

A PSYCHO-PEDAGOGICAL  
STUDY OF  
DIFFERENTIATED SECONDARY  
EDUCATION AND ITS  
SIGNIFICANCE FOR EDUCATION  
IN KWAZULU

BY

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I hereby certify that this thesis is my own work both in conception and execution.



(E.P. NDABA)

KWADLANGEZWA

30 NOVEMBER, 1975

+++++  
+  
+ This work is dedicated to the memory of my +  
+ late parents who imposed compulsory school- +  
+ ing on me and brought me up in the Christian +  
+ faith. +  
+  
+++++

++++  
+ "In point of fact, a society that takes education +  
+ seriously, and cares enough about it to give it +  
+ the priority it deserves, is on the way to becom- +  
+ ing a better society". +

+ (M.V.C. Jeffreys, 1971: 15) +

+ \*\*\*\*\* +

+ "This means that even within KwaZulu we need to +  
+ create a system of education which will provide +  
+ KwaZulu with the personnel to carry out the +  
+ functions of government at all levels, and to +  
+ build the infrastructure upon which the country +  
+ can thrive as a priority". +

+ (UMntwana M.G. Buthelezi, 28.6.75: 9) +  
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**CHAPTER I**

**ORIENTING**

**INTRODUCTION**

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## CHAPTER I

### ORIENTING INTRODUCTION

"Individualization of instruction should progress to the degree that all prescribed learning will be based on each youngster's abilities, interests, style of learning, rate of learning and achievement".

(R. Dunn & K. Dunn, 1972: 242)

#### 1. GENERAL INTRODUCTION

A Chinese adage has it that if you are planning for a year buy rice, if for ten years plant rice, but if for 100 years educate your people. Education is a vital long-term investment for any forward-looking community. As Bozzoli (1972: 2) puts it, "education is as vital to a nation as is sufficient food and a proper diet". The major purpose of planned education should be to induct the individual into the societal pattern in such a way that his individuality and creativeness is enhanced, not dampened (cf. Stenhouse, 1967).

We note that today in all parts of Africa education plays a crucial role in national planning because the future of every independent state depends more than anything else on the rapid and effective development of its educational system. When a metropolitan power relinquishes control, the former subject peoples invariably reorganize the system of education bequeathed to them in accordance with their genuine needs and aspirations. Hopes of achieving higher standards of living and even of attaining viable independence seem to depend almost entirely upon the ability of each budding state to train the human material it requires for service at various levels in the administration. For this to happen there must be statesmen, administrators, scientists, technicians, engineers, doctors, artisans, educationists, and, above all, teachers. These educators are faced with a gigantic task: they are called upon to provide an education which, on the one hand, will take notice of the essential humanity of the people for whom it is designed and, on the other, enable them to take their

full place in a modern scientific-technological world (cf. Duminy, 1968):

It is the indigenous educationist who plays a leading role in bringing about a Black-oriented education to satisfy the authentic needs and aspirations of the African. Needless to say, a Black educationist whose outlook is foreign-oriented will find that his services are not required by his newly independent community. He becomes a "foreign native", a sort of a bat that is useful neither to his community nor to the non-Black expatriates.

In recent times in South Africa there has come about a political dispensation under which Africans are promised eventual sovereign independence in their own areas referred to as Homelands. The vexed question of land consolidation has become a formidable bone of contention with some Homeland leaders (Ilanga, 23.7.75). Whether political independence will become a reality or not is neither here nor there. What interests the educationist is that his Homeland at this stage is given some latitude to design and plan its educational system from the nursery school to the post-primary level except for higher education which remains under the control of the Central Government. Soon after attaining partial self-government in 1963 South Africa's first Homeland, the Transkei, commenced reorganizing its educational system. KwaZulu is following suit. She attained legislative assembly status in 1972. Before that date the territory was referred to as Zululand. It was an integral part of the Natal Province as was the case at one time with the Transkei and the Cape Province. As such it was subject to the jurisdiction of the Natal Provincial Administration and the Central Government. On attaining partial self-government in 1972, the territory's name changed to KwaZulu. Further explanation in this connection is given below in paragraph 2.5 where a map of KwaZulu also appears.

It has been stated that "it is necessary to view education for the 'state' of KwaZulu in relation to the social and economic aims, and not just as a means of wiping out illiteracy" (Thembela, 1972: 2). KwaZulu people should be clear on the aims they want to attain and the means by which they hope to achieve them. Indeed,

without specific educational objectives there can be neither appropriate planning, nor assessment of effectiveness, nor improvement.

Education as a universal phenomenon is a profound and fundamental part of human life. All people of all countries, cultures and creeds educate their children. However, the practice of education, that is how people are educated, varies from culture to culture, from nation to nation, and from community to community. The structure and composition of society, as it will be when the child makes his entry into it, must of necessity drastically influence the pattern of education. It is a universally accepted fact that the aim of education and, with it, educational practice, is determined by the educator's view or philosophy of life. This point will receive special attention in the next chapter. Suffice it to say at this stage that the KwaZulu Government has stated time and again that what is needed is an educational system which is designed to meet the challenges of the scientific-technological era. In the Education Manifesto of KwaZulu the following is stated to be the comprehensive aim of the envisaged restructured system of education:

"The effective organization of the African's experiences so that his tendencies and powers may develop in a manner satisfactory to himself and the nation, by the growth of requisite knowledge, desirable attitudes and congenial skills required to face the demands of the modern age".

(KwaZulu Dept. of Education and Culture, 1973: 2)

As a member of the Ad Hoc Consultative Education Committee which drew up the Manifesto and also as a member of UBhoko, the research and consultative committee which liaises with the KwaZulu Cabinet, the present writer is in a good position to assess present trends in KwaZulu education. Unlike the older metropolitan powers, KwaZulu, as a developing nation, is not shackled by any deep-rooted practices or prejudices: it is free to select suitable elements from any educational system in South Africa or abroad to embellish its own educational edifice. KwaZulu has taken an independent line and envisages a sound educational system second to

none for its child population. In his policy speech at the May 1975 Legislative Assembly session the Councillor for Education and Culture stated in this regard that "if we want to be liberated from the chains of past reigns and shackles of foreign policies, we must place our education system on a sound footing."

The fact that KwaZulu is economically poor does not invalidate its citizens' cherished pedagogical principles. Hayward (1972: 50) hits the nail on the head when he declares that "a valid principle is not made invalid by a difficulty of putting it into practice caused by, for example, shortage of money or lack of staff".

Pedagogically speaking, the present study was conceived at a crucial point in time in the history of KwaZulu. The Central Government was on the verge of introducing a massive programme of differentiated education for European children. Undoubtedly the system would introduce a new era in education in South Africa. A research in depth into this problem in KwaZulu should benefit the budding "state". Further details in this regard and elucidation of terms used in the study are given below.

