55	4050	173	9	-	5	3	10	-	3	4	10	10	1
		R	9	45	875	73	9	-	4	-	9	-	6	7	9	9	6
8.	Bannu	U	1	12	871	23	2	-	1	1	1	-	1	-	1	1	1
		R	5	18	592	65	8	1	4	-	5	-	5	2	5	5	5
9.	Lakki	U	3	19	941	45	6	-	1	1	3	-	5	3	3	3	2
		R	4	27	381	52	7	1	2	1	4	-	1	2	4	4	4
10.	Abbottabad	U	5	68	3265	121	9	2	3	3	5	-	5	3	5	5	3
		R	12	37	3285	155	15	-	6	2	12	-	7	7	12	12	2
11.	Haripur	U	3	65	4841	123	6	3	2	3	3	-	3	2	3	3	3
		R	9	65	3815	129	17	1	5	4	9	-	9	8	9	9	8
12.	Manshera	U	3	25	2168	67	3	-	2	2	3	-	2	3	3	3	1
		R	17	108	3754	180	17	3	9	6	17	-	11	16	15	13	7
13.	Sawat	U	3	32	2484	61	3	-	2	3	3	-	3	3	3	3	3
		R	12	102	3926	158	12	1	1	2	-	-	11	11	12	12	8
14.	Malakand	U	1	14	718	21	1	1	1	1	1	-	1	1	1	1	1
		R	6	40	2920	90	6	1	3	1	6	-	1	4	6	1	6
15.	Dir	U	2	13	646	22	2	-	2	2	2	-	1	2	2	2	2
		R	9	46	2137	93	9	-	2	6	9	-	9	9	9	9	9
16.	Chitral	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		R	2	15	617	26	1	1	4	-	-	-	1	1	2	2	-
TOTAL			131	1514	36,728	1,568	168	22	64	34	185	1	133	98	194	191	100

Source: DEO's (Female) Secondary Education.

TABLE 39

Division wise Detail of Physical Facilities in G.H.S. NWFP 1994-95 Male/Female

S.No.	Division	No. of Schools		Class Rooms		Teachers		Enrolment	
		M	F	M	F	M	F	M	F
1.	Peshawar	U 37	25	477	254	779	469	21745	13650
		R 106	15	982	128	1507	183	29363	3605
2.	Mardan	U 19	9	293	107	612	180	9466	6407
		R 104	25	1159	175	1528	286	34385	8840
3.	Kohat	U 9	7	143	14	289	231	4780	1239
		R 86	11	681	44	1202	78	19076	1986
4.	D.I. Khan	U 15	14	228	86	443	241	10087	5862
		R 121	18	1091	90	1724	190	28833	1848
5.	Hazara	U 16	11	245	158	414	311	10941	10274
		R 196	38	1528	210	2502	464	60572	10854
6.	Malakand	U 15	6	148	59	255	104	6125	3848
		R 251	29	1931	003	3399	367	69497	6600

DEOS Male/Female Secondary Education NWFP

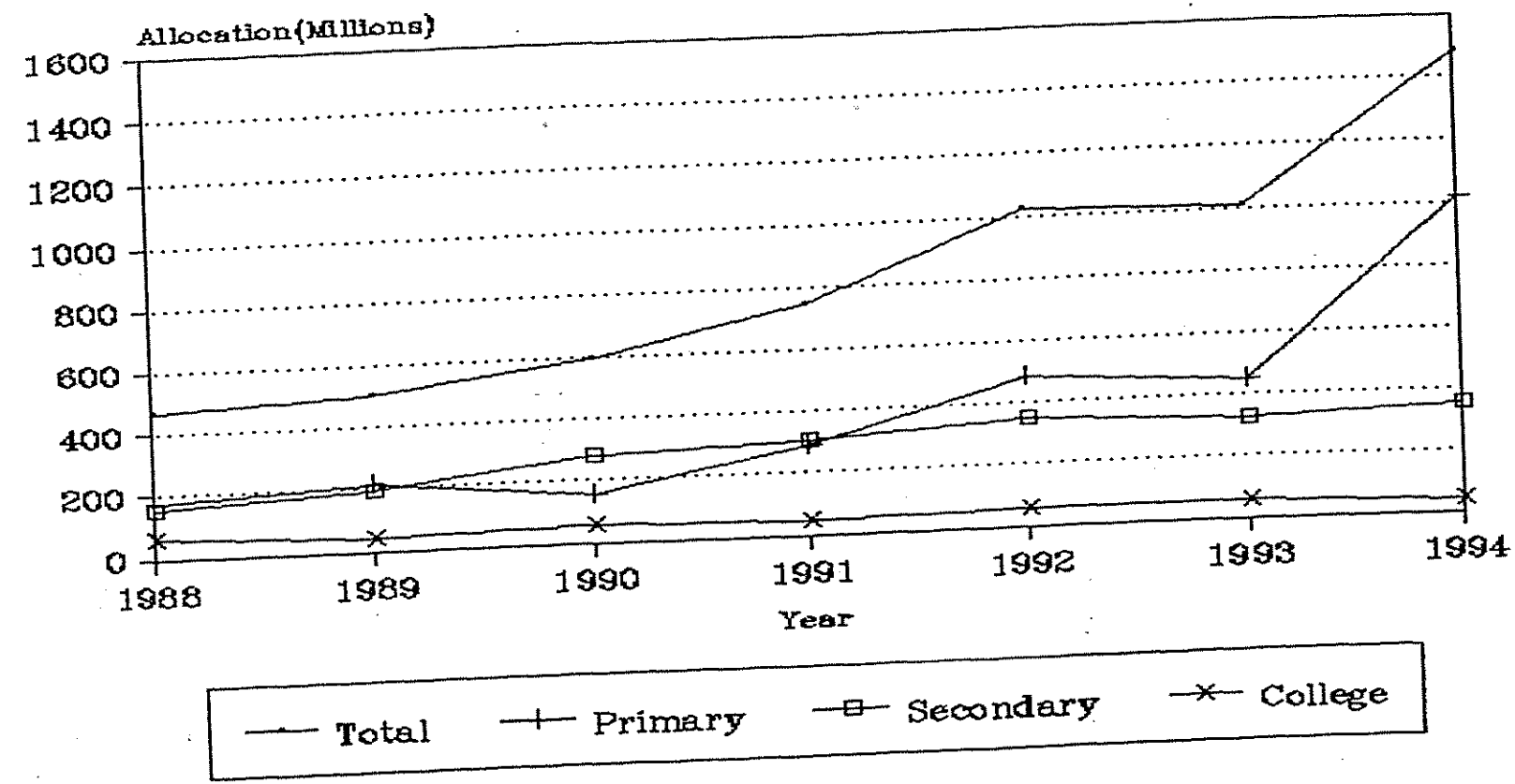
(D) Analysis of financial Allocations for Education in NWFP Findings/Recommendations

1. The data collected on financial allocations in Education sector and specially Secondary education have been processed and analysed through graphical figures 15-19. Data collected from Chief of Education Office NWFP and statistical officer Directorate of Secondary Education has been compiled & tabulated as per Tables 40, 41 and 42. Table 40 indicates that total allocations have increased from Rs. 462.512 million (1988-89) to Rs. 1710.110 million (1994-95), which shows an increase of Rs. 1247.598 millions. The state of utilization of the budget has also improved, i.e, from 99.8% (1988-89) to 102.5% in 1994-95. Total allocations to Primary education has increased from Rs. 193.751 million (1988-89) to Rs. 1126.410 million in 1994-95, which shows an increase of Rs. 932.659 million over the years. Total increase in the allocation of secondary education has been Rs. 242.969 million, i.e, from Rs.193.744 in 1988-89 to Rs. 406.713 million in 1994-95. Total increase in college education could not match even secondary education, i.e., from Rs. 42.498 million 1988-89 to Rs. 89.070 million in 1994-1995.

2. Allocations made to Primary, Secondary and College education have been shown in figure 15 and 16, which indicates that major share of allocation has gone to the primary sector. The percentage share of primary education in 1988-89 was 41.9% whereas it has raised to 65.9% in 1994-95. The percentage of Secondary education in 1988-89 is 35.4% whereas it has dropped to 23.8% in 1994-95. Similarly the percentage of College education, which was 9.19 in 1988-89, has declined to 5.2.

Fig.15

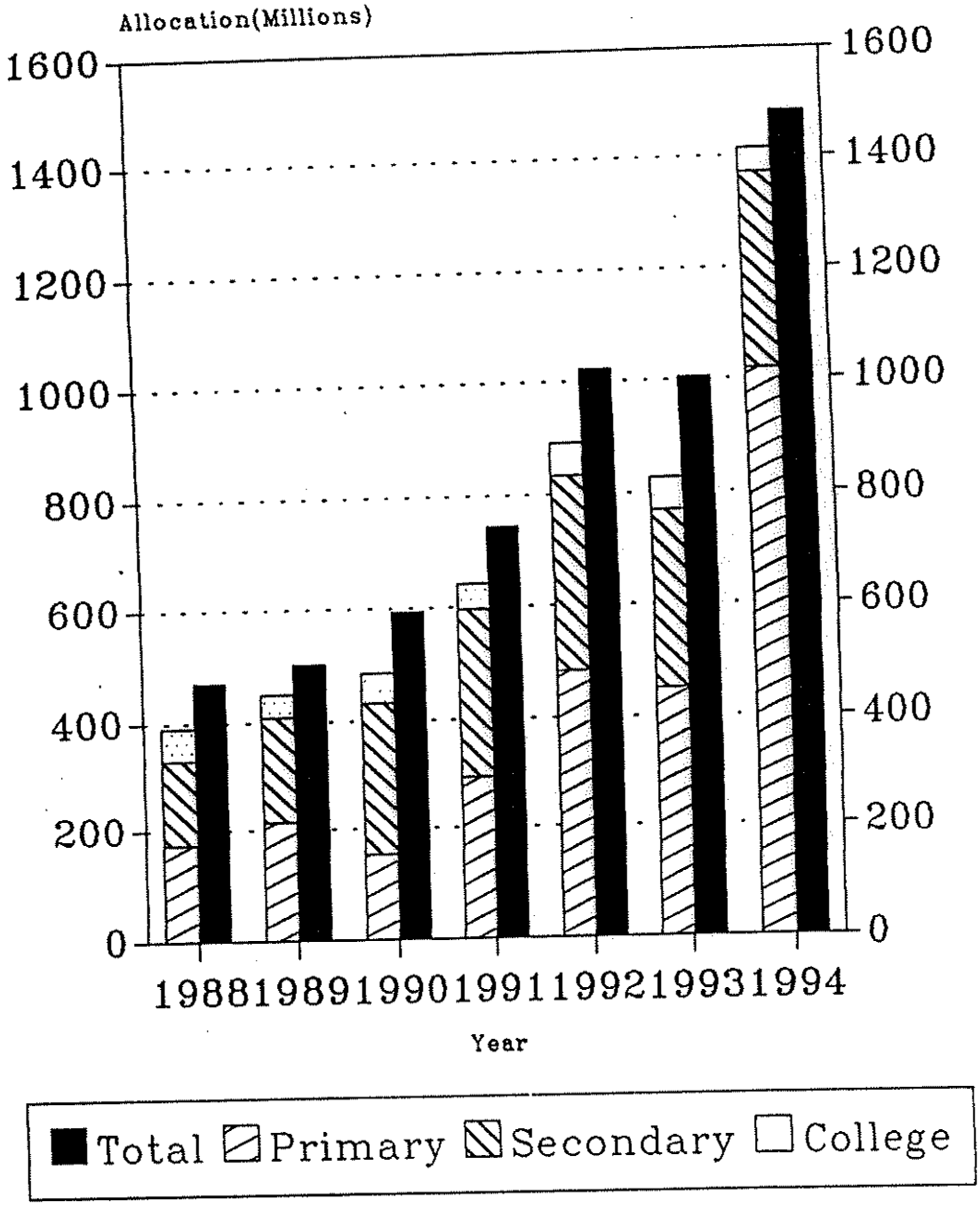
Financial Allocations (Revised)
ADPs: 1988–89 to 1994–95(NWFP)



Sources: ADPs– Reviews–years 1988–89 to
******** 1994–95. (NWFP) Peshawar.

Fig.16

Financial Allocations (Revised)
ADPs: 1988-89 to 1994-95(NWFP)



Sources: ADPs- Reviews-years 1988-89 to 1994-95. (NWFP) Peshawar.

3. It is, therefore, recommended that while increases in primary education are appreciable decreases in the share of secondary and college education should be checked and allocations rationalized proportionately.

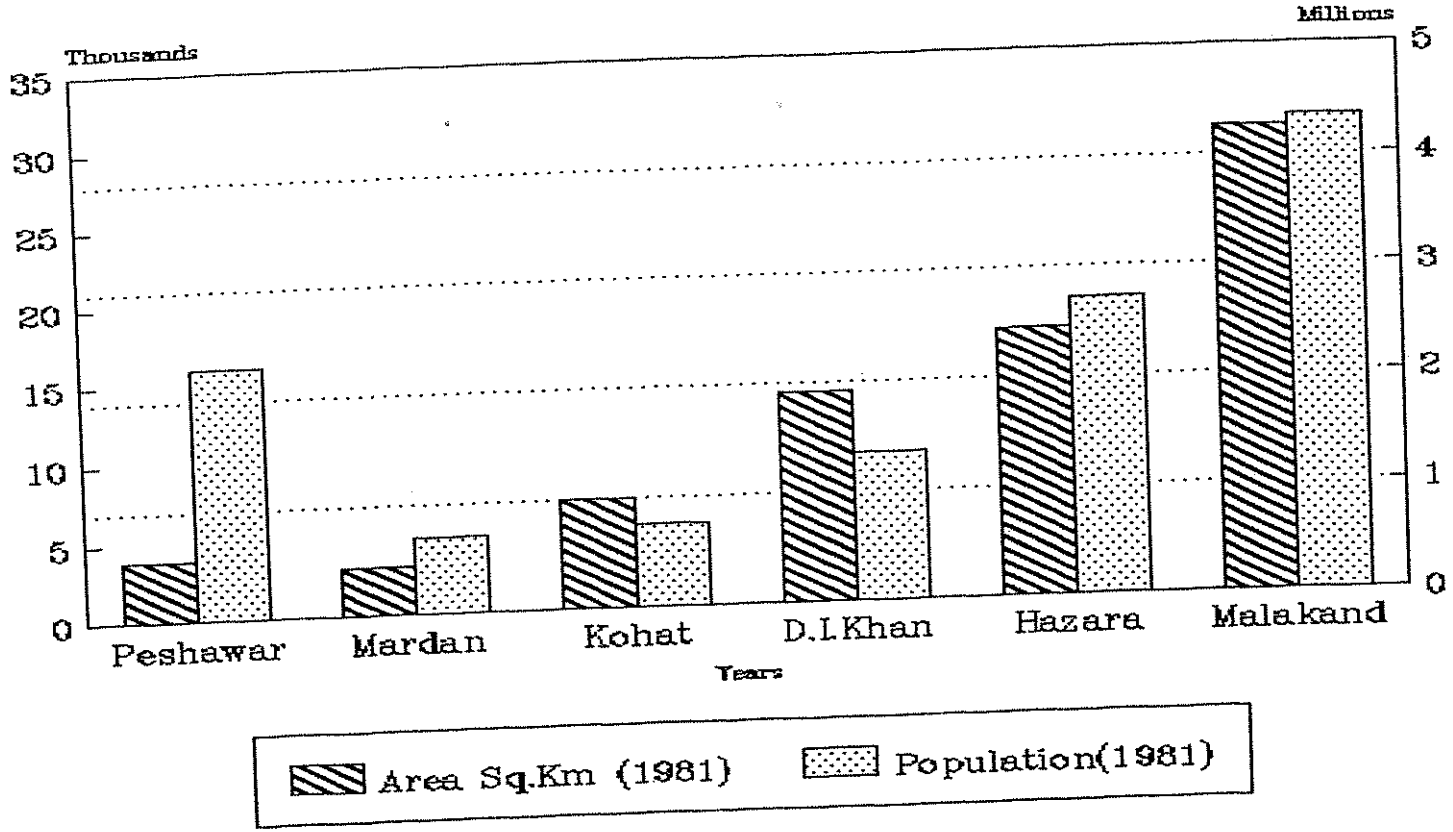
4. Table 41 indicates that financial allocation has not been according to area or population of the districts. As indicated in figure 17 and 18 Malakand Division is on the top area-wise as well as population-wise; followed by Hazara, Peshawar, D.I. Khan, Kohat and Mardan divisions respectively. Financial allocations in 1994-95 have been rationalized to some extent. However, it is recommended that backward areas must be given due preference to bring them at par with comparatively developed areas.