## 2. DEFINITION OF CONCEPTS

### 2.1. Introduction

The title of this thesis implies what is actually contained in the monograph, namely, a psycho-pedagogical study of differentiated secondary education and its significance for KwaZulu. This theme does not only imply theoretical reflection and reasoning on the problem, but specific reference is made to a practical application or implementation of findings. It is thus necessary to analyse the theme by outlining and defining clearly certain concepts pertaining to "psycho-pedagogical", to "differentiated education", to "secondary education" and the term "KwaZulu" itself. Precision of terms is a necessity, since it enables the research worker to give an exact rendering of his thoughts. There is no intention here to enter into a polemic of semantics. The definitions presented below only say what the terms mean in the context of this treatise.

## 2.2. Concepts pertaining to "psycho-pedagogical"

In order to understand this concept it is necessary to define first such concepts as "pedagogics", "education", "teaching" and even to refer to the part-disciplines of pedagogics.

### 2.2.1. Pedagogics

Pedagogics (opvoedkunde) must be clearly distinguished from education (opvoeding): the former is the science, the body of systematized and verified knowledge pertaining to the phenomenon education. The pedagogician practises his science as an investigation of the field of knowledge concerning the phenomenon education.

The Dutch pedagogicians like Kohnstamm and Waterink are responsible for paving the way for a systematic reflection on pedagogics as an autonomous science. The first systematic work reflecting the autonomous character of pedagogics was Langeveld's Beknopte theoretische pedagogiek (1944). Their compatriot Perquin is also another prominent contributor to the "emancipation" and emergence of pedagogics as an independent science. In South Africa this approach has found support in educationists like Oberholzer, Landman, Van der Stoep, Sonnekus, Nel and others (cf. Nel, 1974). pedagogics is neither an eclectic science nor an applied psychology, philosophy, sociology, theology or any other science. pedagogics is one of the youngest sciences. Viljoen and Pienaar (1971) state that its autonomy has only been universally recognized in the past seven or eight years.

It should be pointed out, however, that the notion of pedagogics as an autonomous science is not universally accepted. In South Africa it is mostly English-speaking thinkers who are vocal in their rejection of this view. They claim that pedagogics is not a science but an art or just a practice like the practice of medicine or architecture (cf. Hayward, 1973). These thinkers maintain that like in any professional practice, educators simply have to apply the findings of sciences, ethics, experience, etc., to become better at their job. According to them, the emphasis should not be on pedagogics as a science among sciences but that it should be placed on the theory of a vital practice.

It must also be mentioned that a number of thinkers are opposed to a "neutral science" of education in teacher training courses on religious grounds. Their standpoint is that a phenomenological approach in pedagogics leads to a study of education which is devoid of the desired religious content (Taljaard, 1974; Strauss, 1969). The views of these thinkers are contained in such publications as, inter alia, Fokus, Riglyne and COVSA-Studiestuk No. 15.

The various part-disciplines of pedagogics are mentioned below with special reference to psycho-pedagogics, the field in which this study is undertaken.

### 2.2.2. Part-disciplines

As already pointed out above, pedagogics has its own field of study which is very extensive. As a result, a number of part-disciplines, also called part-sciences or part-perspectives, have come into being. As a point of departure, it must be stressed that, broadly speaking, the science practised by the educationist is pedagogics and that this provides a perspective on a specific reality as a human concern. For the sake of specialized study the basic discipline (i.e. pedagogics) is sub-divided into part-disciplines. However, it must be borne in mind at all times that these part-perspectives, which can be distinguished from one another but never separated, are all part of a single unity. They are all relevant to the study of pedagogical matters. Pedagogics is an autonomous science and to obviate the risk of accepting one aspect as the whole, it is essential to have a clear picture of the various part-disciplines.

These sub-divisions all have a common point of departure, namely, the phenomenon of education (the pedagogical phenomenon). The nature of the pedagogical phenomenon determines what division has to be made.

If the concern is with the purposefulness of education, theories on the aims of education, how the adult-child relationships ought to be, then one is in the field of Philosophical or Fundamental Pedagogics (Philosophy of Education); or one can

confine oneself to, inter alia, the development of adult-child relationships in the past (Historical Pedagogics). If the focus is on methods and techniques of teaching and adult-child relationships in the teaching-learning situation, then that is the sphere of Didactical Pedagogics, and Educational Planning falls under this part-discipline because it is planning for teaching and organizing the teaching practice for the guidance and help of learners. If one deals with matters relating to the educand himself and adult-child relationships as they exist now, then one is in the field of Psycho-, Socio- or Orthopedagogics.

The child in the pedagogical situation is constantly becoming and any assistance and support demands knowledge of the child, that is, anthropological knowledge of the child in his relatedness to the world and to others in the world from the pedagogical situation. Thus knowledge of psychological pedagogics (psycho-pedagogics in short) is essential. One is here concerned with psychology as it arises from the pedagogical situation. It is for this reason that one talks of psychological pedagogics in contrast to the current ideas of pedagogical psychology or educational psychology (Nel, 1974). The reason for the reversal of terminology will become apparent from a detailed elucidation of the nature and essence of psycho-pedagogics in Chapter II (paragraph 4). In this connection brief reference must be made to socio-pedagogics.

Since being-in-the-world (Dasein) means being-with-others (Mitsein), socio-pedagogics refers to a study of the totality of social constellations, groupings, systems, organizations, institutions, etc. as expressions of being human and the possibilities of the child as a social being to be influenced by these. To be with others is the primordial way of being human. Man cannot be an island unto himself. Man never becomes actual existence - he remains possible existence - unless he communicates and associates with others. A human baby picked up and living with, say, baboons in the jungle cannot develop into a human being. The human element lies in the fact that man (child) comes into the world with biological potentialities which can only be actualized through a world of people. Since we are studying the

child as a becoming person, we can say that he is becoming more and more human. Socio-pedagogics views the child from a particular angle viz. the social dimension.

The foregoing reflection on socio-pedagogics indicates that the individual should be viewed against his cultural group which, in the first place, was responsible for his "humanisation" (Nel, 1974) or his "socialisation" (Dewey, 1959). It is this socialisation which accounts for a degree of homogeneity among members of a given group or society. Education perpetuates and reinforces this homogeneity by fixing in the child, from the beginning, the essential similarities that collective life demands, but it also gives leeway for individual variation. As Durkheim (1956: 70) puts it, "education assures the persistence of this necessary diversity by being itself diversified and specialized". This view emphasizes the necessity and importance of differentiated education which acknowledges the phenomenon of the individual-in-society. In the final analysis, "all the activities of the individual are to be valued with reference to his social obligations" (Ross, 1966: 43). Man's individuality and sociality constitute a common onticity as the counterparts of human existence.