5. Table 41 indicates that overall achievement level of physical targets in Primary sector is not satisfactory, except for the establishment of mosque schools. it was excellent in year 1989-90. However, in the year 1993-94, against the target of 1249 for the establishment of primary schools, only 664 could be achieved and again in 1994-95 achievement is 1339 against the target of 2535, which comes to only 52%. This needs reassessment of the task on the part of the implementing agencies. This has also been shown at Figure 19.

6. In the field of Secondary education, analysis of the data revealed that in the year 1988-95 only 6 High schools could be improved, which was the actual target as well. During this period, 41 schools were to be constructed only 27 could be achieved. Similarly 983 primary schools were to be upgraded during 1988-95, 769 could be achieved. In the field of upgrading middle to higher the achievement was 387. However, the achievement level of upgrading High schools to Higher

Fig. 17

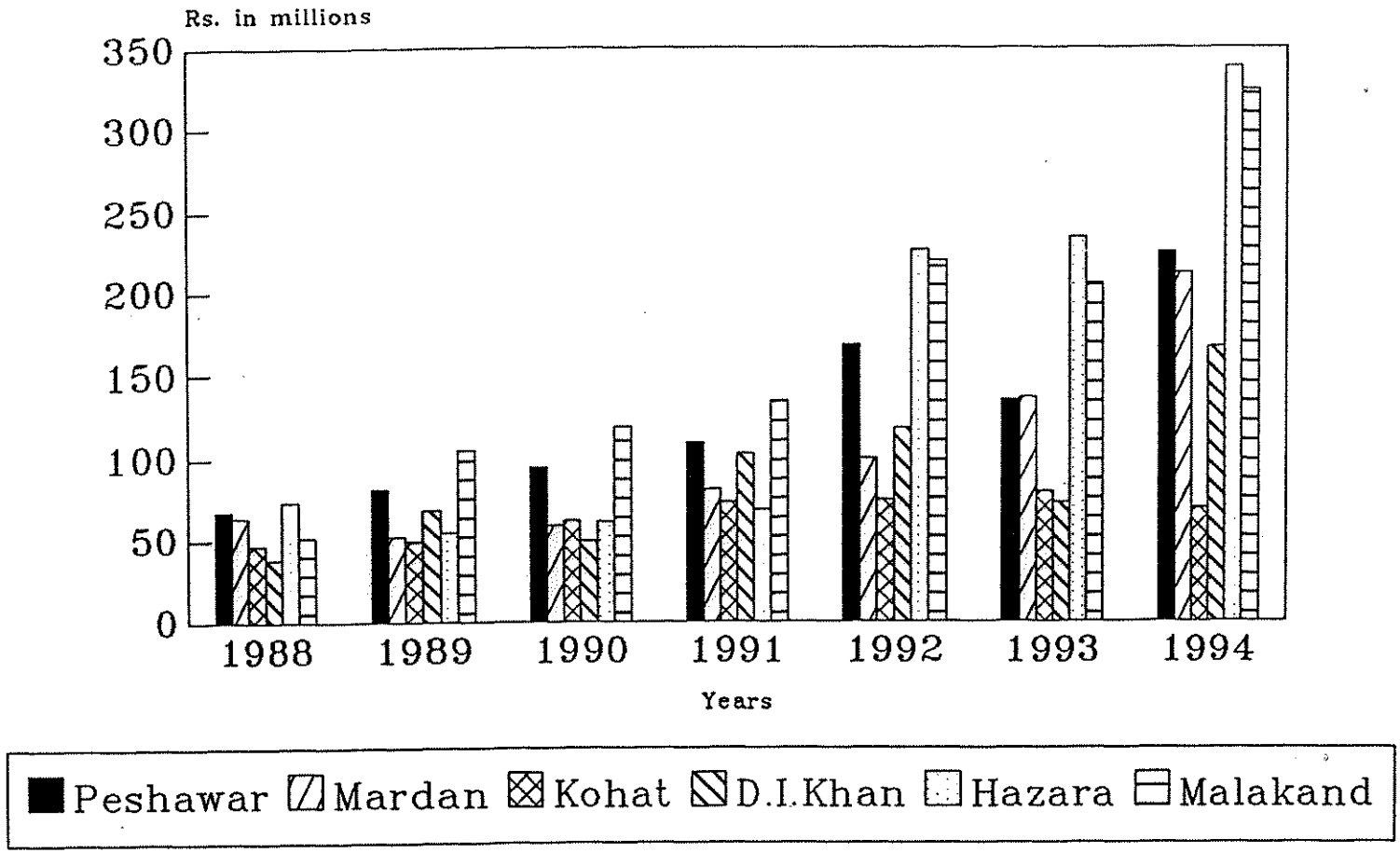
Division Wise Position
Area vs Population



Sources: Year Book 1990–91, P&S Cell
Directorate of Education N.W.F.P. P–32

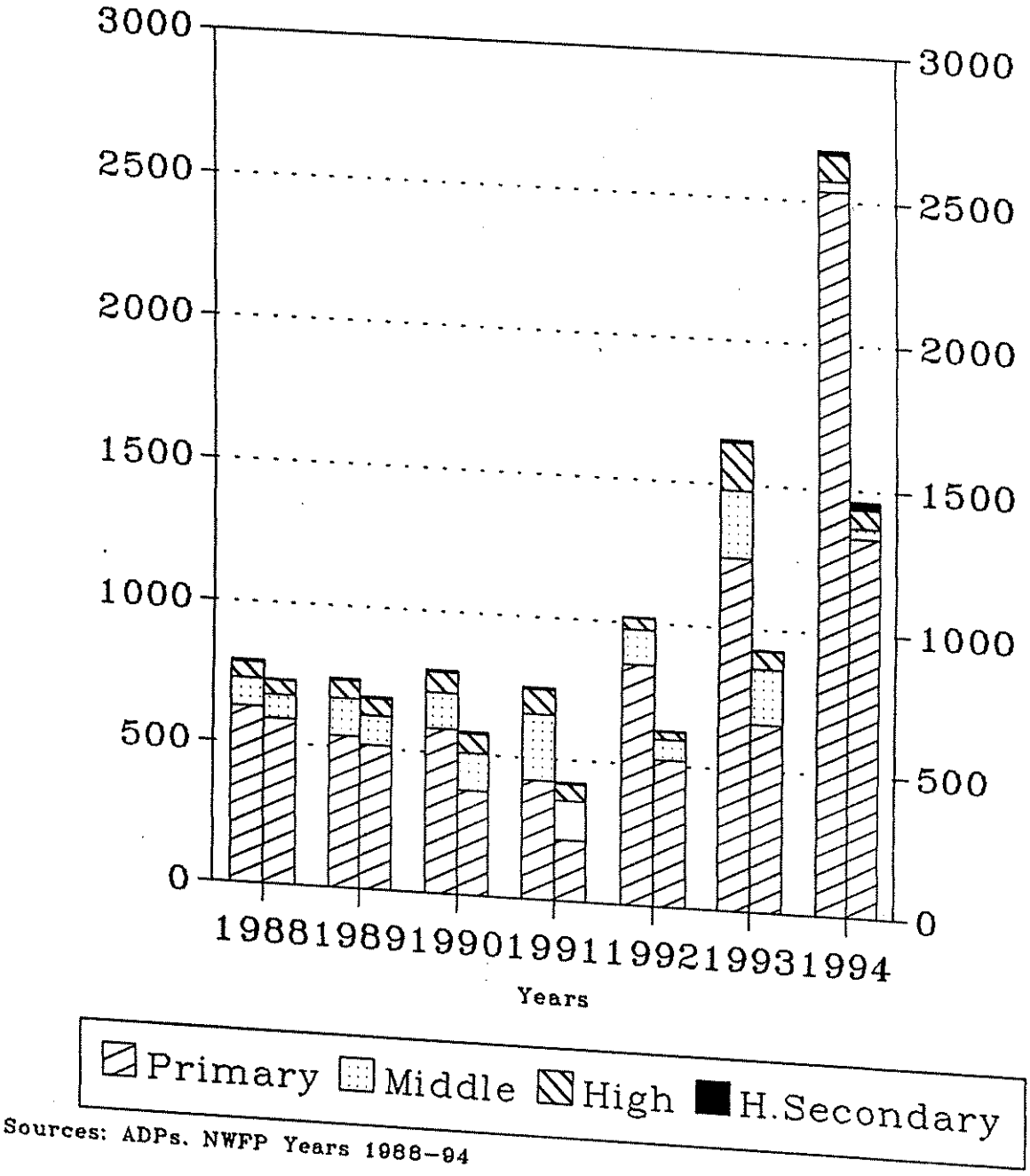
Fig. 18 Division Wise Position

Allocations for Years 1988–94



Sources: ADPs NWFP, Annual Reviews, Year Book 1990–91, P & S Cell Dir. of Education Page: 32

Fig.19 PHYSICAL TARGETS/ACHIEVEMENTS
Establishment/Upgradation of Schools



Sources: ADPs, NWFP Years 1988-94

Secondary was better, i.e, against the target of 65, upgradation of 64 took place, but point to be noted here is that 30 Higher schools have been upgraded only in one year i.e, 1994-95. During the year, 1988-95 only four High schools could be established which is the actual target as well.

7. It shows that major thurst of the government has been on the upgradation of primary and middle schools rather than the improvement of existing schools or construction/establishment of new high schools.

8. Performance in college sector has not been that good either. Buildings of 22 college were to be constructed during 1988-95. Only 9 have been constructed. Improvements were to be made in 83 colleges, the achievement is 42 only during 1988-95.

9. Physical targets and achievements have been graphically represented in Figure 19 which show that Primary education excels all other sectors of education.

10. Analysis of the data has indicated that government as well as the world bodies like Asian Development Bank and the World Bank are putting a lot of emphasis on the expansion of primary education as an integral part of overall social development plan. But it is evident that other sectors especially secondary education is not getting proportionate share of attention, mainly because of the scarcity of funds. So visualizing all this, it is recommended that private sector must be involved in the provision of secondary education.

11. Frontier Education Foundation must be entrusted this task with requisite resources to motivate the private investors to get involved in secondary education.

12. Moreover, government should make efforts to get international/financial assistance in the field of secondary education as well.

TABLE 40

Financial Allocations - ADPs 1988-89 - 1994-95
N.W.F.P

(Figures in Millions)

Sector/Sub-Sector	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Total Allocation	462.512	495.000	559.000	633.700	1474.000	1056.864	1710.110
Revised	469.512	502.436	592.914	744.093	1023.775	1005.552	1480.261
Expenditure	468.805	509.055	587.426	645.971	971.210	989.064	1516.734
% age utilization	99.8%	101.30%	99.1%	86.8%	94.9%	98%	102.5%
Primary Education							
Allocation	193.751	218.939	211.812	262.950	-	437.333	1126.410
Revised	174.343	213.537	152.285	291.315	482.451	447.424	1017.208
Expenditure	174.411	216.490	148.890	275.734	415.989	453.179	1044.107
% age utilization	100%	101.14%	97.8%	94%	93.7%	101.3%	102.6%
Secondary Education							
Allocation	163.744	188.684	241.590	279.511	-	424.163	406.713
Revised	154.718	193.780	277.904	304.332	349.615	321.154	354.917
Expenditure	154.460	195.527	275.836	293.749	327.153	314.684	361.372
%age utilization	100%	100.%	99.3%	96.5%	93.6%	98%	101.8%
College Education							
Allocation	42.498	34.214	39.176	48.871	-	99.069	89.070
Revised	62.031	40.404	54.637	47.330	58.594	58.442	42.739
Expenditure	61.343	41.111	54.613	41.270	62.202	56.013	40.440
%age Utilization	98.9%	101.7%	100.%	97.5%	106.2%	95.8%	94%

Source: ADPs/Reviews NWFP Year 1988-89 TO 1994-95

TABLE 41

Division Wise Position of Financial Allocations 1988-89 to 1994-95 in NWFP

(Figures in Rupees in Millions)

Division	Area Sq. K.M. 1981 Cencus	Population 1981 Cencus	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
PESHAWAR	4001	2281752	67.348	81.596	95.102	109.480	167.914	135.179	224.894
MARDAN	3137	712700	63.870	52.438	58.794	80.773	99.802	136.430	212.095
KOHAT	7012	758772	47.592	49.207	62.053	72.916	74.180	79.373	69.462
D.I.KHAN	13396	1346280	38.578	68.685	49.423	102.696	118.021	72.529	166.113
HAZARA	17103	2701257	73.411	54.532	61.014	68.551	226.224	233.892	338.502
MALAKAND	29872	4343667	51.705	105.324	118.812	134.486	219.428	204.876	323.203

Source:
1. ADPs/Reviews NWFP Year 1988-89 TO 1994-95.
2. Directorate of Secondary Education NWFP.

TABLE-42

Physcial Targets and Achievements ADPs Education and Training NWFP

(Figures in Millions)

Sector	1988-89		1989-90		1990-91		1991-92		1992-93		1993-94		1994-95	
	Target	Achievement	Tgt	Ach	Tgt	Ach	Tgt	Ach	Tgt	Ach	Tgt	Ach	Tgt	Ach
Primary Education														
Establishment of Primary Schools	628	590	541	14	586	370	421	214	855	528	1249	664	2537	1339
Mosque Schools	679	679	812	812	900	900	900	1000	1112	804	926	926	-	-
Constructions of Rooms	107	98	183	198	28	24	283	41	-	-	1151	726	2071	1195
Re-construc- of Primary Schools	19	23	87	84	64	13	80	43	53	53	74	15	139	77
Secondary Education														
Improvement of High Schools	2	2	-	-	-	-	-	-	4	4	-	-	-	-
Constr. of High School Buildings	7	5	5	4	3	2	7	8	11	6	4	-	4	2
Upgradation Primary to Middle	103	85	131	104	126	137	235	139	121	72	231	196	36	36
Upgradation Middle to High	56	50	65	60	71	66	85	60	41	25	167	64	90	62
Upgradation High to H. Secondary	7	3	8	6	9	8	10	8	4	5	11	4	16	30
Establishment of High Schools	-	-	1	-	1	2	3	2	-	-	-	-	-	-
Const. of Rooms Middle & High	-	-	-	-	-	-	-	-	71	90	272	163	258	168
College Education														
Building of Colleges	2	1	1	1	3	2	4	4	9	-	2	1	1	-
Improvement of Colleges	11	4	11	4	7	9	9	8	31	9	14	8	-	-

Source: ADPs/Reviews NWFP Year 1988-89 TO 1994-95

(E) Analysis of the Matriculation Examination BISE Peshawar

1. The Matriculation results of the last thirteen years, i.e, 1982-1994 have been reviewed, processed and tabulated. Again this tabulated data represented in graphics to give us a complete picture both quantity and quality.

2. The data indicates that average pass percentage of matriculation examination has been 54.94% during year 1982-92. The data is placed at table 43 and also represented by Figure 20.

3. There is vast variation between the results of private and regular students as well as between male and female students. The average pass percentage of regular male and female students during the year 1982-92 is 67.21% and 71.6 respectively, whereas pass percentage of private male and female students is 35.37% and 34.27% respectively (Table 43 and Figure 20).

4. Table 44 indicates that average pass percentage of science subjects during 1982-92 is as follows: Physics 76.9%, Chemistry 80.9%, Biology 80.98%, Mathematics (elective) 77.8% and General Science 70%. This shows that the poor performance in the pass percentage of BISE results is mainly due to two factors, i.e, low standards of private students and low performance of Arts students. This also indicates that science subjects bring purpose and interest among the students, who give better performance and achievement level. Hence, it is recommended that science must be open to all students at the Secondary level.

5. Table 45 gives the overall qualitative picture of the Matriculation results during the year 1982-92. This has also been represented in graphical form in figure 21. The analysis of data shows that only 2.65% could get A1 and A grades, 8.5%

were placed in B grade, 18.6% in C grade, and 23% were in D and E grades in the years 1982-1992 (Table 45, Figure 21).

6. This was also indicated that besides huge number of failures, a vast majority of students who had qualified in D and E grades, and some of C graders as well, could not get admission in colleges. Most of them would not be able to get admission in vocational/technical institutes as well. Hence, it is important that they should get vocational/technical education during their stay in High school, so that they are able to adjust themselves in the practical life (Table 45).

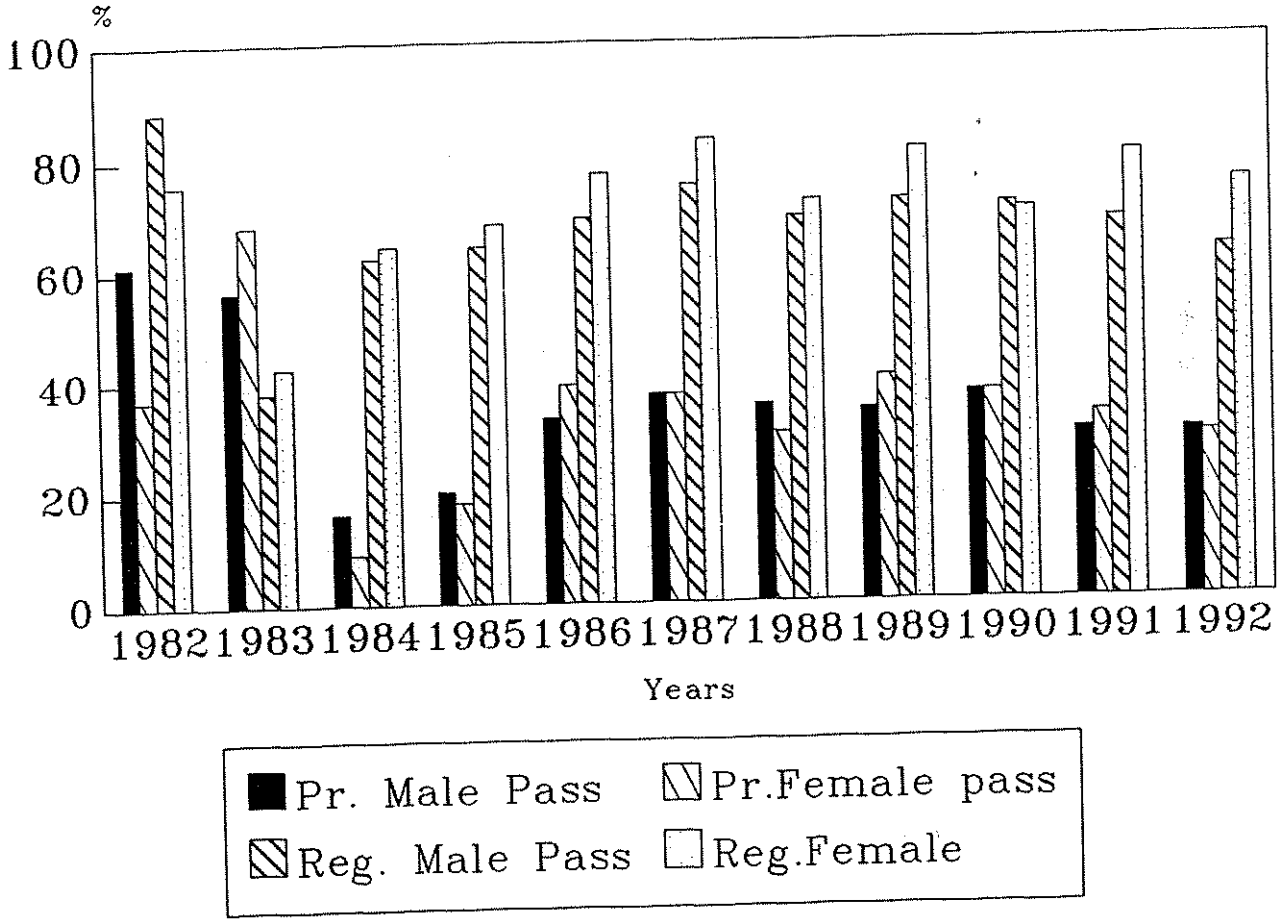
7. The number of unfair means cases have increased about ten times. The total number of cases registered in 1982 (Table 45) were 185, whereas the number rose to 1979 in 1992. This must be attributed to two main factors: lack of strict vigilance and supervision by the Examination authorities and deteriorating moral standards among the students (Table 45).

8. The analysis of the matriculation results of the last four years, i.e., 1991-94 indicated that percentage ratio of students who appeared in Science and Arts were 35%: 65%, 38%: 62%, 316%: 64%, and 37%: 63% respectively. However, this does not correspond to the enrolled ratio of Science and Arts subjects which was 43.5%:5.65% in Class IX and 45.3%: 54.7% in Class X. This shows that students at the last leg were either dropped or opted to appear in Arts subjects. (Table 46 and Figure 22).

9. It is, therefore, recommended that students may be allowed to opt for a third stream as well and that should be vocational/technical at ixth and xth classes level.

Fig. 20

Comparative Analysis
Matriculation examination
B.I.S.E. Peshawar

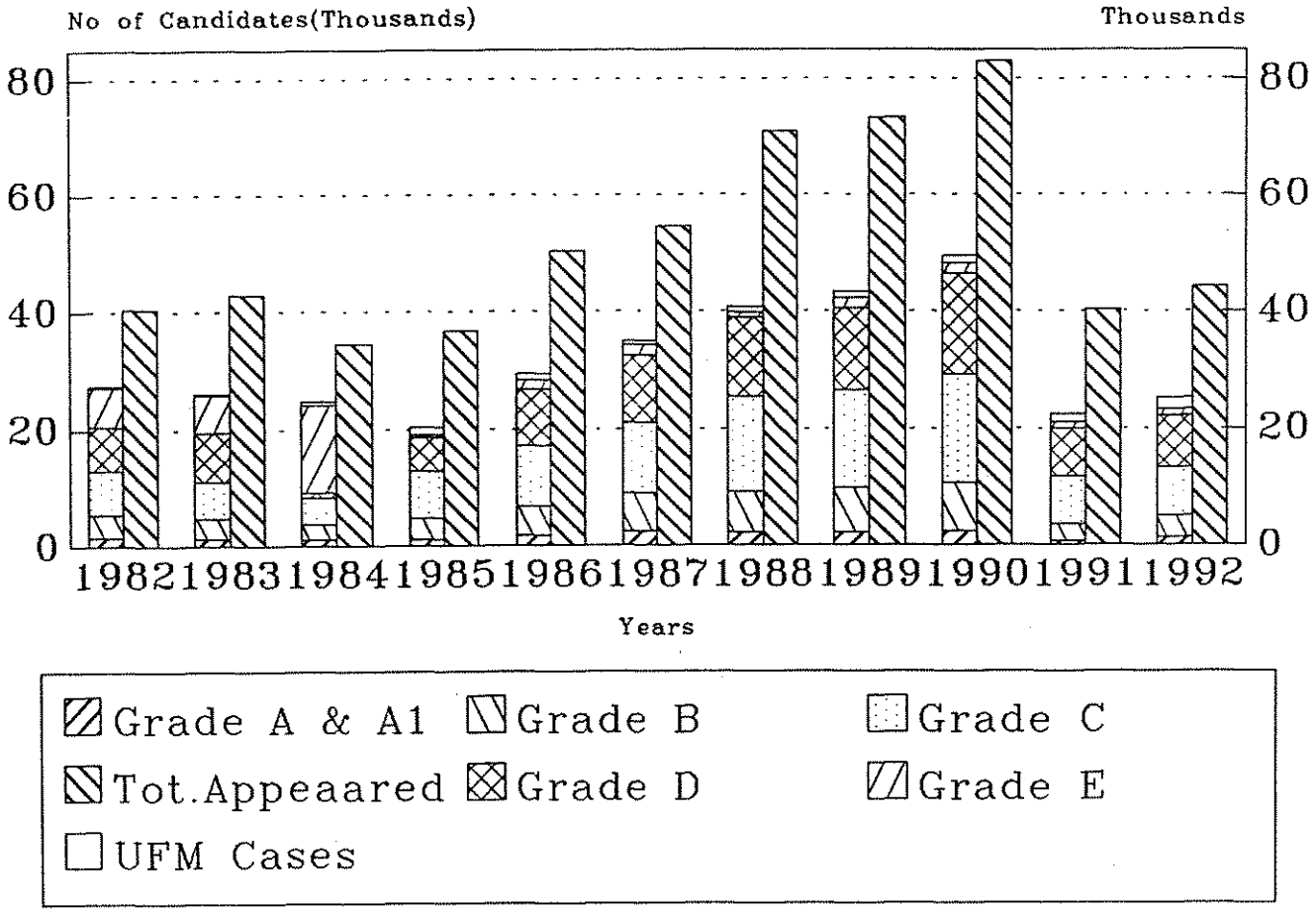


Source:Annual Results B.I.S.E. Peshawar

Fig.21 Comparative Analysis

Matriculation examination

B.I.S.E. Peshawar



Source:Annual results BISE Peshawar

Fig.22

Comparative Anallysis
Matriculation Examinations
Sciences vs Arts

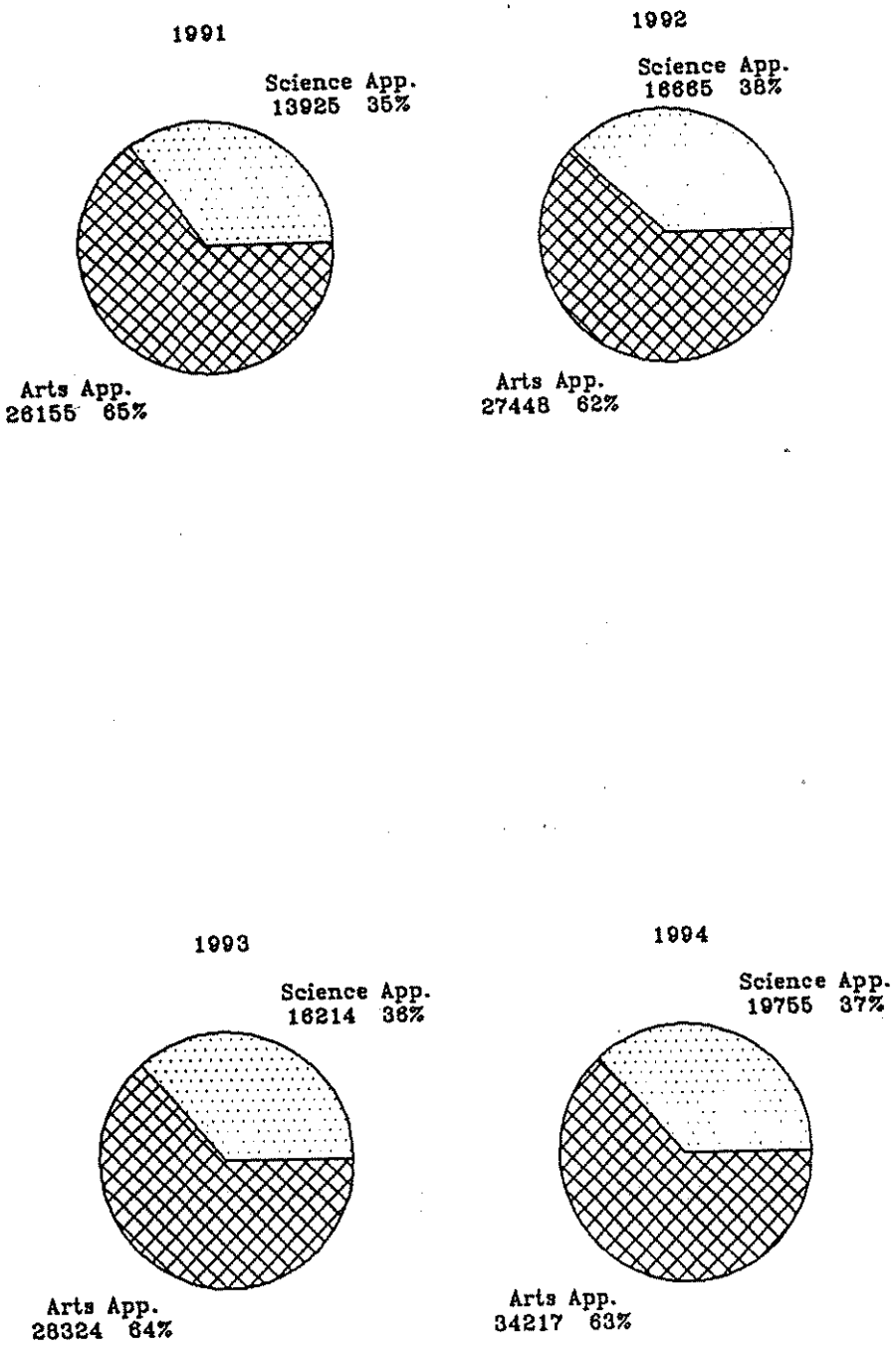


TABLE 43

Comparative Analysis Matriculation Examination BISE Peshawar NWFP Year 1982-92

Candidates	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Private Male Appeared	13972	12795	10786	8402	16645	18397	29134	24223	25218	13899	10785
Pass %age	61.28%	56.2%	16%	20%	33%	37%	35%	34%	37%	30%	29.6%
Private Female appeared	2268	2630	2523	1793	2423	3246	4695	5664	6285	3484	3959
Pass %age	36.9%	68%	9%	18%	39%	37%	30%	40%	37%	33%	29.1%
Regular male appeared	21283	24194	18668	23163	27547	29254	39122	36336	45338	196226	24853
Pass %age	88.6%	37.87%	62%	64%	69%	75%	69%	72%	71%	68%	62.6%
Regular Female appeared	2922	3265	2601	3223	3694	3747	5260	5233	6177	3563	4516
Pass %age	75.6%	42.4%	64%	68%	77%	83%	72%	81%	70%	80%	75%
All appeared Pass %age	40445	42825	334578	36581	50302	54644	71013	73456	83028	40080	44113
	75.6%	40.6%	44%	52%	56%	60%	56%	57%	58%	52.8%	52.9%

Table 44

Comparative Analysis Matric Examination BISC, Peshawar 1982-92 (Science Subjects)

Subjects	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Physic appeared pass %age	14055 85%	13018 79.7%	13553 86%	16422 64%	16745 70%	19087 70%	22897 77.7%	24301 89%	27570 84%	14140 63%	16058 77.3%
Chemistry appeared pass %age	14637 82%	13062 82.1%	13557 86%	16422 65%	16741 69%	19245 81%	22750 83.2%	24253 88%	27520 85%	1210 88%	15740 88.81%
Biology apeared pass %age	13784 71%	12968 85.1%	13420 81%	16420 70%	16747 73%	18946 83%	22554 84.7%	24054 90%	27535 84%	12796 87%	15702 82%
Maths appeared pass %age	14305 88%	13203 82.6%	13827 77%	15075 58%	14795 70%	19246 81%	23325 85.1%	24519 87%	27849 83%	13037 68%	16689 76.9%
Gen. Sc. appeared pass %age	17662 79%	25101 79.7%	16581 80%	11454 65%	14530 65%	31229 72%	43081 86.5%	40276 60%	41995 75%	17887 67%	24349 58.4%

TABLE 45

Qualitative Analysis Maric Exmaination 1982-92 BISE, Peshawar

Grading	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
A-1	87	102	115	119	209	337	233	223	173	36	113
A	1394	1194	837	976	1462	2016	1680	1969	2056	586	1055
B	3790	3331	2641	3682	4936	6568	7056	7612	8459	2806	3773
C	7734	6430	4491	8030	10587	12221	16309	16685	18584	8218	8230
D	7696	8513	932	5993	9535	11358	13442	13844	17060	8430	8953
E	6560	6441	15171	338	1612	1760	896	1823	1785	1071	1212
Un-fair Mean cases	85	71	504	1402	1015	749	812	1167	1284	1384	1979

Source : Annual Results BISE, Peshawar year 1982-92

TABLE 46

Comparative Analysis Arts Vs Science BISE Peshawar 1991-94

		Science Group				Arts Group			
		1991	1992	1993	1994	1991	1992	1993	1994
Regular Girls	Appeared Pass %age	1219 73%	1388 78%	1323 89.79%	1554 67.4%	2344 83.1%	3128 75%	2908 76%	4499 83.9%
Regular Boys	Appeared Pass %age	11478 66.4%	13461 71%	1223 78%	15653 70.6%	8144 70.4%	11392 53%	10092 53%	14580 69.3%
Private Girls	Appeared Pass %age	50 30.4%	117 73%	135 54%	110 56.4%	3428 33%	3842 28%	3592 29%	3643 43.8%
Private Boys	Appeared Pass %age	1172 54.8%	1816 54%	2524 45%	1438 58.5%	12239 25.9%	9086 25%	1197 22%	11495 66.9%
Total	Appeared Pass %age	13925 65.8%	1665 70%	16214 73.61%	19755 70%	26155 44.4%	27448 43%	28324 41.%	34217 57.3%
Grand Total	Appeared Pass %age	40080 52.8%	44113 52.7%	45540 64%	53972 62.1%	40080 52.8%	44113 25.9%	45540 64%	53972 62.1%
Ratio Sc. Vs. Arts		34:66	37:63	36:64	36:64	65:35	62:38	64:36	63:37

Source: Annual Results Matric Examination BISE, Peshawar 1991-94.