In Chapter II a more detailed discussion will be given of the different part-disciplinary perspectives as these pertain to the study at hand. In the meantime, brief reference is made below to education and teaching in the context of a differentiated system of education.

### 2.2.3. Education as school instruction

Generally speaking, education is an interhuman phenomenon whereby the mature leads the immature to maturity. In this sense education is a universal phenomenon which is found in all cultures down the corridors of history. This definition connotes accompaniment: it is the well-grounded effort of the adult with the child on his way to adulthood to unlock the world in order to support the latter and activate him into constituting his own meaningful world and to inhabit the world and in this way to bring the child to a well-founded acceptance of his existence and essence-un-

folding (cf. Viljoen and Pienaar, 1971). Education thus signifies the intentional, directed and systematic influence of the self-responsible free human personality upon the development of the yet unfree personality-in-becoming in accordance with a more or less clearly preconceived purpose. The adult has a preconceived idea of what he wishes the child should become. Thus education in the last resort cannot take place without deliberate influence by the become upon the becoming. Moreover, education implies norms and values which form the basis of the educational philosophy and determine the educational aims.

The foregoing exposition of education focuses on education as a phenomenon (i.e. as opvoeding in Afrikaans or imfundiso in Zulu). However, for purposes of this study, the term should be restricted to education as school instruction (i.e. onderwys in Afrikaans or imfundo in Zulu). This dual meaning of education in English tends to mislead. Hence a clear distinction between these two connotations must be made. In this connection, education implies school education as it occurs in the teaching-learning situation. Consequently, differentiated education is essentially differentiated teaching (i.e. gedifferensieerde onderwys). More will be said in this regard in the ensuing paragraphs.

#### 2.2.4. Teaching as the spearhead of education

The term "teaching" is more limited than "education". Whereas education is directed at the person as a whole, teaching deals with only one aspect of man, namely, the intellect (Cilliers, 1975). Teaching inculcates knowledge and skills that are useful and profitable for man's existence.

The term "teaching" should not, however, be understood as meaning only what is done in school: teaching is also done outside the school, just as the school is supposed not only to teach, but especially to educate as well. The teacher is first and foremost an educator since his teaching often provides him with ample opportunity to educate. Teaching must, therefore, be educative, for education includes teaching. Primordially, a sound teaching situation and a sound pedagogical situation are two sides of the same coin. In fact, it is this close connection between

educating and teaching in the life of the child which makes didactics inseparable from pedagogics. Thus in the mode of being human (child) the pedagogic situation is at the same time a didactic one.

In the context of a differentiated system of education the didactic perspective lays particular stress on the unfolding of reality (teaching) and entry into reality (learning) as well as on the advantages of the principle of differentiation. For this reason the teacher would be unwise to teach all children in the same way because in doing so he would neglect their unique biological and psychical differences.

In short, teaching could be regarded as the spearhead of education. The educator should be conscious of two factors, namely, the children at his disposal and the expectations of the community to which the school belongs. This view is amplified below.

#### 2.2.5. The function of school education in society

In its broadest sense, education (opvoeding) means the transmission of culture from one generation to the next generation in order to maintain continuity of a way of life of a people. This is the universal function of education. In this sense all peoples in all ages are subject to education. Education bestows on man his humanity. Without education he cannot be man or human.

Preliterate societies had education without schooling or formal training. They mainly relied for instilling needed dispositions into the young upon the same sort of association which kept adults loyal to their group. The children learnt the customs of the adults and acquired the emotional set and stock of ideas by sharing in what the elders were doing (Dewey, 1959). In tribal society education was largely a matter of a set pattern. It was a complete education whereby every normal youth at a certain stage would be regarded as fully educated and eligible to participate in the activities of the adults.

However, as civilization advanced, bringing science and technology in its stride, the gap between the capacities of the young and the concerns of the adults widened. Learning by direct sharing in the pursuits of grown-ups became increasingly difficult except in the case of less advanced occupations (Dewey, 1959). Thus it became imperative that intentional agencies (schools) and explicit material (studies) should be devised. The task of teaching certain things had to be delegated to a special group of persons (teachers). Formal or school education came about to supplement informal or parental education, as it became impossible to transmit all the resources and achievements of a complex society. School education opens a way to a kind of experience which would not otherwise be accessible to the young, if they were left to pick up their training in informal association with others, since books and the symbols of knowledge are mastered (Dewey, 1959).

The function of informal and formal education should remain essentially the same, namely, the guidance given to the non-adult by the adult on the former's way to adulthood. The route through the school is an unavoidable part of the child's way to adulthood. The school was established for the child by the adult and each child is obliged to attend it at a particular age. At home education remains non-formal and non-systematic until the child enters school and the teachers take the place of the parent in order to establish a formal educational situation in which systematic education is given, but in which that which is pedagogical remains fundamental (Nel, 1974).

It should be pointed out, however, that, although the child has been sent to school, his education should still remain a joint effort between parents and teachers. After all, the latter have the child for only five hours in five days of the week but for the rest of the time the child is with his parents. This thought may be illustrated as follows:



Therefore, it is important that what is taught at school should not be at variance with the community's needs and aspirations. The material of formal instruction (i.e. the selected aspects of reality) must not be merely the subject-matter of the schools, isolated from the subject-matter of life-experience. If the said isolation obtains, the permanent social interests are likely to be lost from view. Dewey (1959: 10) hits the nail on the head when he declares that "one of the weightiest problems with which the philosophy of education has to cope is the method of keeping a proper balance between the informal and the formal, the incidental and the intentional, modes of education".

School education could be described as a vital force in nation-building. It should be stated in this connection that there are two types of factors that determine the aim and content of education, namely:

- (i) philosophical-ideological dimension (manhood), and
- (ii) the reality/needs dimension (manpower).

The two factors are interrelated and no attempt should be made to overstress one at the expense of the other, thereby causing an undesirable imbalance. For instance, it would be tantamount to treating schools like factories if an injunction were to be issued by authorities to the effect that so many pupils must be "trained" and channelled into certain categories of the vocational sector. School education then is a vital force to influence people's lives in accordance with accepted norms and values and to raise the people to the desirable levels of competence and effective adulthood. Indeed, with suitable opportunities to learn, men can rise above the levels they would otherwise attain (Fischer, 1962). The content of school education constitutes aspects of reality which have been selected and designed to facilitate learning of the child in the various periods of his schooling.

Langeveld underlines the fundamental primordial fact that the child is someone who wants to be somebody himself and therefore requires to learn, a fact which must be taken as a point of departure in any reflection on the teaching-learning situation.