(F) Survey of the Technical Training Centre Peshawar, Agro-Tech Teacher Training Centre, Peshawar and Government Technical High School, Peshawar

We surveyed these institutions to assess their capabilities, course offerings and the manner in which trades/skills are imparted. Based on the data collected during the visits to these institutions, main findings/recommendations are given as under:-

1. Technical Training Centre may undertake the task of training instructors for secondary school technical/vocational subjects. T.T.C. may also provide material help in the form of mobile workshops for a cluster of secondary schools earmarked for the purpose of vocational/technical education. But this will require coordination between the Education Department and the Labour Division, NWFP.
2. Most of the students opt for the courses/skills/trades which possibly offer some social recognition/status in the society, e.g., refrigeration, air conditioning and computer training etc. However, students for unpopular trades could be attracted by lowering the entry qualifications.
3. Technial Training Centre Peshawar offers training in eleven different trades with total training capacity of 198, with per trade capacity ranging from 10 to 30. Entry qualification for most of the courses is matric and middle. Duration of the courses ranging from 6 months to two years. The Technical Training Centre, Peshawar has well qualified staff with 27 instructors including a principal.
4. Technical Training Centre prefer science students. Hence, teaching of science should not be restricted to bright students only. The average

student should also be allowed to opt for science subjects in 9th and 10th classes.

5. There are three major fields, namely, Industrial Arts, Agriculture and Home Economics (for female) which are offered to the teacher students at Agro-Tech Teachers Training Centre Peshawar. Wood work, metal work and electric works are covered under Industrial Arts. However, it is recommended that computer training for the teachers must also be introduced at this institution.

6. Students study Agro-Technical subjects in 6th to 8th classes which are examined by the Department of Education. However, these subjects are not examined in 9th and 10th classes by Boards of Intermediate and Secondary Education. It is recommended that Board of Technical Education may be asked to examine the students at 9th and 10th level.

7. Government Technical High Schools were established in 1954 under Columbo Plan. It offered Technical training in three major Trades: electrical, wood work and mechanical. Students at 6th-8th classes study all the three fields. However, they do not study Arabic or Persian etc. Students at 9th and 10th level take up specialization in one of the three fields.

8. Students of matric level were examined even in technical subjects by BISE till 1968, and thereafter it was discontinued,. Hence, the students as well as teachers lost interest in Technical education as it did not carry any weightage towards final grading.

9. Students studied Technical subjects as they were preferred by polytechnic

institutes for admission to various courses, but even this was discontinued after 1976-77. Now they prefer Matric with science and F.Sc. (Pre-engineering group) with good grades.

10. The workshops and machinery in Government Technical High School, Peshawar city are in excellent working order. Qualified staff is also posted. But the technical education at 9th and 10th classes level has been discontinued. The school has changed to General education with Science only.

11. The main reason for the failure of Technical High school is the absence of clear policy of the government of NWFP on the subject, and the lack of accountability. There are no instructions by the government to discontinue technical education at 9th and 10th level. Even this year (1994-95) Rs.1200 had been allocated for three workshops for their maintenance and expendable commodities. But it is evident that this amount is not sufficient. Hence, technical education has been discontinued. It is recommended that all such institutions should be run jointly by the Directorate of Secondary Education, the Directorate of Technical Education and Labour Department. Efforts must be made to generate funds for these institutions through local industries as well.

CHAPTER V

SUMMARY, FINDINGS/RECOMMENDATIONS/STRATEGIES

Summary

I. Prior to the British rule a network of schools and colleges existed in the Indo-Pak Sub-Contiinent, where education was imparted free of cost. Muslim rulers encouraged learning by giving pecuniary grants to religious scholars, by establishing *Madrassahs* and *Maktabs* and by endowing educational institutions for higher religious studies. The British established Calcutta *Madrassahs* to win the confidence of influential Muslims and to qualify their sons for responsible and lucrative offices in states. Initially the curriculum of this institution was oriental in outlook, and the media of instruction were Persian and Arabic. Through the Charter Act of 1813, British Government allocated Rs. one lakh for the promotion of knowledge of sciences among Indians. When Lord Macaulay became the President of the General Committee of Public Instruction, he advocated Western knowledge for Indians. On his behest the famous minutes were passed on 7th March 1885, thereby resolving the pattern of education to be imparted to Indians. The decision was made in favour of English language. Muslims, however, resented this decision. The General Committee of Lord Harding's Educational Resolution of 1814 gave new impetus and encouragement to English language by the decision that preference in public services would be given to those who had qualified in Western knowledge and English language.

The most important document on the subject of education is Wood's Educational Despatch (1854), which aimed at improvement and wider extension of education. The Despatch laid great emphasis on the system of grants-in-aid and made considerable budgetary provision for assisting private enterprise, resulting the opening of secondary schools in the private sector. The Indian Educational Commission (1882) recommended that secondary education should be transferred to Non-Governmental organizations and where required, government should also establish secondary schools in the interest of the people. The Wood Despatch of 1854 had contemplated the provision of vocational or pro-vocational instruction at the secondary stage. In the province of Bombay a few scholarships of Rs.4.00 per month to children of agriculturists were given, in order to encourage them to attend model farms connected with high schools, for instruction in practical agriculture. The Indian Education Commission, therefore, gave considerable attention to provision of vocational courses at secondary stage. As a result an alternative examination was introduced for vocational stream.

Lord Curzon's new policy on education (1904) regularized the privates sector institutions and increased grants-in-aid. Provision was to be made for training teachers. Curricula was modified and made useful and practical. Mother tongue was accepted as medium of instruction at the middle stage. The Education policy of 1913 also adopted concrete measures for improvement of secondary education in India, including better service structure for teachers, increase in grants-in-aid, and making government schools as model institutions. Attempts for the provision of vocational courses at secondary level led to failure, because various inputs required for vocational subjects like

teachers, grants, and teaching material were not provided. Again there was no demand/pressure from the public as well for vocational courses. The Hartog committee report 1919 concluded, that, the quality of education should be improved rather than quantity.

Sargent Report 1944 is considered as the first official attempt to plan a national system of education for the sub-continent. The Report recognized secondary stage as complete in itself. The Report also asserted that large majority of High school leavers should receive an education that will fit them for direct entry into occupations and professions. The Report also admitted that mother tongue should be the medium of instruction at Middle and High school level and English should be a compulsory second language. The Report suggested the establishment of Technical High Schools as an alternate stream.

All the above-mentioned schemes/plans meant for reconstruction of education system in India failed to create a national system of education mainly because of failure to formulate adequate aims of education. Moreover, this failure may also be attributed to the inability to evolve a synthesis of East and West. However, most important contribution of the British educational system is its introduction of English language and literature to the sub-continent and through these all the modern scientific and technological knowledge.

The system of education Pakistan inherited from the Britishers was to be modified, changed and further developed to meet the requirements of a free and independent state. Realizing this, the first Educational Conference was convened in

November, 1947. Father of the Nation, Muhammad Ali Jinnah, in his message to the Conference laid down the basic principles centered around the fundamentals of Islamic faith, universal brotherhood and acquiring of modern science and technology. Mr. Fazal-ur-Rehman, the then Education Minister condemned the prevailing education system for its lack of realism and its inability to adjust itself to the needs of society. He recommended that entire educational structure required a complete overhaul.

The first Five Year Plan (1955-60) proposed that the secondary school system must strengthen its teaching of Science and Applied Arts and give pupils more adequate pre-vocational preparation for careers in Agriculture, Education, Social Welfare, Business, and Industry. However, the Plan admitted that there was uncertainty about the methods for accomplishing that desirable objective.

In 1959 the National Commission on Education, recommended that within ten years secondary schools should be transformed into multi-purpose schools offering diversified courses. The curriculum at secondary stage should prepare a student for a definite vocation and career. The diversification of courses in the secondary stage was a good suggestion but it failed due to inadequate number of teachers. The system of education was overhauled but the steps taken in this direction were retracted after some time.

The Commission on students' problems and welfare, (1966) observed that use of unfair means had become rampant and that it was being practised with the active co-operation of the supervisory staff. The Commission recommended that an examination at 8th level should be conducted enabling the students to assess their capabilities. Those

achieving low should be advised according to their aptitude to choose vocational/technical subjects, so that they might be properly equipped in classes ix and x for a vocation or further technical education.

The Second Five Year Plan (1960-65) made provision for the amalgamation of the intermediate classes with the secondary education as was envisaged by the Commission on National Education, 1958. The Plan besides provision of various physical facilities in the secondary schools also provided for the diverfication of the programme in these institutions through introduction of courses in Technical, Commercial, and Agricultural subjects and for Guidance Programmes.

Report of the Curriculum Committee for Secondary Education (1960) recommended three stages of secondary education and suggested a separate scheme of studies for each stage. The committee identified that the majority of pupils would leave schooling at the end of class x, so the depth of syllabi had been increased accordingly. The Committee recommended that every student should take at least 3 to 5 elective subjects/papers. The committee also recommended improvements in the existing examination system.

The Third Five Year Plan laid down the rapid introduction and development of a diversified curriculum at the secondary level as the highest priority. However, the Plan admitted that the main problem was the dearth of suitably educated and trained teachers of science and diversified electives. The Plan also proposed the development of an affective guidance system to assist children in making suitable decisions. The Third Plan envisaged necessary shift from traditional subjects of study to

practical and essential skills. However the Plan pointed out, that one of the main problems of education at the trade/craft level was that responsibility was dispersed among so many agencies, and there was a need for co-ordination among them.

The New Education Policy, promulgated in 1970, aimed at re-orientation of educational programmes in the light of economic needs of the society particularly by shifting emphasis to Scientific and Technical/Vocational education. The Policy also aimed at integration of *Madrassah* into normal school system. The policy remained operational just for a year or so when another policy was introduced by the government in 1972. Under this policy education was made free upto class x for all children in a phased manner. Nationalization of privately managed educational institutions was its hallmark. The policy aimed at designing curricula relevant to the national needs and providing a massive shift from general education to more purposeful and agro-technical education. The policy provided for the integration of general and technical education in order to equip the students for gainful employment, including self-employment. The policy also proposed for the introduction of integrated science course including mathematics, biological and physiological sciences at high and intermediate stages with a view to giving students a more comprehensive and diversified preparation enabling them to have a wider choice at the time of entry to various occupational avenues.

The Fourth Plan (1970-75), meant to encourage private sector investment in education by providing liberal subsidies. The Plan also recommended that the gulf between *Mardrassah* and various other types of schools should be narrowed down. The Plan also proposed that education in Arts should be restricted and instead provision

should be made for teaching of science and diversified courses. The Plan was abandoned after the dismemberment of East Pakistan in 1971 and the country resorted to Annual Development Plans. During the years 1972 to 1978 the expenditure on education was in the range of 1.3 to 1.8 percent of the GNP, secondary education was made free and the private educational institutions were also made the public responsibility. The percentage expenditure on secondary education fell from 21 percent in 1972-73 to 12 percent in 1977-78. The total development expenditure on education ranged between 3.5 and 5.2 percent of the total development expenditure. However, a large part of the increase in expenditure over these years is attributed to high rate of inflation.

During the Fifth Five Year Plan (1978-83) the major emphasis was on re-orientation of education and qualitative improvement. The principal step in re-orienting secondary education was the introduction of agro-technical courses. However, the achievement level in this regard was only 22.88 percent. The Plan's physical achievements were also very low. Financing of education did not improve but in fact deteriorated during the Fifth Plan period.

National Education Policy 1979 aimed at development and inculcation of character, conduct and motivation expected of a true Muslim in accordance with the *Quran* and the *Sunnah*. The Policy also aimed at the promotion of ideology of Pakistan and Islamic culture and heritage, and fraternal brotherhood with the Muslim *Ummah*. The Policy proposed that efforts should be made to integrate traditional *Madrassah* and modern schools into one system of education. The Policy proposed restructuring secondary education, whereby the present four tier system could be replaced by a three

tier system of elementary (i-viii), secondary, (ix-xii) and university education. The policy proposed that agro-technical subjects should be introduced in all the schools in a phased manner. Moreover, a wide range of offerings should be introduced at the secondary stage for greater diversification according to the aptitude of the students. Introduction of second shift and availability of science laboratories and libraries was also provided in the Policy.

Except for the Second Five Year Plan, the performance of education sector in the planned and non-planned period remained utterly deficient. While the main emphasis of the Sixth Plan (1983-88) was on primary education, it provided for additional enrolment of about one million children in secondary schools. A number of secondary schools were to be equipped to provide vocational training in one selected discipline corresponding to local trade. The Plan recognized that secondary education is a terminal stage for majority of boys and girls. Hence, it recommended that it had to be broad-based, flexible and of high quality. It should enable those unable to continue education beyond this stage to get gainfully employed without being required to take long training courses. The Plan proposed to minimize the Urban/Rural and Male/Female disparities in the provision of education facilities. The Plan also provided for a comprehensive guidance and counselling service programme in secondary schools in a phased manner. However, the achievements of this plan were also not encouraging. The participation rate especially of girls remained low. The policy of vocationalization could not be implemented. The amalgamation of classes xi and xii into secondary schools could

not be done upto the desired standards. Still a large number of schools lacked essential physical facilities like science laboratories, workshops, libraries etc.

The Seventh Plan (1988-93) envisaged expansion in secondary education to absorb the increased output from primary schools. The curriculum at the secondary level would be made skill oriented and job oriented. Skill training in classes ix-x would be made more sophisticated to meet the demands of the market. Seventh Plan proposed following educational structure.

Class I-III	Lower Elementary
Classes IV-VIII	Upper Elementary
Classes IX-XII	Secondary
Classes XIII-XV	Colleges (B.A three years)
Classes XVI=(M.A) and above	University.

The Plan observed that different agencies were responsible for vocational and commercial education and there was no co-ordination between them. Seventh Plan looked for establishment of Educational Testing and Measurement Services which will develop standardized tests. The overall performance of the Plan was satisfactory as it achieved 100% utilization of its funds allocations. The NWFP province has established Frontier Education Foundation and National Education Management Information System has been installed in the Education Department.

The National Education Policy (1992-2002) has proposed the increased linkage between curriculum development, textbook writing, teacher training and the examinations system. The policy also provides for the introduction a wide of range of

vocational subjects relevant to job requirements in the employment market and self employment. Workshop technique shall be adopted to develop new books. A separate unit of teacher training shall be set up by each provincial Educational Department. Adequate physical facilities will be provided in all Middle and Secondary schools. A National Testing Service will be set up to develop tests for admission into professional institutions. The Policy provides a massive shift from general education to more purposeful agro-technical, scientific and professional education.

The Eighth Five Year Plan (1993-98) has aimed at reducing the imbalances in education system, i.e., urban/rural and male/female, and making education responsive to the communities requirements. The Plan also envisages to improve the quality and relevance of education through curricula reforms and provision of other essential inputs.

The models of an earlier era which shaped the secondary education systems of the developing countries assumed a dichotomy between vocational/technical education and academic education. This has led to the effect of diverting general studies from the work experience and relegating vocational education to lower status and esteem. But now work and education interface is one of the most important issues confronting secondary education in Pakistan. The other important issues, as brought out by various studies, are mismanagement of educational institutions, absenteeism of teachers lack of accountability, poor academic achievements, unreliable evaluation system, irrelevant curricula, lack of proper facilities for managers and administrators, issues of access and equity, and improvement of Education Management Information System in the province of NWFP. These issues require complete overhauling of the present system. The issue

of inadequate financial resources also needs to be addressed. Most important issue which requires national effort is to define exactly what we want to achieve through secondary education. There is urban/rural disparity as well male/female imbalance in the distribution of educational facilities at the secondary level. The policy of restructuring secondary education is under implementation stage, and the haphazard steps taken in this connection have aggravated the situation which calls for prompt action.

Aims of education must consist of national aspiration of the people. These must reflect the social, cultural, political and economic aspirations of our people. The fundamental purpose of the school is transmission of culture to the young. Burten W. Gorman advocates preparation of students for social responsibility as a major aim of education. Mortimer Adler envisions personal development, citizenship and vocation as the three important goals of schooling at the secondary level. Mukhtar Ahmad Bhatti *et al*, 1987, have emphasized the integration of general and technical education, diversification of course offering, expansion of science education and provision of technical/vocational stream as the main objectives of secondary education in Pakistan. Almost all the policy documents recognize secondary education as a complete stage in itself and that for majority of students as terminal as well. The current Education Policy of 1992 envisages a shift from general education to a more purposeful scientific and agro-technical education at secondary level.

The present structure of secondary education is complicated. There are no clear cut divisions. This has created administrative difficulties, including criss-crossing of administrative domains of Directorates of primary, secondary and college education.

This needs to be resolved immediately. Study of the structures of various countries indicates that vocational element is an integral part of the general education all over. There are two important features of the secondary education: a reorientation towards science and diversification of the programme under which a large number of subjects of technical and vocational nature are introduced.

Specialist vocational education is an important part of the schemes of studies at the secondary level. Generally it takes almost one third of the total instructional time. The reports of the Education Policies Commission, and that of Harvard University present very important models for the diversification and vocationlization of secondary education in the developing countries as well. However, before initiating any innovation, a study of needs must be undertaken to ascertain the demands of the society and the job market.

Curricula have a pivotal role in any system of education. A curriculum should be relevant to national aspirations and requirements. It must be constantly reviewed and brought upto date with the current trends and new developments. The content of a curriculam should be based on the purposes of education which must be clearly stated. W.M. Zakki criticises the present curricula in Pakistan and says that these are divorced from the world in which the students live and the real day to day issues and problems with which they are faced. Mukhtar Ahmad Bhatti endorses Theodore R. Seizer's stand that fewer subjects studied in greater depth and detail would raise the level of competence of students. There has been agreement that both general as well as

special/vocational education are two interrelated facets of a good programme of high school education.

Pakistan's greatest assets are its people. According to W.M. Zaki (1975) it is a great paradox that a country with one of the highest rates of illiteracy is also facing problems of un-employment of educated youth. In Pakistan, an education system which was designed to produce a limited social elite in the pre-independence period, has not undergone sufficient changes to serve as an instrument for producing a large supply of educated and trained manpower for an industrial society. The unemployment of educated youth is an expensive and socially disruptive phenomenon. Education must be so designed as to generate new employment opportunities, in addition to supplying manpower for existing employment openings.

Burtan W. Gorman has presented a set of principles by which we can test the soundness of the organization of a secondary school. It includes individualized attention, communication between students and teachers, teacher's initiative, active participation of the students in educational activities, and priority to student interest over that of the institution. He further suggests that the policy making functions, as well as higher administrative posts, should be in the hands of persons with the proper intellectual qualification. The education system in Pakistan is working under a rigid bureaucratic control. The administrative organizations resemble a multi-layered pyramid with only a vertical flow of information and command. There is no co-ordination between various agencies involved in the administration of education. The dual structure of policy making and planning at the centre and implementation in the provinces has not worked well.

Therefore, educational administration has to be reviewed and reorganized to facilitate desirable change.

In view of the proposed scheme of vocationalization and diversification at the secondary level, a well designed system of guidance and counselling at the secondary level is required. However, while planning the programme emphasis must be placed upon working with parents, community and other agencies of the society for closer liaison. To begin with there should be at least one trained career/guidance counsellor in each high school.

Education has to compete along other sectors of the financial resources. The average expenditure on education in Pakistan has been 2% of the GNP, whereas UNESCO recommends allocation of 4% of the GNP for the countries passing through similar stage of development. There has been substantial increase in GNP, but inflation usually paralleled and often exceeded increase in GNP. Presently Secondary education is receiving 13.2% (8th FYP) of the total allocations, while primary education has got 70:8%. This needs to be rationalized and brought at the minimum level of 30%. A recent study (World Bank 1994) suggests 8% to 9% per annum increase in the budget on secondary education for the provision of access to secondary education. However, keeping the meager resources of the country iin view, t has been suggested that private sector must be encouraged for establishing educational institutions.

II. Turning now to this study, it is significant because the demand for overhauling, changing, reorganization, and restructuring has been repeatedly emphasized

in almost all the educational policies. It encompasses most of the important issues confronting Secondary education. The study will contribute to the development of a strategy for reforming present structure of the Secondary education. This study has been able to project a collective view of the whole problem under one major theme. The study has brought out the problem areas of the Secondary education and suggested corrective measures in the form of recommendations.

The objectives of the study includes the analysis of the existing structure of secondary education; implementation of the government policy in developing and suggesting a strategy for restructuring secondary education. The study has reviewed the genesis of the present structure of the secondary education bringing out its evaluation till the present stage. The study has also examined all development programmes of the government from Ist Five Year programme to 8th Five Year Plan. The study has also reviewed various innovations made by the government including Science Education Project, Agro-technical Scheme and Government Technical High schools to assess their contribution in the development of secondary education in NWFP.

The method and procedure were commensurate with the nature of our study. The descriptive study method was adopted and Survey and Field study approach was also employed. The procedure included the review of the related literature on theory, research and modern practices in the field of secondary education. The instruments were developed mainly from Pakistan's Education Policies and Plans. These covered various important aspects of the development of secondary education in Pakistan. Informal

interviews with the experts and visits of various important educational institutions also helped in the construction of interview schedules.

The data has been obtained from: (a) official documents such as Policies, Plans, Projects, Studies, Reports of Seminars, Files, Letters, Papers, and District Education Officers (Secondary) NWFP. (b) non-official material including Journals, Books and Newspapers, (c) interviews with key personnel in the education field, such as Secretary Education NWFP. Director Secondary Education, Chairman BISE, Peshawar, Director PARD, Chairman Textbook Board, and (d). a questionnaire has been administered to university Professors, Lecturers, Education Administrators, Principals/Headmasters of High schools, DEOs secondary education, officers of P&D Education Department and various other officials including Deputy Secretaries Education.

The data this collected are categorized, organized under various important headings and analysed accordingly. Major deductions made as a result of data analysis are produced here in the form of findings, conclusions and recommendations.

Findings

III. As indicated above this study has reviewed related literature, including official policies and development plans, conducted interviews and administered questionnaire to obtain relevant information/data concerning the theme of the study. The study has also adopted surveys of institutions and review of official files in this regard. The study has reviewed the researches/studies already done in the education field. Below is given the summary of our findings in this regard:

Review of the Related Literature

1. Official curriculum provides a criterion for the evaluation of the functional curriculum (Erant, A. 1978).

2. According to Paul Hirst (1987) a curriculum must accommodate all the basic forms of knowledge. These forms are empirical, mathematical, philosophical moral, aesthetic, religious and historical/sociological. In the context of the Third World countries such as Pakistan, the liberal education at school level should include all the basic forms of knowledge in it. Moreover, specialization must presuppose a liberal education.

3. Diagnosing the main issue of Pakistan's educational system M. Ashraf Adeel (1991) says that it suffers from lack of direction, confusion in adopting methods and inefficient use of resources. The present system, moreover, lacks coordination and linkages between aims, methods and resources. Hence, there is a need to define exactly what we want to achieve and to determine how this will be achieved. Thus he recommends, that to achieve this goal we would require a good deal of 'restructuring' of our current system. The present study has been inspired by this viewpoint.

4. Realizing the need for a change, Burton W. Gorman (1971) says, that instead of patching the old organization of the High school system, there is a need for the re-examination of its basic structures. Maurice Galton and Bob Moon (1983) suggest that there is no doubt that organization

structure in schools will have to be changed in responding to new demands.

5. I. H. Qureshi (1975), suggests that the creation of a competent manpower at the lowest level is essential if Pakistan has to make real progress in the development of its material resources. Appreciating the importance of secondary education as terminal stage for majority of students, Abdul Ghafoor (1984) suggests that this level of education needs to be designed in such a way that it is capable of meeting the requirements of various vocations without further long training courses.

6. according to National Education Commission (1959) the main weakness of our secondary education is the absence of full opportunities for training the technical and other vocational subjects, and inflexibility and lack of diversification which fails to correspond to social needs and individual aptitude and interests. The Commission suggested a redefinition of and a reorientation of school courses and structures of our secondary schools.

7. Most of Education Policies and development Plans in Pakistan admit that secondary education is a terminal stage for majority of students. Emphasis should, therefore, shift from general type of education to vocational and technical orientation for which diversified curricula should be offered.

8. Wood's Despatch of 1854, contemplated the provision of vocational or pre-vocational instruction at the secondary stage. Again in 1882, the Indian Education Commission gave considerable attention to the provision

of vocational courses at the secondary stage with a view to preparing pupils for various walks of life. This aspect has been emphasized in all subsequent education reforms in the pre-independence era in the sub-continent.

9. More comprehensive documents on restructuring of secondary education in Paksitan are 1959, 1972,1979 and 1992 Education Policies.

10. There has been a tenfold increase in educational facilities. Yet the limitation of financial resources, poor appreciation of educational priorities, inadequate delivery system and population pressure have hampered progress in this sector.

11. The major issues confronting secondary education are education and work interface, clarifying the purposes of secondary education, reforming examination system, restructuring the administrative and organizational system of secondary education, provision of adequate financial support and issue of access and equity of educational facilities at the secondary level.

12. The present administrative structure of education in NWFP is complicated. There are no clear cut domains of primary, secondary and college directorates.

13. Most of the policy documents have recommended class xi and xii should be considered higher secondary classes and as such should be introduced in high schools.

14. The education structures of leading nations of the world indicated the provision of vocational/technical education at the secondary level.

15. Two important studies pertaining to USA, already discussedin chapter 2 indicate that one third of the school time is given to special vocational/ technical education at the secondary level.

16. Many secondary schools in USA include, among their general education offerings, four practical arts that are closely related to vocational programme-Industrial Arts, Agriculture, Home-Economics, and Business.

17. The vocational versions of industrial arts are trade and industrial education and technical education.

18. General education and special interest education are two inter-related facets of a good programme of high school education.

19. Curriculum in Pakistan is over-loaded. It forces and compels teachers to deal with multiple subjects rather rapidly. It suffers from lack of emphasis on vocational/technical courses.

20. Teachers rely on verbalism in Pakistan. Chalk and talk are the principal methods of classroom teaching methodology.

21. Most of the schools are ill-equipped and lack even necessary physical facilities.

22. Curricula is dominated by Arts and Humanities.

23. Pakistan's population growth rate as 3.1 percent per annum is one of the highest in the world where its expenditure on education is below 2 percent of GNP. This is below average.

24. The cut off point for educated manpower is the matriculation examination, meaning 10 years schooling, whereas in the modern education system in the world, schooling required for beginning a career is 12 years. Thus we are providing two years less of education upto high school level than other countries.

25. Education System of Pakistan faces structural imbalances.

26. There is preponderance of rural population of secondary school age group in NWFP.

27. The dual structure of policy making at the centre and implementation in the provinces has not worked well.

28. Availability of guidance and counselling services in Pakistani schools in rare.

29. There has been substantial increase in GNP but inflation usually parallels and often exceeds increases in GNP in Pakistan.

30. Pakistan does not compare favorably with other less developed countries in financing of education. The average percentage of GNP devoted to education among LDCs is 3.5%. For Pakistan it has been less than 2%.

31. The distribution of money has been inveserly related to the size of the student population.

32. The financing of education is highly skewed towards public subsidy. Almost all educational expenditure are borne out of tax revenues.

Interviews

Findings based on interviews are summarized below:-

1. Present management system of secondary education is defective. It is more centralized and lacks accountability.

2. Main drawbacks in the present system of secondary education are: lack of physical facilities, ineffective in-service training of teachers, defective evaluation system, lack of guidance and counselling services, lack of R & D at Education Department/Directorate level, ineffective implementation of curriculum, shortage of qualified teachers especially in science and vocational/technical subjects, lack of interest by students as well as the teachers, lack of linkage case between education and the world of work, theoretical nature of the curriculum, and more emphasis on languages.

3. Problem areas in the implementation of government education policies on vocationalization and diversification of secondary education in NWFP include, scarcity of financial resources, lack of Provisions/equipment, machinery, workshops, lack of trained staff, non-willingness of students to opt for vocational/technical subjects, lack of political will in the government, lack of proper infrastructure, absence of Legislation for effective implementation, lack of proper service structure for vocational/

technical education teachers, lack of information and motivation of students and parents, and lack of employment opportunities in the job market.

4. Main issues of secondary education include absence of clear definition of aims and objectives of secondary education, decision about learning what, how and for what purpose, no clear policy on vocational/technical education, i.e., enrolment ratio of Science and Arts, Urban/Rural and male/female disparities in the provision of educational facilities, and lack of direction in the content of the curriculum.

5. There is a need for change/revision of syllabi and courses at secondary level.

6. Study of science is a pre-requisite for most of vocational/technical courses at T.T.Cs and other vocational/technical/institutions.

7. School buildings are underutilized.

8. Vocational/technical subjects at secondary level are not examined by B.I.S.Es.

9. Forces/Factors determining diversification at the secondary level are pressure/demand of the society, demand of the job market, employment opportunities, motivation of students and parents, adequate financial allocations for implementation, separate administrative infrastructure, local trade, availability of raw material, and government's will to implement its policy.

10. There is no institutional set up for effective co-ordination at secondary level.
11. Directorate of Technical education may help the Directorate of Secondary education in conducting examination in technical/vocational subjects, helping in establishing workshops, instalment of machinery etc. and supplying technical knowledge and expertise in preparation and conduct of vocational/technical training to teachers as well as to students.
12. Department of Education NWFP favours vocationalization of secondary education from Class VI to Class X.
13. There is no agency or institution made responsible for conducting surveys to determine the occupational choices of students and demands of the job market.
14. The World Bank and Asian Development Bank have cautioned that the scheme of vocationalization at the secondary level, is very expensive.
15. Availability of resources, i.e, human material, financial, conceptual and organizational are pre-requisites for the introduction of vocationalization and diversification at the secondary level.

The questionnaire

The responses of the subjects have been tabulated, processed in percentages, represented in graphical patterns, and analysed accordingly. Following are the main findings based on questionnaire:-

1. Vast majority supports that secondary education should be vocational/ technical as well.
2. Besides Arts and Science streams the introduction of third stream as vocational/technical is favoured.
3. The main reasons for the failure of government policies of vocatioanalization are lack of coordination among different agencies responsible for the conduct of secondary education, lack of manpower planning, lack of infrastructure, lack of trained teachers, and inadequate financial resources.
4. Information about better employment opportunities, guidance and counselling services, and proper education of subjects based intellegence and aptitude tests motivate students to opt for vocational technical subjects.
5. Main reasons for the low achievement level of students are lack of interest by the teachers as well as by students, erosion of merit system, lack of physical facilities, lack of purpose in general education and lack of textbooks.
6. The present examination at the secondary level needs some structural changes.
7. Test of rote memory as standard of achievement is least favoured.
8. Principals/Headmasters require management training.

9. The performance of teachers may be enhanced by adequate professional training, attractive incentives, higher academic qualification, and their selection should be based on aptitude.