Society wants to induct the child into its ranks when he attains adulthood, and, in turn, the child is amenable to learning. The phenomenon of learning is a primordial mode of becoming, i.e. a mode of becoming in relation to things and to others (viz. children and adults) (Sonnekus, 1974). Needless to say, before a child can be given real-life problems to solve, he must be aided in arriving at an understanding of life and reality. Effective learning at school is a protracted phenomenon of giving meaning to life. The educative dialogue gradually expands towards greater possibilities of choice and responsibility, until the bounds of youth are passed and the individual becomes part of the realities of adult life (Erasmus, 1970).

In the light of the foregoing, a differentiated system of education becomes a burning necessity whereby schools of every type fulfil their proper purpose in so far as they foster the free growth of individuality, helping every boy and girl to achieve the highest degree of individual development of which he or she is capable in and through the life of a society (Ross, 1966). During the school years the aim of differentiated education is concerned firstly with the education of the child as a functioning totality. Viewed pedagogically, it is also correct and meaningful to supply the secondary school pupil with knowledge concerning vocational practice which is the mainstay of adult life. In the scientific-technological world of today the extent and complexity of the vocational world has increased so much that it would be illogical to send the child unprepared into the kaleidoscopic world of vocations. Because the child cannot investigate the whole of the vocational field during his school life, while nevertheless knowing that his participation in reality is a task-performing one, it is meaningful that the reality of the vocational sphere should be differentiated into smaller structures, to one of which he can be directed in his studies. Differentiated education offers the unique boy or girl the opportunity for the gradual opening up of positive human potentialities which are also directed towards the world of work in which he or she will live as a future adult.

Therefore, the education that the pupil receives should prepare him for entry into the vocational world as the world of the adult. This is the major function of school education in society. Needless to say, preparation for a vocational life begins in earliest childhood (Van Zyl, 1973). It is essentially interwoven with all the educational work as concomitant assistance towards eventually proceeding independently with his life-work. During the whole of childhood, education will therefore be geared to the preparation for, and the acceptance of a vocational life. It will not be a forgotten aspect which all of a sudden starts to receive attention when differentiation into the various fields of study takes place during the secondary school period (Transvaal Education Dept., 1974). Education is always a matter of educating the child so that in his adult life it will crystallize as independent acceptance and fulfilment of tasks as a matter of life-fulfilment. The adult stature of the individual is largely determined by his occupational functioning.

A detailed elucidation of differentiated education appears below.

### 2.3. The concept "differentiated education"

In general, this term means that as far as possible provision is made for the development of the ability, talent and interest of each pupil (Frandsen, 1961). It seeks to educate all children by providing equal though not similar educational facilities, taking individual differences among children into account. Thus it is designed to route pupils to the right course and the right institutions on the basis of their ability, aptitude and interest and in response to the manpower needs of the state.

It may be asked as to why differentiated education is preferred to a non-differentiated type of education. In a way this question has been answered in previous paragraphs. A further amplification is offered here.

The interests of society are enhanced by the individual's optimum development of his potentialities, and individuals find

their best chance of self-development in the service of society (cf. Ross, 1966). The overriding consideration in differentiated education is the fact of the inequality of men and the multiplicity of needs and demands of society. In order that they should take their rightful places in the community on attaining adulthood and make meaningful contributions thereto, society demands that all pupils should have access to secondary education and that education should give pupils the opportunity of realising their abilities to the optimum. Coupled with this is the demand that pupils should be prepared for the indispensable vocational sphere so that they will be able to pursue their vocations productively. To satisfy this demand, it is essential that the uniqueness of individual pupils should be taken into account when planning their education. The inequality of persons is reflected in the abilities with which each is born, that is, their differences in respect of, inter alia, intellectual ability, aptitude, temperament, potentialities, interest and emotionality, but especially with regard to the way in which the person structures the abovementioned components as an integrated totality in real life. This inequality or individual uniqueness of pupils must be accommodated in educational planning so that education may be offered in accordance with pupils' abilities. This means that differentiated education should be planned to link up with post-school vocational fields (Transvaal Education Ept., 1973).

As previously mentioned in paragraph 2.2.3, differentiated education refers to differentiated teaching, and as such it lays emphasis on the reality of the uniqueness and individuality of man. On the other hand, education as phenomenon (opvoeding) demands a recognition of moral equality. People's concept of reliability and responsibility does not emanate from individual biological and psychical qualities. It does not lead to differentiation as regards reliability, loyalty and sense of responsibility. The expectations (shared understandings) of society with reference to opvoeding are the same for all children irrespective of home background or psychical endowment. In this respect all men are created equal and equally responsible. For this reason every person is entitled to his human dignity irrespective of his race,

sex, colour or creed. Consequently, good manners, respectfulness, neatness, honesty, dignity, etc. are moral universals which cannot be subjected to differentiation of any form whatsoever. On the other hand, it can be argued that differentiated education exactly serves the purpose of enhancing these moral universals for it offers every individual pupil the opportunity "om tot sy reg te kom" (to come to his own).

Since children differ in many ways, it would be unwise of the educator to teach all children in the same way. There will have to be differentiation in content and method of his teaching. Therefore, it is the task of the school to educate the child to perform at optimum level of his accord. A more elaborate exposition of the concept "differentiated education" appears in Chapter III (section 3).

#### 2.4. Concepts pertaining to "secondary education"

##### 2.4.1. Grades, standards, forms

In South Africa the term grades refers to the first two years of schooling which are also called sub-standards A and B respectively. From the third year onwards school years are referred to as standards, i.e. standards 1 to 10. Europeans and other non-African groups follow a 12-year school programme and up to 1972 standard 5 marked the end of the primary school and standard 6 the first year of the secondary school.

The position is different in Bantu Education. Up to now (1975) a 13-year programme is followed and standard 6 is the final year of the primary school so that Black pupils take 8 years to complete the primary school education. The imposition of the extra year has always been resented by Blacks as it cannot be supported on pedagogical grounds. However, from 1976 a 12-year programme will be introduced whereby standard 4 will mark the culmination of primary school education and standard 5 the first year of the secondary school. The streamlining of the school years or phases is dictated by the recently introduced national differentiated system of education and the concomitant

changes in the requirements for the National Senior Certificate and Joint Matriculation Board Examinations.

The term forms refers to the school years in the secondary school phase. From 1976 the position will be as follows:

Junior secondary phase: Std. 5, Form I, Form II.

Senior secondary phase: Form III, Form IV, Form V.

#### 2.4.2. Schools

Different terms are used to describe the various types of schools which offer secondary education. Some of these terms, which will appear in subsequent chapters, are explained below.