Data collected through Directorate of Secondary Education

The data collected through DEO's (male/female) was duly tabulated, processed and analysed. Following are the findings:

1. At the middle stage Agro-tech subjects are being taught. However, more than 80% boys still opt for Arts, whereas about 75% girls study Home Economics.
2. 51.4% boys and 27% of girls of the middle classes join class IX and X.
3. The ratio of Science and Arts among boys and girls at class ix and x is 44:56 and 18.82 respectively. This means Science is popular among boys.
4. Out of 2.1 million secondary school age students in NWFP, 57% are male (1.2 million) and 43% are female (.9 million) whereas urban/rural distributions are 14% (.3 million) and 86% (1.8 million) respectively.
5. The total capacity of High schools is unable to absorb the incoming pressure from the elementary education. Similarly only 7% of the matriculates may have a chance to get admission in any college.
6. Technical/Vocational institutions are not equitably distributed.
7. Overall participation rate at the secondary level is 19%. However, female participation rate is very low, i.e., 4.38% (1987).

8. Catchment area for the girls High schools is five times more than the boys.
9. Out of 1164 High schools in NWFP there are 127 with workshops. The number of Workshop Instructors and Assistant Workshop Instructors is 40 and 237 respectively.
10. There is shortage of science teachers as well as science laboratories.

Review of ADPS/Financial Allocations

The data collected from Chief of Education, NWFP and Directorate of Secondary Education has been processed, analysed and represented in graphics. It indicates followings findings:

1. Primary sector has got maximum financial allocations, whereas the share of secondary education has decreased.
2. Financial allocations have not been made according to area or population of the Districts/Divisions.
3. Development of secondary education during 1988-95 has not been proportional to the expansion made at the primary level.
4. There have been more emphasis on primary education as an integral part of Social Development Plan and, hence, it receives more funds.
6. The establishment of Frontier Education Foundation is a major step forward to pursue private sector's investment in secondary education

Analysis of Matric Examination, BISE Peshawar

The annual results of the last 11 years have been reviewed and analysed and expressed in the form of graphics. Main findings based on this analysis are:-

1. The average pass percentage of the years 1982-94 has been 54.94%.
2. There is a vast variation between the results of private/regular and male/female students. The results of regular students, and specially of girls, are better
3. Pass percentage of science subjects has been above average. This shows the poor performance of BISE results is mainly attributable to two factors, private students, and Arts and Humanities groups.
4. Qualitative analysis of the matric results reveal, that only 2.65% students got 'A' grade whereas 8.5 students got 'B' grade in (1992). Whereas majority of students passes in C and D grades.
5. The number of UFM cases have increased.
6. The analysis of matriculation results of last four years (1991-94) indicates that percentage ratio of Science and Arts students, who appeared is 35% : 65%, 38% : 62%, 36% : 64% and 37% : 63% respectively. However, there is a variation in the percentage of enrolled students in Science and Arts Stream, i.e., 43:57% in class ix and 45% : 55% in class x. This indicates that students are dropped, relegated or forced to appear in Arts as private students.

Review of Research studies

The research has reviewed seven important studies conducted in the field of secondary education in Pakistan/NWFP. Major findings are:-

1. Secondary education has actually become a complete terminal stage for majority of students.
2. The aim of secondary education should be to prepare students to enter the world of work and instill in them the ability to adjust to the new environment, and to develop an appreciation of good workmanship.
3. Demand for education is also going to rise as a result of population pressure.
4. There is low enrollment at Higher secondary schools.
5. There is over-crowding in urban institutions.
6. There is a needs to identify clearly the need of the society on one hand and the relate these needs to the process of education on the other.
7. At present (1987) about 21.9% of our secondary age group are enrolled in schools.
8. The average number of teachers per school in NWFP is 14 and student teacher ratio is 13, with average enrolment of 189 per school (1987).
9. Neglect of secondary education of female in NWFP is evident from their low enrolment.
10. One of the reasons for the failure of vocationalization of secondary education has been the unwillingness of the industry to employ its output.

11. In NWFP education after class viii tends to become terminal.
12. Intermediate colleges are more cost-effective than Higher secondary schools.
13. New Higher Secondary schools be opened based on feasibility report only.
14. Intermediate colleges are considered more prestigious and successful in examination achievement.
15. Restructuring secondary education has not been done due to inadequate financial resources. Besides there is clash of interest such as in the scope and authority of Directorate of secondary and college education as well as career of the teachers.
16. With the adoption of the second shift the class size can be reduced upto 50%.
17. The capacity to carry out professional work/research work within the discipline of education is minimal.
18. Malpractices in examination are rampant and, hence, examination results are unreliable.
19. Political will is essential for putting a stop to corruption in examination.
20. Most of the BISE have not used their surplus budget to improve the quality of examination.
21. Teaching in Pakistani Secondary schools is entirely lecture/recitation model.
22. Curriculum is outdated and poorly disseminated.

23. Textbooks donot match curriculum objectives, are badly organized and of low production quality.

24. Learning materials except for the textbooks are scarce.

25. Overcrowded general courses are offered at high schools to the detriment of technical/vocational education.

26. The organization of school time table follows a traditional pattern.

27. The schools are not equipped with proper physical facilities like Audio-Visual aids, computers, workshops, science laboratories and libraries etc.

28. To check the drop out at secondary level, curricula need to be, skill oriented.

29. Participation of the private sector in providing schooling may be encouraged by facilitating access to credit, removing regulatory barriers, and provision of scholarship to needy students.

30. Deficiency of teachers in science and vocational/technical subjects can be made up by employing un-employed science graduates and engineers and diploma holders.

31. Total allocation to secondary education during the Eight FYP is 13.2% as compared to 70.8% for the primary sector.

32. Bureau of curriculum, BISE, Textbook Boards, and IERs are isolated from the regular activities of the Education Department.

33. The Education Management Information System needs to be made more effective in the dissemination of relevant information.

34. It is essential to develop standardized tests of intelligence, scholastic aptitude, interest inventories, vocational preference scale and similar other psychological tests on the norms of Pakistani children.

35. At least one guidance worker/counsellor needs to be provided in each school.

Survey of institutions

1. Lack of accountability, ineffective supervision and follow up has led to the policy breakdowns like in Government Technical High School Peshawar which has started as normal school without any clear instructions from the Directorate of Secondary Education.

2. T.T.Cs may provide mobile workshops for a cluster of High Schools to impart technical/vocational education. T.T.Cs may also help the Directorate of Secondary education to train the teachers for technical/ vocational subjects.

3. Agro-Technical Teacher Training Centre may be upgraded to the level of an institute to impart training in Technical/vocational teaching upto B.Ed. Technical level.

Conclusions

IV. In the light of the above findings, following conclusion have been made:

1. Based on our review of the related literature, policies, plans and research studies, some of the specific objectives for the secondary education are as below:

a) To enable the students to learn basic principles and practices of Islamic faith, and to foster attitudes and values like brotherhood, tolerance, social justice and equality necessary for the development of an Islamic society.

b) To create understanding and appreciation of national history, culture, and ideology of Pakistan.

c) To enable students to be active citizens of a democratic order by knowing their rights and duties.

d) To provide diversified course offerings according to aptitude, interest and ability of the students.

e) To enable students, who donot intend to continue schooling beyond matriculation, acquire enough training in a vocation/trade preparing him to enter the world of work or be self-employed.

f) To enable students to understand the importance of environmental conservation and inculcate in them a spirit to play their role effectively in this regard.

g) To provide broad-based curriculum, rich in modern science and technological trends thus enabling students to decide their future careers in higher studies.

h) To enable students to lead a healthy and enjoyable life.

2. Present administrative set up of education at secondary level is designed to impart liberal/general education only. It has to be restructured to meet

the specialist demand of Vocational/ Technical education. The education system is working under rigid system of civil service rules which are of over-riding importance.

.3. There is lack of co-ordination and linkage within the system of education. The functions of Bureau of Curriculum, the Boards of Intermediate and Secondary Education and Text Book Board are crucial to educational development, but they stand isolated from the regular activities of the Education Department and the Directorate of Secondary Education. There is no institutional framework for effective co-ordination among these agencies.

4. At present Education Department and the Department of Labour and Manpower are responsible for technical/vocational education but their efforts/activities are least co-ordinated.

5. There is a consensus of opinion in all policy documents on restructuring the present education system in Pakistan. The National Education Policies (1979 and 1992) proposed three tier system of elementary (Class I-VIII), secondary (classes IX-XII) and tertiary education (a four year degree course). This has not been fully implemented mainly because adequate financial provision has not been made. The importance of Higher Secondary schools is being questioned because of its limited course offerings (Humanities only in most of the cases) and low percentage of results.

6. Science is taught as a compulsory and multi-disciplinary subject at the middle level. At the secondary level, i.e., classes IX and X, one group of students opt for general science as one subject and other group (science group) studies science in three separate subjects i.e., Physics, Chemistry and Biology. T.T.C and other technical/vocational institutions as well as most of the employing agencies (like Pakistan Armed Forces, WAPDA, Tele Communications) require science group students. It is thus essential that all three subjects be integrated into one form and be offered to majority of students.

7. There is acute shortage of science laboratories in the High schools in NWFP. Science project has achieved 100% target by establishing 117 Science laboratories in NWFP. Science education still suffers from lack of science teachers, lack of laboratory equipment and other instructional materials.

8. The Education Policy (1972-80) envisaged "a massive shift from aimless general education to more purposeful Agro-Technical education". This has been reiterated in 1992 Policy as well. The scheme of Agro-technical subjects-Agriculture, Commerce, Technical and Home Economics were provided in "Z" list of the scheme of studies for secondary education. It was recommended that at least one multipurpose workshop should be constructed in each High school. It was also suggested that reasonable amount for the repair/maintenance of the equipment and purchase of raw

material must be sanctioned to the schools. The Agro-technical programme did not fare well because of poor understanding of the problems of implementation, shortage of resources and teachers, a poorly developed curricula and lack of equipments and books. So lessons learnt here must be taken into consideration before launching any new venture.

9. People and the environment are interdependent; the one directly effects the other. Today this awareness of interdependence is becoming a major issue in childern's education. The conservation of resources, the desire for a clean environment, the importance of the quality of life on a global as well as local scale should be understood by all pupils. These are the areas about which attitudes should be formed and be made part of curriculum integrated with all subjects of the secondary level.

10. Historically, our education system had three important components, a) Ideological education, b) Character training, and c) Vocational training. This can be the best model for restructuring our entire educational system.

11. In many developed countries there are three main models in technical/ vocational education at the secondary level namely, a) the school model, b), the dual model, and c), the mixed model. The school model covers public and private schools which provide a wide range of general, technical and vocational courses between secondary and higher education. In this model learning is on full time basis in the vocational high school or technical school. Students usually graduate with vocational certificate.

The school model aims at integrating special education with in the formal secondary schooling. USA, Japan and Canada, Belgium, Sudan, and France, follow this system. The dual system covers all kinds of apprenticeship programmes, offering initial vocational training under the formal schooling with duration of one to four years. This system requires highly developed apprenticeship sector. This is found in Germany, Switzerland and Austria. The mixed model similar to dual model gives greater emphasis to non-formal sector. It is found in U.K. Keeping in view our peculiar circumstances, school model may be suitable for Pakistan with suitable modifications.

12. Keeping in view the meager financial resources of the province (NWFP), involvement of private sector in the establishment of secondary, technical/bocational institutions is a viable alternative. However, for the encouragement of private sector, incentives in the shape of credit facilities, scholarship to poor/needy students and subsidies in vocational/ technical education will have to be offered.

13. Urban/rural and male/female disparities in the provision of education facilities may be removed. Moreover, allocation of funds to districts/ divisions may also be rationalized, keeping in view their area and population.

14. At present achievements made by students at the annual examination are not reliable. The constitution of National Education Testing System

outside the present system is desirable. This institution should be assigned the task of devising tests for admission to various professional institutions. This practice will minimize malpractices at public examinations.

15. A curriculum designed on a national basis is not flexible enough to adjust itself to micro-level employment needs. Whereas the state of physical facilities are of different standards at different level of development and varying age and sophistication, and varying competence of teachers. Hence the attainment of national curriculum with a uniform standard becomes a difficult task. Therefore, Federal government would prescribe the standards of achievements and parameters of curriculum to ensure that there is broadbased uniformity in the levels of education, but the provinces be allowed to make suitable adjustments according to their specific local needs and circumstances, thus making the maximum use of available resources.

16. Examinations act as an important link in the teaching-learning process. The other important factors in this process are the curriculum, teaching methods and learning style of students. The main function of examinations is to serve as a tool for evaluating how all these variables are working and what their collective impact is on the end product, i.e., the achievement level of the students. However, it is the achievement level of the students which tends to be over-emphasized owing to its weightage in admissions in professional colleges and in getting employment. All other functions,

such as that of being a diagnostic tool to identify the weaknesses of Textbooks or teaching methods, are thus overshadowed.

Recommendations/Strategies for Restructuring

V. Keeping in view the above findings/conclusions this study recommends the following measures/strategies for restructuring of Secondary Education in NWFP:

1. The curriculum of secondary education should be diversified in accordance with the manpower requirements identified by survey of needs.
2. There is a need to improve the quality of educational inputs and thereby enhance the quality of students emerging from Class X.
3. Drastic revision in respect of curricula for teacher education is needed.
4. Religious and ideological motivation, study of modern sciences and technology, modern trends, issues of concern to humanity, of new social order, of democratic practices, all these should form an integral part of our education system.
5. All subjects having common elements such as Islamiat, Pakistan studies, History, Civics, Geography etc. may be integrated into one major area. Keeping in view our proportionate representation of all the areas. Similarly we may adopt integrated science course for science group students at the secondary level.
6. There is also a need for the scrutiny of different subjects for elimination of duplication and overlapping.

These two steps (5&6) will save additional time required for vocational/ technical subjects.

7. Presently school buildings are underutilized. Second shift may be considered to overcome over-crowding in the morning shift. This will also increase the utilization of the teaching staff, who are underutilized in the morning shift because of the shortage of class rooms.

8. Project method, home assignment, and second shift system may be adopted for vocational/technical education at secondary level.

9. Besides science and humanities there should be a third stream as vocational/technical which students may be allowed to opt for.

10. For effective implementation of vocationalization and diversification of the secondary education, following inputs are required:

    a) Manpower Planning based on survey of needs of the job market.

    b) Adequate financial resources for the provision of requisite physical facilities such as workshops etc.

    c) Coordination among different government agencies, e.g., Department of Labour, Directorate of Technical Education and Directorate of Secondary Education.

    d) Separate infrastructure at all levels for vocational/technical education.

    e) Provision of trained teachers and proper teaching material for vocational/technical subjects.

f) Information/motivation of parents and students to opt for vocational/technical courses.

g) Adequate guidance and counselling services enabling students to make suitable decisions.

11. Vocational Technical education should be financed jointly by Industries, Department of Labour and Manpower, and Education Department.

12. The Board of Technical Education should be given the responsibility to conduct examination in Vocational/Technical subjects.

13. There should be a liaison officer to conduct surveys in order to determine the needs of the job market and disseminate this information to students/ parents and the planners.

14. Vocational/Technical subjects should be offered to those students who do not intend to continue schooling beyond matric level. Keeping in view the modern trend and choices of the students, modern trades and skills such as computer training, air conditioning, refrigeration, etc. may be offered.

15. For the introduction of vocationalization/diversification in secondary schools, conceptual, organizational, financial, human, and material resources should be made available. Firstly, it should be clearly defined what we want to achieve and how. Secondly, we should have requisite administrative structure to undertake the job. Thirdly, we should have skilled personnel, and fourthly, there should be enough students to opt for

vocational/technical subjects. All this should be done in the following order:

a) Recruitment and training of teaching staff.

b) Construction of workshops/laboratories/farms etc.

c) Provision of equipment/machinery.

d) Preparation of instructional packages and programmes of studies.

e) Motivation and guidance of students to opt for vocational/ technical subjects.

16. The scheme of vocationalization must be binding upon all private schools as well.

17. While launching the scheme, wide publicity on the media be undertaken emphasizing its importance and utility.

18. As there is acute shortage of workshops and instructional staff, the scheme should be introduced where it is feasible and in a phased manner in a few districts as a pilot project. After necessary modification the scheme can the be generalized over whole of the province.

19. There is a need for the political will of the government for effective implementation of the proposed scheme. Legislation is also required to compel the industries to keep the skilled workers.

20. The service structure, rules for promotion and seniority and pay and allowances of the teachers of vocational/technical subjects should be at par with their counterparts in other streams of secondary education.