##### (1) Secondary school

From the primary school, which terminates at standard 4 level in the new differentiated system of education, pupils will be admitted to the secondary school to do standards 5 to 10. The first three years constitute the junior secondary phase and the next three years the senior secondary phase.

##### (2) High school

The senior secondary school used to be officially referred to as the high school, and several such schools in KwaZulu still retain this title. Although the term has been abandoned by the various Education Departments, Africans in KwaZulu still use this term instead of senior secondary school and the junior secondary school is referred to as the 'secondary school'. It is possible that with the implementation of the new 3-3-3-3 system of differentiated education the use of the term 'high school' will peter out as it has happened in the Transkei when the said system was introduced in 1975.

##### (3) Bilateral school

If a school offers two "sides" of secondary education (i.e. any two from academic, technical, commercial, domestic science, vocational, etc. "sides"), it is referred to as bilateral. In England this term is used to describe a school which offers under one roof any dual combination of grammar, technical or secondary modern school studies.

(4) Multilateral school

This term is used to describe any school which offers three or more "sides" or "streams" under one roof.

(5) Comprehensive school

This is an all-purpose school which offers a variety of courses under one roof for purposes of catering for all the pupils of a given area without streaming them into different "sides". The pupil is given a wide latitude to select any subjects which are in accord with his ability, aptitude and interest.

(6) Ordinary school

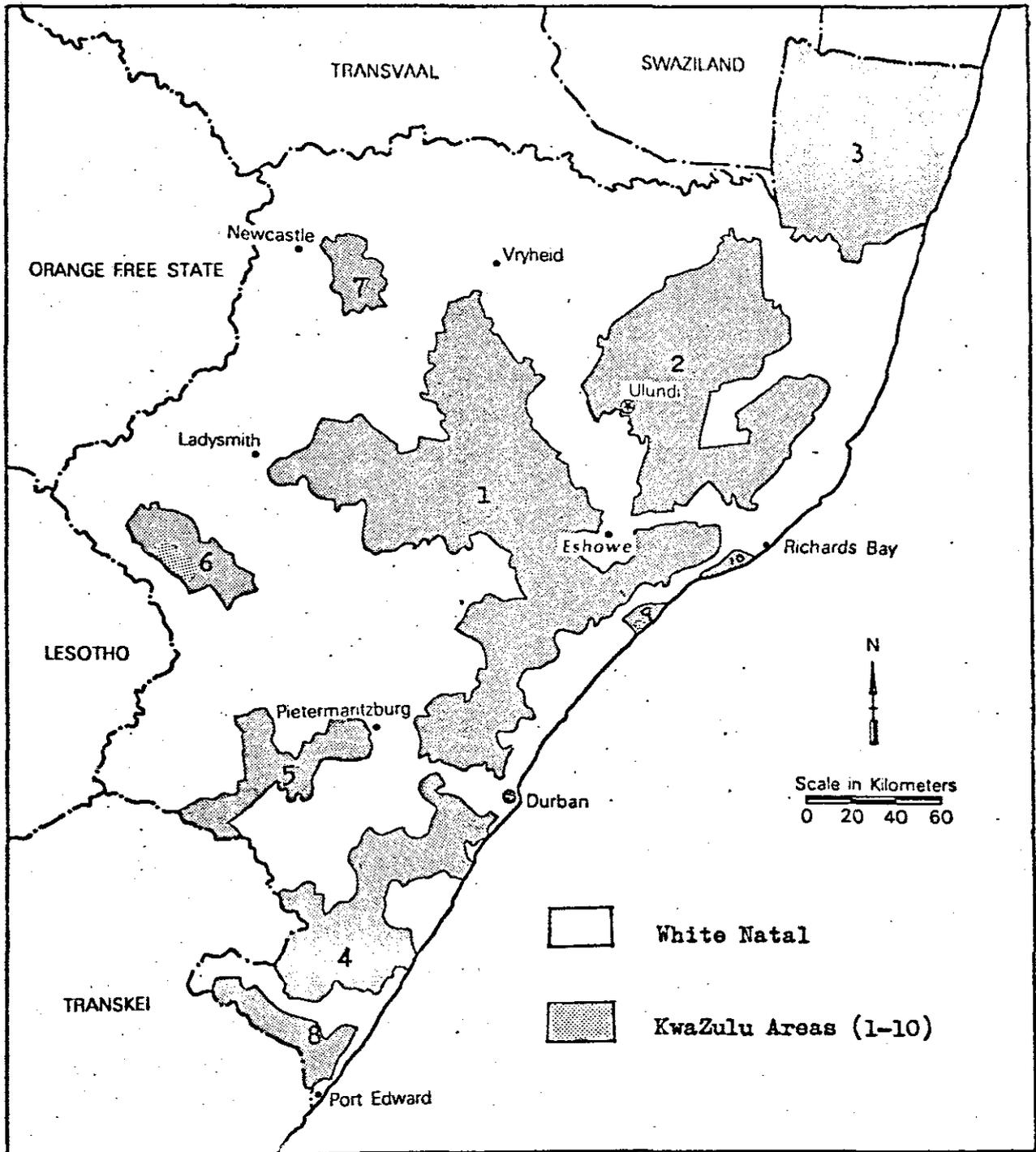
This term appears in Chapter VI in the questionnaire survey. In that context it refers to the common school in KwaZulu which offers the ordinary academic course in contrast to those schools which offer the said course plus one or more "sides".

2.5. The concept "KwaZulu"

The 1913 Natives Land Act stipulated that certain areas in the then Union of South Africa were to be set aside for the exclusive occupation by Natives, and the 1936 Native Trust and Land Act stipulated that more land should be bought to augment these "reserves", as they were called. The total land quota for the Reserves would amount to 13% of the total land area of the Union. Zululand in Natal was the Reserve which was set aside for the Zulu-speaking Natives. When the present Government came to power in 1948, it launched vigorously the policy of apartheid or separate development, as it was called a decade or so later, whereby the various Native ethnic groups would be assisted to develop gradually into separate independent political entities operating within the 1936 Act in so far as territorial requirements were concerned. The Bantu Authorities Act of 1951 set the machinery for this development in motion.

For Zululand the first significant milestone on the road to self-government was the inauguration of the Zulu Territorial Authority in June, 1970. In March, 1972, it attained legislative assembly status, and then the name "changed" (i.e. constitutionally)

FIG. I : FINAL CONSOLIDATION PROPOSALS FOR KWAZULU



(Source: Daily News, 31.3.75 : 4)

to KwaZulu, a term which has always been used by Zulus and other Blacks since Shaka (1787 - 1828) founded the Zulu "nation", just as Lesotho has always been used since the days of Moshoeshoe I, the founder of that nation. Kwa is a preposition used to express at, from, etc., the place or country of a person (cf. chez in French). Common examples are Kwambonambi, KwaPhindangene, Kwa-Ndaba, etc. Thus KwaZulu means the place of the Zulus.