21. All the teachers must get an opportunity for orientation courses/in-service training.
22. 20% quota in promotions should be reserved for the teachers getting higher qualification.
23. Job rotation may be provided to all teachers.
24. Teacher's best achievements must be recognized through special awards.
25. Performance standards need to be developed for teachers working at different levels.
26. Young qualified teachers having leadership qualities should also be appointed as Principals/Headmasters.
27. Career opportunities for subject specialists should be equal to those of Grade- XI and XII lecturers in college.
28. Teachers may be motivated for better academic output by attractive incentives like good salary.
29. School management should be made more effective through giving management training to the heads.
30. There should be academic competitions among schools of the same district as well as interdistrict competitions to enhance the qualitative output of secondary education.
31. There should be a combined system of examination, having fixed marks for teacher's assessment, annual examination and performance at semester tests.

32. The examination must aim at testing the ability of students to apply the acquired knowledge to solve everyday problems.

33. Objective type tests may also be used at the secondary level.

34. Top priority must be given to redesign the procedures for developing and grading public examinations.

35. Public examination system must be reformed by establishing National Education Testing Service, improving accountability, improving examination security and diversifying and strengthening University selection criteria.

36. Annual examination may be connected with summer vacations so that while the students spend their vacations, the results are announced and the next class starts.

37. Research be undertaken for doing away with all grades and divisions. Instead, percentile ranks of students in each subject should be worked out and announced by the Board in each subject.

38. BISEs must undertake research to suggest steps to improve the quality of examinations.

39. Detailed and timely feedback should be provided to schools on levels of performance and areas of difficulty in public examination.

40. The professional competence of examination authorities needs to be developed especially in test construction.

41. BISE, authorities should have close co-ordination with Directorate of Secondary Education, Curriculum Wing and Textbook Board.

42. Provincial rankings of schools based on public examination be published annually to provide the public with an opportunity of comparing schools.

43. To avoid wastage and repetitions, public examinations in different subjects be held at two levels, L 1 as passed and L 2 for advance level.

44. Predictive validity studies of public examination should be conducted as existing examinations are apparently inadequate in this regard.

45. Government should increase financial allocations for education at the rate of 8 to 9% per year of the total budget to ensure access to secondary education for those coming out of primary schools.

46. Government should spend at least 4% of GNP on education.

47. Allocations to secondary education, i.e., 13.2% as compared to primary 70.8% during the 8th Plan period should be rationalized.

48. Government can save Rs. 453 million if all the intermediate students are transferred to Higher secondary schools.

49. Financial allocations must be made equitable, keeping in view the area and population of the districts/divisions. Backward areas must be compensated on priority basis.

50. Instead of upgradating middle schools to high level provisions must be made for establishment of new high schools.

51. As in primary education, government should make efforts to obtain financial assistance of world bodies for secondary education as well. As an immediate step efforts must be made to encourage private sector for establishment of secondary and vocational/technical institutions.

52. Frontier Education Foundation must be fully activated to undertake the job of extending credit facilities to private investors in education sector.

53. It is recognized that there is lack of co-ordination among different agencies and no institutional arrangement exists for such co-ordination. Therefore, it is suggested that a Co-ordination Council comprising heads/directors of key institutions may be constituted at the provincial level with revolving chairmanship. Similarly such co-ordination committees may also be constituted at the district level. Secretary Education may also chair the proposed Co-ordination Council.

54. A survey is needed at the provincial level to determine the training needs based on local industrial manpower requirements of the area.

55. A close liaison is urgently needed between Department of Labour and Manpower and Education Department.

56. For better coordination there should be a Deputy Secretary at the Education Department who may be expert in vocational/technical education.

57. Urban/rural and gender disparities may be minimized by increasing women participation in their specialized and general field and

rationalization of urban/rural vocational training and technical education facilities and equitable distribution of Agricultural Industrial, Commercial and Home Economics training facilities.

58. More schools for girls as compared to boys should be set up at reasonable distance. Transport facilities should be provided to girls and female teachers in rural areas.

59. Present administrative set up of education system at secondary level is designed to impart liberal general education only. It has to be restructured to meet the specialist demand of vocational/technical education. It is recommended that a post of Additional/Deputy Director at the Directorate of Education should be created for Agro-technical education. Similarly posts of Deputy Divisional Director and Deputy District Education Officers should be created at the divisional and district level respectively.

60. A post of placement officer/liaison officer should be created at the provincial/divisional level. The sole job of this officer should be to tap vacancies/jobs in the industries and disseminate this information down to the schools.

61. An implementation unit/monitoring service should be created to supervise and evaluate the ongoing vocational/technical education at secondary level.

62. Heads/Principals and Administrators/Managers of Secondary education must be given management training.

63. The planing cell of the Education Department should be led by a professionally qualified educational planner with the status of Deputy Secretary, Education.

64. There should be three tier system, primary (classes 0-VIII), secondary classes (IX-XII) and Tertiary (University classes). Students of intermediate colleges be transferred to Higher Secondary Schools or students of IX and X classes should be transferred intermediate colleges. Secondary education should be of 4 years duration offering diversified courses.

65. There should be three streams at IX and X classes, i.e., Science, Arts and Vocational/Technical.

66. while upgrading High schools to the status of Higher Secondary, adequate physical facilities should be provided. Presently Higher Secondary school offer admission in Arts/Humanities only because of inadequate faculties.

67. Due weightage should be given to the duration of schooling a student has undergone and it should be considered a qualification for entry to various courses at T.T.C. and vocational centers.

68. Prevailing four systems of education should be combined into one single system.

69. For restructuring secondary education three areas are important which should be made clear.

    a) What should be the aims and objectives of the new system;

    b) What areas to be included in the new system;

c) How to cater for financial implications;

70. Restructuring secondary education would demand enhanced financial allocations.

71. There are only 126 workshops/sheds in a total of 975 government boys High schools in NWFP. There are 42 workshop in 111 urban High Schools and 84 workshops in 864 rural High schools. Number of Workshop Instructors, Assistant Workshop Instructors and vocational instructors is 110. Moreover, there are many serious gaps in the availability of equipment, materials, teachers, and finance to meet current costs. So that only a relatively small proportion of the total number of schools can be said to be fully operational. Hence, there would be considerable financial commitments to face with respect to additional workshop facilities as estimated by Asian Development Bank. (Sector study on Education 1988 p. 25) involving, at least a 50 percent increase over the current schools facilities which do not come upto the standard. In addition, the recurrent costs of materials which are to be borne by the provincial governments would place further strain on already meager resources. Of even greater importance would be the availability and cost of providing suitably trained teachers for vocational/technical subjects. This study proposes that a more viable option would be to have cluster schools serviced by mobile teachers and facilities operating from a central

technical facility either at T.T.C or a polytechnic at District or Tehsil level.

71. Moreover, the feasibility of imparting vocational/technical education in the evening shift many also be considered. There is a need for co-ordinated efforts to encourage industries to bear the expenditure incurred on vocational education. Rather, it should be a joint venture of Labour Division, Industries and Education Department.

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Appendix-A

INTERVIEW SCHEDULE
Secretary Education, N.W.F.P.

Questions

1. Please state the functions and responsibilities of the Education Secretariat regarding implementation of National Education Policies in N.W.F.P?

2. Are you satisfied with the present organizational/administrative set up of the secondary education in N.W.F.P?

3. Please indicate the main drawback of our secondary education; what are its good points?

4. What are your views regarding vocationalization and diversification of secondary education? Please state the reason why the provisions of National Education Policies 1972-80 and 1979 regarding vocationalization and diversification of secondary education could not be implemented?

5. What should be the strategy for introduction of vocational training at the secondary level in N.W.F.P?

6. What is the level of coordination/cooperation between the Labour and Manpower Division and Education Department for the exchange of information etc, in planning and development of educational activities in N.W.F.P?

7. If Government decides to introduce vocational education at the secondary level, what would be the main problem areas and how could these be addressed effectively?

8. What are your plans for implementing National Education Policy 1992 and its provisions for diversification of secondary education in N.W.F.P?

Appendix-B

INTERVIEW SCHEDULE

DIRECTOR SECONDARY EDUCATION, N.W.F.P.

Note: This interview is purely an academic exercise. Its contents will not be made public, nor these will be conveyed to any unauthoritized person or agency. Please give your comments on the followings points:

1. What is organizational structure of Secondary Education in N.W.F.P?

2. What innovations have been introduced in the administrative set up of secondary education in NWFP? What are the results?

3. Does the directorate consider Secondary Education as a preparatory stage for entrance to colleges or as terminal stage in itself?

4. Should Secondary Education provide a common curriculum for all or differentiated offerings, in view of the fact that it is a terminal stage for majority of students?

5. Should Secondary Education include vocational/technical training or should it be restricted to general education?

6. Does the Directorate conduct surveys etc to determine the choices of secondary school students regarding various occupations?

7. What is the criterion for selecting students for various course offerings i.e, Sciences and Humanities.

8. What difficulties would you appreciate if the Government decides to introduce vocational/technical training at the secondary level? How these could be over-come?

9. While determining the aims/objectives of Secondary Education, what priorities should be given to the development of the individual viz -a- viz. development of the society?

10. Should Secondary Education present merely organized knowledge, or should it also assume the responsibility of generating and inculcating new attitudes?

INTERVIEW SCHEDULE

Appendix-C

Director of Technical Education, N.W.F.P, Peshawar

Please mention your particulars:-

1. Please state the status and statutory functions of the Board of Technical Education? what functions are assigned to the Board for the development of vocational education in N.W.F.P?.

2. What are the main drawbacks of our educational system at the secondary level? What are its good points? What remedies would you suggest?

3. Please state, what are the reasons, that vocational education at secondary level could not be initiated as per the policy provisions of the government in N.W.F.P?

4. Please state the strategy which can best be adopted to diversify and vocationalize the secondary education in NWFP in accordance with NEP 92?

5. If the government decides to introduce vocational training at the secondary level, what assistance the Technical Board would provide for its implementation?

6. What type of theoretical and/or practical vocational training would be suitable at the secondary level?

7. What strategy can best be adopted to diversify, vocationalize secondary education in NWFP, Keeping in view the Sindh experience of Matric Technical?

Appendix-D

INTERVIEW SCHEDULE FOR OFFICERS OF PLANNING & DEVELOPMENT CELL, CIVIL SECRETARIAT, N.W.F.P.

Chief Planning Officer Education Department.

1. What is the role and functions of Planning & Development Cell regarding development of Secondary education in N.W.F.P.

2. Please state, how National Education Policies are being implemented in N.W.F.P, with special reference to the secondary education?

3. Please explain the procedure how funds are allocated to the secondary education in Annual Development Plans?Do these allocations meet full demand of the Directorate?

4. What are the reasons that provisions of National Education Policy 1972-80, 1979 and 1992 regarding diversification and vocationalization of secondary education could not be implementated in letter and spirit, in N.W.F.P?

5.1	Financial hardships	-	Yes/No
5.2	Lack of infrastructure to cope-up with this changes	-	Yes/No
.5.3	Lack of trained staff	-	Yes/No
5.4	Lack of political will by the government	-	Yes/No
5.5	Lack of interest by the officials	-	Yes/No

6. What is the mechanism for the coordination of various agencies responsible for the conduct and development of the secondary education in N.W.F.P?

7. How do you assess the occupational choices of the secondary school students in N.W.F.P? How do you plan that the out put of secondary education be related to the requirements of the job market?

   7.1 Survey of occupational choices of the students conducted/not conducted/conducted by any other agency.

   7.2 Survey of the demand of job market/conducted/not conduct/ conducted by any other agency.

7.3 Present out put of secondary school is related to the job maker/not related/need vocationalization and diversification in view of the demand of the job market.

8. In case government decides to introduce diversification and vocationalization of secondary education in NWFP, what would be its implications?

Financial
Administrative
Training wise.

9. Please indicate the forces and factors that determine diversification and vocationalization at the secondary level?

9.1	Social factor	Yes/No
9.2	Demand of the job market	Yes/No
9.3	Employment opportunities	Yes/No
9.4	Parent choice	Yes/No
9.5	National interest	Yes/No
		Yes/No

INTERVIEW SCHEDULE Appendix-E

Director, Pakistan Academy for Rural Development, Peshawar

1. What should be the aims and objectives of secondary level education in Pakistan?

2. What are the main drawbacks of our current system of secondary education?

3. Should vocational education form an integral part of secondary education?

4. What are the main reasons, that the government education policy (1972-80) and 1979; regarding diversification and vocationalization of secondary education could not be implemented properly in N.W.F.P?

5. What changes would you suggest in the present administrative set-up of secondary education? What should be the strategy for bringing about such changes?

6. What can be a better model for restructuring secondary education in N.W.F.P. in view of the present situation?

7. How can a restructured secondary education contribute to national development, particularly of the rural areas?

Appendix-F

INTERVIEW SCHEDULE

Chairman Board of Technical Education, N.W.F.P, Peshawar

1. Please state the status and statutory functions of the Board of Technical Education? what functions are assigned to the Board for the development of vocational education in N.W.F.P?

2. What are the main drawbacks of our educational system at secondary level? what are its good points? what remedies would you suggest?

3. Please state, what are the reasons, that vocational education at secondary level could not be initiated as per the policy provisions of the government in N.W.F.P?

4. Please state the strategy which can best be adopted to diversify and vocationalize the secondary education in NWFP in accordance with NEP 92?

5. If the government decides to introduce vocational training at the secondary level, what assistance the Technical Board would provide for its implementation?

6. What type of theoretical and/or practical vocational training would be suitable at the secondary level?

7. What strategy can best be adopted to diversify, vocationalize secondary education in NWFP, keeping in view the Sindh experience of Matric Technical?

Appendix-G

INTERVIEW SCHEDULE

Chairman, Text Book Board, N.W.F.P, Peshawar

Please mention your particulars:

1. Please menton the status and statutory functions of the Text Book Board. What functions are assigned to the Board for the development of text books for secondary education in N.W.F.P?

2. What is the level of coordination between the Text Book Board and the Directorate of Secondary Education? Are you satisfied with the present arrangement? If not what improvements would you suggest?

3. Please state the procedure for preparation and production of text books for secondary classes in NWFP.

4. Has the Text Book Board prepared the text books for all the subjects provided in 'Y' list and 'Z' list of the scheme of studies for the secondary classes. If not, what are the reasons for not doing so?

5. Please indicate the reasons, why the government policy of vocationalization and diversification of secondary education in NWFP could not be implemented? what strategy would you suggest for effective implementation of NEP 92 in this regard?

6. What broad changes should be brought in to make present secondary education address national requirements - meaning-fully and effectively?

Appendix-H

INTERVIEW SCHEDULE

Chairman, Board of Intermediate and Secondary Education, NWFP, Peshawar

Please mention you particulars:

1. Please state the status and statutory functions of the Board of Secondary Education Peshawar? What functions are assigned to the Board for the development of the secondary education in NWFP?

2. What is the procedure for preparation and conduct of examination; What improvements do you suggest?

3. Are you satisfied with the present state of coordination between your Board and the Directorate of Secondary education? What improvements would you suggest in this regard?

4. Curricula revision and development is the responsibility of the Secondary Boards. What are the criteria for determining the need for revisions and changes?

5. What is the current ratio of students in secondary classes in Humanities and Science subjects?

6. What is the achievement level of government high school students vis -a-vis private schools students? What are the reasons for the gap?

7. If government decides, the introduction of a third stream of education, i.e., Vocational/Technical stream, What would be the main difficulties and how best these would be addressed?

Appendix-I

INTERVIEW SCHEDULE

Deputy Director Staff Training Institute Peshawar and Director T.T.C. Peshawar

1. What are the main issues of Secondary Education in Pakistan?
2. What are the main drawbacks in our secondary education?
3. Should there be liberal education or vocational/ technical/scientific education at secondary level in Pakistan?
4. Should there be one curriculum for all students or should it be diversified at Secondary level?
5. Should vocational/Technical training be the part of secondary education?
6. Should not it be too early for secondary schools students to opt for any vocation?
7. What are the remedies in your opinion to correct the present system?
8. If you agree that Technical/Vocational Education should form part of secondary education, the what would you suggest regarding modus-operandi for incorporating such changes in the present structure?
9. In T.T.C. what is the general trend of students regarding their occupational choices?
10. What are the trades in which T.T.C. offers training?
11. What are the qualifications of the teaching staff. What arrangement do you have for their pre-service/in-service training?
12. Regarding your proposal for the mobile workshop what could be its catchment area/how many schools could it serve?
13. If technical/vocational education and general education is merged, what arrangements can be made for the direction and co-ordination.