With the conquest of Zululand in the last century, the territory was carved up into numerous pieces which up to recently numbered 188 including 140 "Black spots" dotted all over the Province in the so-called White areas (De Clercq, 1973). According to the latest consolidation proposals, these pieces will now be reduced to 10. This information is reflected in the map which appears on the previous page.

Having now analysed the theme and defined relevant concepts, attention is now focused on an exposition of the problem as such.

### 3. STATEMENT OF THE PROBLEM

The adage that "the boy is father of the man" is nowhere else better illustrated than in the phenomenon of education. Progressive states have realized that capital spent on education is a sound investment and that children are a nation's greatest asset which should be developed to its maximum extent. One of man's best investments is in himself. Educated human resources generate increased productivity and, ipso facto, wealth. Education therefore is an investment in human material which can reap rich dividends. Almost uniformly the newly independent states of Africa are characterized by a formal commitment to educational expansion as one of the primary tools of modernization and development.

The crucial question is not whether children are being educated - this being taken for granted in the modern era - but what type of education are they given to enable them to fit into the contemporary world. Inevitably we Blacks find ourselves

drawn into the vortex of the contemporary era, and, in the circumstances, we must take a hard look at the contemporary educational systems with a view to updating or effecting a radical restructuring of our own.

Whilst education does not occur in a vacuum but is an integral part of society, nevertheless for it to thrive and flourish it also needs external nourishment and contact. No society can be an island unto itself, impervious to external influences. The Russians' successful launching of the first sputnik in 1957 sent ripples of shock waves throughout the U.S.A. which had hitherto rested on its laurels derived from the fact of being the leader of the Western world in almost every field of human endeavour. America was shocked into a new realization of the urgent need for a radical reorganization of the educational status quo to meet the new challenge from the leader of the communist world. The popular uproar resulted in soul-searching and re-evaluation of goals. Within a decade or so America had not only met the challenge but had also outstripped her rival. The epoch-making event of the 20th July, 1969, when the astronauts Neil Armstrong and Edwin Aldrin landed on the moon, was a dramatic illustration of America's phenomenal scientific-technological advances. From his moon perch Armstrong was able to describe man's immortal moment on the moon in these now famous words: "That's one small step for man, one great leap for all mankind". This "great leap" was dramatically demonstrated on Thursday the 17th July, 1975, at 6.10 p.m. (S.A. time) when American and Russian spacemen docked in space and became the first international crew of a "space train" which undocked on Saturday the 19th July, 1975, at 5.30 p.m. (S.A. time).

It goes without saying that no nation is born overnight except in mythology. The present state of any nation is the culmination of the interplay of a multiplicity of historico-socio-economic factors. A brief general review of some of these factors appears in the ensuing paragraphs.

Most progressive states today have been compelled by the phenomenal scientific-technological advances of the latter half of this century to gear their educational systems to rapidly

changing conditions and to keep abreast of times. The attendant industrialization, urbanization and secularization have necessitated far-reaching educational changes in all developed societies. The strongly emerging egalitarian ideology demanded that there should be equal vocational and educational opportunities and that all young people should receive a sound general education extending to beyond the primary school level. The various human activities characteristic of industrial society needed trained personnel who had gone through a sound general education prior to their subsequent specialized training. These exigencies have necessitated the extension of the compulsory schooling period, and, in the light of these, educationists have had to re-examine current secondary education systems with a view to introducing the necessary innovations.

Historically the secondary schools of today are the product of the European grammar schools, of the middle ages which aimed at preparing for the universities young men who intended becoming scholars. The function of these schools later broadened to include the pre-university education of those who wished to become statesmen, magistrates, lawyers, doctors, etc. In the course of time they were attended by pupils who desired training for positions in administration, commerce and industry. The rapid industrialization of the Western countries in the 18th and 19th centuries and the resultant need for a rising number of well-educated members of the middle classes exerted constant pressure for a rapid expansion of secondary education (U.N.E.S.C.O., 1962).

The persistent cry during this century for equal educational opportunity for all resulted in the extension of secondary education to all members of society and the provision of a type of education designed to develop each child to his fullest capacity. This new move necessitated the extension of the compulsory period of school attendance to cover the post-primary stage or part thereof. Consequently, in some countries, the upper limit of compulsory attendance was raised to 15 years of age and later in others to 16.

This new move had far-reaching implications. The unprecedented influx of multitudes of pupils of varying abilities into the schools created new problems of a pedagogic and administrative nature, and a revolutionary approach to the new situation was called for. Hitherto the main diet of the secondary school was the traditional academic type of education. Now the sharply emerging differences among adolescents in mental capacity, natural aptitude and interest as well as their vocational requirements had to be catered for, new problems which were not pronounced at the primary level.

In the pedagogical sphere, the burning problem, which required instant attention, was that of providing differentiated courses of study to cater for the great diversity among the new secondary school population in contrast to the traditional academically oriented courses designed to lead to scholarly pursuits. The latter had to be restructured and broadened to incorporate courses suited to the full spectrum of innate ability. This resulted in major changes in the form and organization of secondary education systems as well as the streamlining of the curriculum and teaching methods. This type of education is today called differentiated secondary education.

In the administrative sphere, the various schools either had to be re-designed to provide different types of courses (i.e. intra-school or internal differentiation) or different types of schools had to be established for the various types of secondary education now demanded (i.e. inter-school or external differentiation). Illustrations of the latter are the grammar and technical schools in England, the Gymnasium, Realgymnasium and Oberrealschule in Germany, the classical and scientific lyceo of Italy and the collèges and lycées in France. In many other countries also agricultural, domestic science and trade schools came into being for the specific purpose of providing for the varied needs of the heterogeneous post-primary school population.

South Africa, as an industrial power, did not lag behind in the worldwide pursuit for solutions to the burning educational problems of the day. In the wake of compulsory education up to the age of 15 or 16 years, in terms of which all educable children

of school-going age were kept at school until early or middle adolescence, education authorities were faced with the problem of how to adapt school training and instruction to the varying needs, interests, and capacities of the pupil in such a way as to prepare him best to live his life and to render to his country the most valuable service that is within his powers and capacities. South Africa was conscious of the need for renewal in education. She was fully aware of the desirability of combating the intellectualism of the last century with its subject-centred instruction and of instituting the psychology of this century with its child-centred teaching which places the individual child in the foreground. The Union Government and the Provincial Administrations got into grips with this problem. Some provincial education departments dispatched commissions overseas to study differentiated secondary education and make recommendations for its implementation. The recommendations of the following education commissions listed in chronological order should be seen against this concerted effort to bring about pedagogical renewal:

- (1) The Nicol Commission, Transvaal, 1939.
- (2) The Wilks Commission, Natal, 1945.
- (3) The De Villiers Commission, Union, 1948.
- (4) The Pretorius Commission, Free State, 1951.
- (5) The Van Wyk Commission, Transvaal, 1955.
- (6) The Committee for Differentiated Education and Guidance, S.A. and S.W.A., 1969.

In addition to official endeavour, educationists conducted intensive research into this problem, for example, Lynch (1952), Davies (1958), for the Transvaal; Shiels (1963), Prozesky (1968), for Natal; to name only a few. A study of the reports of the various commissions and investigations by individuals since the 1930's reveals time and again findings and recommendations in favour of a national system of differentiated education. Thus the various committees of investigation have contributed to the crystallization of the current system of differentiated education for Whites.

"Differentiation" (in the pedagogical sense) has become a household name in South Africa particularly since 12th November, 1971, when the Minister of National Education made a dramatic announcement about the introduction of a national system of differentiated education for Whites in the near future. However, this term seldom appears in educational writings before 1943, but in that year it received considerable attention in the Norwood Report of the British Government. There it has an unfortunate connotation, namely, that of differentiating among types of pupils, and placing pupils in categories. This had far-reaching educational implications. It led to selection examinations at 11+ and to the hiving off of pupils into separate schools, a black chapter in English education which is shunned by many today. More will be said in this regard in Chapter IV.

The above connotation of the term differentiation was based on certain assumptions which are now considered to be fallacious and therefore to be avoided. These are that:

- (a) intelligence is inherited and therefore constant;
- (b) it is measurable;
- (c) it predicts scholastic prowess;
- (d) children fall into types. (Hayward, 1972).

Fortunately the erroneous idea that differentiation means separating or kraaling out different types of children and assigning to each type its so-called correct course has now been abandoned.

The introduction of differentiation into an educational system has several beneficial effects. Firstly, it encourages to stay on at school children who would otherwise have left on failing a class. Secondly, it aims at finding out what children can do in contrast to filtering off those who cannot go on. As a result, the change to differentiation and comprehensive schooling increases the holding power of the schools. A complicating factor is that the new extra pupils tend to be mainly average and below average ability. This is the sector that has hitherto seldom reached the upper standards of post-primary schools with the result that there have seldom been any concerted attempts to cater for them in the secondary school situation (Hayward, 1972). This is a burning problem in KwaZulu at present as will be indicated in Chapter VII.

In spite of the fact that there is great similarity between people as each was created in God's image, there are nevertheless great differences among them in the sense that they are qualitatively unequal. By the time children enter school the inequalities among them have increased manifold. As they move up the scholastic ladder or mark time the differences increase even further. "This rule of inequality" manifests itself in, inter alia, factors such as varying mental capacities, temperaments, social behaviour, degrees of emotionality, aptitudes, interests and mastery of language (cf. Thomas & Thomas, 1965: 3). These matters illustrate the fact that one child, because of his unique composition, will be able to master what another child cannot or can only partially master. It stands to reason that a state is duty bound to provide for this inequality in the education it offers, so that each pupil is able and inspired to pursue a standard of excellence that is commensurate with his ability, aptitude and interest. Such provision is made by means of differentiated fields of study, curricula and syllabuses which in turn lead to differentiated elaboration of the learning material and differentiation in measurement and the issuing of certificates (H.S.R.C., 1972).

Thus it is a universal fact of life that people differ from one another with regard to capacities with which they were endowed and in the ways in which they give form to the components of the person-structure as an integrated totality in their approach to the reality of life. In the light of this fact education must be offered in accordance with the pupils' capacities or individual qualities, and this means that education must be differentiated.

Now the task of a differentiated system of education is to:

- (1) supply pupils with differentiated education in accordance with their unique capacities to enable them to attain full development;
- (2) supply differentiated education which will link up with the demands which are posed in connection with post-school vocational training;

- (3) give pupils guidance relating to their educational and vocational choices so that the country's manpower needs can also be provided for; and
- (4) lead the youth towards moral and emotional stability which is necessary in order to cope with changing and challenging times (H.S.R.C., 1972).

At this juncture it is pertinent to emphasize strongly that, although it is a most valuable aid to study what is being said, written and done in other countries concerning differentiation, certain reservations must be maintained concerning much of the evidence thus gained, for nowhere does the problem appear to have been solved completely. Perhaps it is even a mistake to speak or think of a "complete solution" to the problem, because what may come near to being the ideal in one area or at one period may not be so at another time. Education has to meet the needs of a constantly changing society. To speak of a finality in this matter would be tantamount to saying that education is a static phenomenon and not a dynamic force which changes and adapts itself to the vicissitudes of human nature. Thus it may be best to seek out what appears in various theories or experiments to be best for a given situation, the requirements of which have been carefully assessed, and then to develop one's own line of experimentation within that framework.

However, there is unanimity all round on one fact, namely, that individual differences among pupils must be provided for. This brings us to the crucial question in this study: what is the position in Bantu Education in this regard?

The picture seems to be different in Bantu Education. The Black educational system appears to be out of step with the rest of the world in respect of differentiated education. Without a properly organized system of differentiated education inevitably the gifted and the below average pupils will suffer. Needless to say, in a non-compulsory school system failure by pupils to cope with the learning situation becomes an automatic culling process. Modern pedagogy insists that no child should

be summarily dismissed as ineducable. The call by Black leaders and their communities for universal free, compulsory education has become persistent in recent times. The reaction of the Department of Bantu Education to this call is one of cautious acknowledgement of the inevitability of such an eventuality in due course (cf. Bantu Education Journal, October, 1972). During the 1975 deliberations on the Budget Vote for Bantu Education in the White Parliament the Deputy Minister for Bantu Education stated that compulsory education for Blacks was the ideal towards which his Department was moving. He revealed that the introduction of free schooling immediately would cost an extra R159 million in salaries and R415 million for extra classrooms. In the interest of Blacks, the Central Government is urged to "invest adequate sums annually in a fund designed to reach this goal within a reasonable time" (Natal Mercury, 9.5.75: 16). It is not contended that compulsory education will be a panacea for all current problems affecting Blacks. However, it is a gospel truth that education and training are common denominators in striving towards higher productivity and in the relentless fight against inflation, and, moreover, they promote self-fulfilment in the varied occupational pursuits.