Appendix-J

INTERVIEW SCHEDULE

Principal: Agro-technical Education Teaching Centre Peshawar

Questions

1. What is the official policy regarding Agro technical education which is presently being implemented in the schools in N.W.F.P?

2. What are the trades/skills covered under the present scheme in N.W.F.P.?

3. How are these trades introduced in the schools. through survey of local needs/availability of student/teachers or facilities.

4. What are the reasons that the students donot opt for these trades: Please (tick) Lack of information/Social barrier/Lack of employment/Lack of proper guidance/All of the above.

5. What is the role of your institution in imparting agro-tech training to the teacher. Do you consider this training a pre-requisite?

6. What is the total capacity of your institution. How many teachers are trained in different trades?

7. What are the qualifications of Agro-Technical Teachers at the secondary level?

8. Are these teachers actually employed in Agro-technical teaching in the school.?

9. If the government decides to introduce vocational/Technical training at the secondary level i.e. 9th and 10th, what would be the main problem areas and how these could be tackled?

10. What are your views on the diversification of present curricula at the secondary level.

    a. Besides Arts and science group these should be a third stream i.e. vocational/Technical, or

    b. One vocational Technical subject should be made compulsory for every students or

c. Vocational/Technical subject should be made optional

11. Why students of secondary level could not be diverted to technical/ vocational fields

a. Reluctance due to social barrier

b. Consider it inferior type of education

c. Lack of information about the job opportunities

d. Lack of employment opportunities in certain trades

e. Any other reason.

12. What are the reason that vocationalization and diversification of secondary education could not be attained as per government policies and plans?

a. Lack of infra structure

b. Lack of trained teachers

c. Lack of Funds.

d. Lack of facilities like workshops, provisions etc.

13. How schools are earmarked for any trade/skill? what is the criterion

a. Local trade/Industrial requirement

b. Availability of raw material.

c. Students opt for the trade

d. Availability of trained teachers.

e. Any other reason.

Appendix-K

INTERVIEW SCHEDULE

Director Science Education Project, N.W.F.P, Peshawar

1. Please state the status and statutory functions of the science Education Project, regarding the promotion and development of science Education at secondary level in NWFP?

2. What is the present ratio of science vs Arts students in 9th and 10th classes in N.W.F.P. Is it in consonance with the official target?

3. What are the main short comings of present secondary education? How can these be overcome?

4. How far science education project has been successful in completing the assigned tasks?

5. What is the students/teachers ratio of science subjects in NWFP.

6. What improvements are required in the present curricula of the sciences at secondary level? what measures have been taken to affect these changes?

7. What are the reasons that vocational/technical education could not be introduced successfully at the secondary level in NWFP?

Appendix-L

I.E.R UNIVERSITY OF PESHAWAR

Questionnaire for Ph.D (Education)

Note:

1. This questionnaire has been designed to solicit the opinion of experts in the education field regarding various issues relating to Secondary Education. It is certified that contents of this instrument will be used for Ph.D. (Education) Only.

2. Please quote your: Name: _____

Designation _____

3. Please tick ( ) your choice

Q:1	Should Secondary Education be General Only. OR	Yes	No
Q:2	Should Secondary Education be Vocational/Technical as well	Yes	No
Q:3	What should be the methodology for the introduction of Vocational/Technical training at the Secondary level		
a.	Besides science and Arts there should be a third stream as Vocational/Technical, which students may be allowed to opt for.	Yes	No
b.	One Vocational/Technical subject may be made compulsory at IX, X level for every student	Yes	No
c.	Vocational/Technical subjects should be only optional	Yes	No
Q:4	What are the reasons that Government Policy regarding diversification and vocationalization of secondary Education could not be implemented		
a.	Lack of Infrastructure.	Yes	No
b.	Lack of coordination among different Government agencies.	Yes	No
c.	Lack of trained teachers	Yes	No

d.	Lack of financial resources	Yes	No
e.	Lack of manpower planning	Yes	No
Q:5	How can be the students motivated to opt for Vocational/Technical subjects at the Secondary level?		
a.	Information about better employment opportunities	Yes	No
b.	Guidance and Counselling Services	Yes	No
c.	Proper selection of subjects based on intelligence/Aptitude tests.	Yes	No
Q:6	Who should conduct the surveys/liaison to determine the demands of the job market?		
a.	Industries, labour and Manpower Department	Yes	No
b.	Education Department.	Yes	No
c.	A separate Liaison Officer.	Yes	No
Q:7	Who should finance the Vocational/Technical education at Secondary level?		
a.	Industries.	Yes	No
b.	Industries, Labour and Manpower Department	Yes	No
c.	Education Department.	Yes	No
d.	A joint venture of all agencies	Yes	No
Q:8	Who should conduct the examination in Vocational/ Technical subjects at the Secondary level?		
a.	Board of Intermediate and Secondary Education	Yes	No
b.	Board of Technical Education	Yes	No
c.	Any other authority (if yes please Name)___	Yes	No
Q:9	What are the main reasons for the present low achievement level of the students at Secondary level?		
a.	Lack of interest by students	Yes	No
b.	Lack of interest by teachers	Yes	No
c.	Erosion of merit system	Yes	No
d.	Lack of physical facilities (labs, buildings, libraries, provisions etc).	Yes	No

e.	Lack of better text	Yes	No
f.	Use-less general education	Yes	No
Q:10	What is the best method for writing text books at the Secondary level?		
a.	Open competition	Yes	No
b.	Research based technique	Yes	No
c.	Nominated writers	Yes	No
d.	Syndicate of experts	Yes	No
Q:11	What is the best method of evaluation of students performance/achievement at Secondary level?		
a.	Present annual examination	Yes	No
b.	Assessment by teachers	Yes	No
c.	Semester System	Yes	No
d.	A combined system of examination (having fixed marks for teacher assessment, annual examination or performance in semesters)	Yes	No
Q:12	How best can the achievement of students be tested?		
a.	Essay type examination	Yes	No
b.	Objective type examination	Yes	No
c.	Test of ability to apply knowledge	Yes	No
d.	Test of rote memory	Yes	No
Q:13	How can we make school management more effective?		
a.	Through giving management training to the Head Masters/Principals etc.	Yes	No
b.	Through financial incentives	Yes	No
c.	Through greater local autonomy	Yes	No
d.	Through academic competition. (among schools of the same District as well as Inter-District competition).	Yes	No
e.	Through involvement of Local Bodies	Yes	No
f.	Through better co-ordination between various agencies	Yes	No

Q:14	How can we motivate teachers for better academic output?		
a.	Higher academic qualifications	Yes	No
b.	Professional training	Yes	No
c.	Aptitude	Yes	No
d.	Attractive incentives like good salary,promotion etc.	Yes	No
Q:15	It is assumed that there is lack of co-ordination among agencies responsible for the conduct of Secondary Education in N.W.F.P, what will you suggest for better coordination?		
a.	Creation of a new post at the apex, i.e Director General of Education	Yes	No
b.	Constitution of Provincial Education co-ordination council comprising the Heads/Directors of various Key Educational Institutions/Departments.	Yes	No
c.	Constitution of District co-ordination committees comprising representatives of agencies responsible for the conduct of Secondary Education.	Yes	No

Appendix-M

List of dignitaries responded to the questionnaire

S. No.	Name	Designation	Address
1.	Dr. Fahim-ud-Din	Professor	Department of Chemistry, University of Karachi.
2.	Mr. Jan Muhammad Keerio	Professor	Electrical Engineering Department, Mehran University Jamshoro, Sindh.
3.	Mr.M. A. K. Malghani	Professor & Chairman	Department of zoology, University of Balochistan, Quetta.
4.	Dr. Muhammad Daud Khan	Professor & Chairman	department of Statistics and Computer sciences, AIOU, Islamabad.
5.	Mr. M. Shahab Ud Din	Professor	Department of Microbiology, University of Karachi.
6.	Syed Qamar Abbas	Associate Prof.	History Department, University of Punjab, Lahore.
7.	Mrs. Nosheena Saleem	Associate Prof.	College of Home Economics, Lahore
8.	Dr. Shahnaz Nazir,	Associate Prof.	-do-
9.	Mr. Amjad Bokhari	Asstt. Prof.	Department of Law, University of Bahalpur.
10.	Mr. Sajjad Paracha	Asstt. Prof.	Department of Mass Communication, Islamia University, Bahawalpur.
11.	Mr. Hidayatullah Akhund	Asstt.Prof.	Department of Sindhi, University of Sindh, Jamshoro.

12.	Mrs. K. Rizwana Siddiqui	Prof. & Principal	College of Home Economics, University of Peshawar.
13.	Mrs. Sultana Altaf	Associate Prof.	-do-
14.	Dr. Fazal-ur-Rehman	Associate Prof.	Physics Department, University of Peshawar.
15.	Mrs. Fathul Huda Inayat	Associate Prof.	College of Home Economics, University of Peshawar.
16.	Ms. Farzana Aziz	Advisor Home Management	-do-
17.	Dr. M. Fazli Qadir,	Asstt. Prof.	Department of Statistics. University of Peshawar.
18.	Dr. Salahuddin	Asstt. Prof.	-do-
19.	Mrs. Shahnaz Mushtaq	Associate Prof.	Jinnah College for women University of Peshawar.
20.	Dr. M.Iqbal Naseem Khattak	Associate Prof.	Department of Pashtu, University of Peshawar.
21.	Dr. Nawab Ali	Asstt.Prof.	Agricultural University, Peshawar.
22.	Mrs. Sajida Ayaz	Asstt. Prof.	Jinnah College for Women, University of Peshawar.
23.	Mrs. Amina Asghar	Lecturer	College of Home Economics University of Peshawar.
24.	Mrs. Rubina Rahman	Lecturer in English	University of Peshawar.
25.	Mr. Syed Mahmood Shah	Dy. Secretary Eduction	Civil Secretariat, NWFP, Peshawar.
26.	Dr.Syed Jaffar Hayat	Chairman	Textbook Board, NWFP, Peshawar.

27.	Mr. Nazir Ullah	Dy. Director	Directorate of Technical Education NWFP, Peshawar
28.	Mr. M. Azim	Dy Director	Pakistan Academy for Rural Development (PARD) Peshawar
29.	Mr. Hasan Mehdi Naqvi	Fd Research Specialist	-do-
30.	Mr. Ghulam Mustafa	Dy Director	Science Education Project N.W.F.P. Peshawar
31.	Mr. Khan Muhammad Bhatti	Instructor	Pakistan Academy for Rural Development, Peshawar.
32.	Mr. Abdul Ghaffar	Faculty Member	National Institute of Public Administration Peshawar
33.	Mr. Nasir Ahmad Khan	Instructor	PARD, Peshawar
34.	Mr. Iftekhar Hussain Khan	Director BS1-PP1&M	University of Peshawar
35.	Mrs. Mukhtar Begum	DEO (F) Secondary	Haripur
36.	Mr. Muhammad Hussain Khan	DEO (M) Secondary	Mardan
37.	Mrs. Nishat Perveen	DEO (F) Secondary	Mardan
38.	Mr. Muhammad Raza Bangash	DEO (M) Secondary	Kohat
39.	Mrs. Irshad Rashid	DEO (F) Secondary	Mansehra.
40.	Mr. M. Halim Shirazi	DEO (M) Secondary Peshawar	Peshawar
41.	Mrs. Mukhtar Begum	DEO(F) Abbottabad (Secondary)	Abbottabad
42.	Mr. Muhammad Ilyas	Headmaster G.H.S. Shiinai Payeen, Mansehra	Mansehra

43.	Mr. Muhammad Shaib	Deputy Secretary	Education Department NWFP, Peshawar.
44.	Mian Said Kareem	Planning Officer Civil Secretariat	Education Dept. NWFP
45.	Syed Farid Ahmad	Statistical Officer P&D Cell (Edu)	Civil Secretariat Peshawar
46.	Mr. Sardar Mohamad Khan	Deputy Chief Planning Officer	Education Department, NWFP, Peshawar
47.	Mr. Mushtaq Hussain	Head master, G.H.S. No.4	Peshawar Cantt
48.	Mr. Muhammad Yousaf	Principal, G.H.S. No.3	Peshawar Cantt.
49.	Mr. Faqir Gul	Principal G.H.S.No.2	Peshawar Cantt.
50.	Mr. Amin Jan	Principal G.Tech. High School	Peshawar City
51.	Mr. Amir Muhammad	Principal, G.H.S	Sardar Garhi Peshawar
52.	Mr. Khadim Hussain	Principal G.H.S. No.2	Peshawar City
53.	Mr. Attaullah Jan	Principal G.C.E.(M)	Peshawar City
54.	Mr. Taj Muhammad	Instructor G.C.E.(M)	Peshawar City
55.	Mr. Muhammad Ali Khattak	Vice-Principal Agro-Tech-Teaching Centre	Peshawar City
56.	Mr. Zarawar Khan	Principal G.H.S.S. No.4	Peshawar City
57.	Mr. Ghulam Sarwary Khan	Deputy Director (Secondary)	Secondary Directorate, NWFP, Peshawar
58.	Mr. Muhammad Ashraf	Asstt.Director P&D Secondary schools	-do-

Appendix-N

No. 3101-16 dated 20th September, 1994

From: The Additional Director,
Secondary Education, NWFP,
Peshawar

To

The District Education Officer
Male/Female

Subject: COLLECTION OF DATA

Dear Madam/Sir,

I feel pleasure in introducing Major Muhammad Younis, AEC, Ph.D. Scholar, I.E.R, University of Peshawar, who is presently engaged in conducting his Doctoral research on.

"Development of a strategy for restructuring Secondary Education, in the light of Policy initiatives of the Government, in N.W.F.P"

He has prepared separate instruments/schedules for the collection of relevant data and interviews of the eminent scholars and experts in the field.

Your cooperation will be highly appreciated. Kindly fill in the attached proforma and return it as soon as possible please.

S/d
(Gul Zaman Khan)
Additional Director
Secondary Education,
N.W.F.P, Peshawar

Appendix-N

Proforma for the Collection of Statistical data for the year 1994-95 Secondary Schools N.W.F.P. (Male/Female)

DEO, District.....

Sir,

Data on following aspects in required for Ph.D. Eduction. You may be use the official proforma for this purpose please. Your cooperation will be highly appreciated.

1. Summary showing the number of Middle/High & High Secondary Urban/Rural

2. Summary showing the subject wide Enrolment of GHSS/GHS/GMS of the District

S.No.	Name of Schools	Urban/Rural		6th - 8th						9th - 10th					
		U	R	Arabic	Agro	Tech	H.Eco for (Girls)	Pashtu	Total	Science	Arts	Science	Arts	Total	G.Total

3. Summary Showing the number of Teaching Staff category wise of GHSS/GHS/GMS of the District:-

S.No.	Name of School	U/R	Principal	V/Principal	H/M	Sub spl	SET C.T.	S.V.	W1	AW1	PeT	DM	O.T	AT	T.T	Qari

4. Detail of physical facilities available in G.H.S./GHS/GMS of the District

S.No	Name of School	Year of Estt.	Cl/room	Office	Staff Room	Lib	Science Lab	Hall	Store	B. Wall	Water supply	Electricity	Play ground	Toilets	W/Whop/Shed	Fans

(DEO - Male/Female)
District_____

Appendix-O

From: Director, I.E.R.
University of Peshawar,
Peshawar

To:

_____
_____
_____

Subject: COLLECTION OF DATA

Dear Madam/Sir,

I feel pleasure in introducing Major Muhammad Younis, AEC, Ph.D scholar, I.E.R. university of Peshawar, who is presently engaged in conducting his Doctoral research on.

"Development of a strategy for restructuring Secondary Education, in the light of Policy initiatives of the Government, in N.W.F.P.

He has prepared separate instruments/schedules for the collection of relevant data and interviews of the eminent scholars and experts in the field.

Your cooperation will be highly appreciated. All information will be kept confidential and will be used for Ph.D. dissertation only.

Yours Faithfully,

S/d

(Abdul Khaliq)
Director I.E.R.
University of Peshawar