The new approach to secondary education and the provision of systems of education to provide opportunity for boys and girls according to their ability and interest as outlined in the foregoing call for an urgent investigation and planned application of these in KwaZulu. There is an urgent need for a study that seeks to come to a fuller understanding of the Black child in the teaching-learning situation so as to teach and educate him effectively. Differentiated education offers this unique boy or girl the opportunity for the gradual opening up of all possible human potentialities. Consequently, from a psycho-pedagogical perspective the child is looked at particularly from the viewpoint of the psychology of becoming (child psychology) during his school years, and as certain potentialities unfold into reality during certain periods, there must of necessity be differentiation of subject content and of methods of presentation during the separate school phases. These "certain periods"

denote the primary school as well as the secondary school years (cf. H.S.R.C., 1972). The differentiating of potentialities assumes a specific form at certain times in a child's life with attendant signs. These characteristic signs can be regarded as pointers to the need for change of the means of education. The content and method of presentation of each piece of reality must be so different for each individual pupil that it makes a direct appeal to him which he must, and wants to, answer actively by exploration. This is in accordance with Langeveld's view that the child is someone who wants to be somebody himself.

The initial step towards solving the problem under discussion seems to lie in first undertaking a fact-finding study into the working of the Bantu Education machinery, particularly at secondary school level, with special reference to the KwaZulu area. According to the Bantu Homelands Constitution Act No. 21 of 1971, legislative assemblies may make laws in respect of various matters including education. That is, the KwaZulu Legislative Assembly has jurisdiction over all educational matters except higher education which is governed by Act No. 43 of 1969 which pertains to the University of Zululand. However, it should be pointed out that, although theoretically KwaZulu was granted control over her educational system on reaching legislative assembly status in 1972, in practice hitherto the status quo has been maintained particularly in the sphere of the curriculum, syllabuses, examinations and certification. That is to say, by and large, at this stage KwaZulu education and Bantu Education at secondary level are identical.

Seeing that a wise man learns by experience but a wiser man learns through the experience of others, it will be necessary to take a broad look at developments elsewhere in educational differentiation in order to arrive at valid conclusions. For this purpose a survey of differentiation in England and White South Africa will be undertaken in order to determine existing trends. That is, two educational systems, one overseas and another local, will be reviewed. In each case emphasis will be laid on secondary education which is the primary problem

area for this study. This leads us on to a consideration of the purpose of this investigation.

#### 4. OBJECT OF AND MOTIVATION FOR THE STUDY

Throughout the history of subject peoples down the ages, be they Anglo-Saxons, Brazilians, Egyptians, Americans or Afrikaners, there is always a phase of reorganization of the status quo following the granting, by the metropolitan power, of the right to self-determination. This is a fact of life which is inevitable, so that the "golden rule" or the best intentions of the outgoing metropolitan power are irrelevant to this reality. The different philosophies of the foreign governor and the indigenous subjects rule out the possibility of identity of purpose and ideals, especially in the sphere of education. The indigenization of the educational system invariably follows the departure of the ruler, whether the departure is a peaceful one or is the culmination of a blood and iron struggle.

KwaZulu has already indicated in no uncertain terms that she would indigenize her educational system in due course. The present study might provide the factual basis which is essential for such a step. It is interesting to note that in 1973 the Transkei Government appointed the Kakana Commission to investigate the whole educational set up in the territory and its terms of reference included, inter alia, criteria for a differentiated school system.

This study has a dual purpose: firstly, to conduct a survey of developments and existing practices in non-Black education systems in respect of differentiation in order to determine the measure of success achieved by these systems and innovations connected therewith in the provision of secondary education, and secondly, to make suggestions based on conclusions drawn from the study for a differentiated secondary education system which would be feasible for KwaZulu. The motivation for the selection of the abovementioned systems is stated below.

Britain will be selected on the grounds that it is a world power with a formidable history, and it wields considerable influence in the contemporary international scene, and the Anglophone African countries' educational systems derive directly from the British system. South Africa, on the other hand, is the "mother" of the Homelands. It has a modern educational system which is being adapted at the moment along the lines of effective differentiation. Therefore, scrutinizing educational developments in these two areas should make profitable study.

An additional motivating factor for undertaking an investigation of this nature was the desirability to procure a global picture of how other education authorities cope with the various administrative and pedagogical problems arising from the needs of children during the various phases of their development from childhood to adolescence. Although the spotlight is on the differentiation phenomenon at secondary school level the concomitant problems with which the school phases are fraught cannot be ignored. If we were to isolate the problems which are fairly generally encountered in the provision of secondary education, these could be stated as follows (Mans, 1970):

- (1) The best way to link the primary with the secondary phase;
- (2) The most suitable time in a pupil's life to transfer from primary to secondary education;
- (3) The best method of selecting pupils for secondary education in systems where certain specialized types of secondary education are provided;
- (4) The best way to meet the demands of diversity among adolescents - the forms of organization, grouping, and the provision of courses diversified in level and in aptitudes and interests;
- (5) The most effective secondary school system;
- (6) The correct balance between general and vocational education; and
- (7) The most equitable examination system.

Teachers and education authorities even in our own country have encountered these problems in varying degree. Any attempt to throw some light on them must of necessity be welcome as a move in the right direction.

This work does not pretend to be a blueprint for Bantu Education or a manifesto for KwaZulu education, but it is intended to be a modest contribution in an aspect of African education which is deemed very important but has not yet received the spotlight of research. In this sense the study is breaking new ground. Perhaps its appearance at this stage of constitutional development of KwaZulu may prove valuable with regard to contemplated changes in the educational system.

At this stage attention is turned to the method of investigation followed in this study.

##### 5. METHOD OF RESEARCH AND PROCEDURE TO BE FOLLOWED

The method of research employed in this work is the survey or descriptive research. The primary objective of the survey is the investigation of the present status of the phenomena (Mouly, 1963). It seeks to uncover the nature of the factors involved in a given situation and to determine the degree in which they exist, and attempts to discover the links or relationships which exist between the factors (Lovell & Lawson, 1970). In other words, descriptive research, whilst based on tabulation, must go beyond the mere gathering and tabulating of data. It involves an element of interpretation of the meaning or significance of what is described: it is descriptive as well as evaluative.

The chief instruments of descriptive research are the questionnaire and the interview. The questionnaire has been described as "a form of interview on paper" (Nisbet & Entwistle, 1970: 44). These two techniques are "most nearly interchangeable" (Mouly, 1963: 239). The main handicap of the mailed questionnaire is that members of the lower intellectual and educational groups tend not to answer and, if they do, to introduce an element of invalidity by their inability to interpret the questions or to express their responses clearly. This problem is not likely to arise in this study since the respondents that the researcher has in mind will be the chief education planner,

chief inspectors and secondary school principals.

The research project itself will be conducted in two parts. Firstly, a critical scrutiny of developments in non-Black education systems will be undertaken. The main sources of information in this regard will be published and unpublished literature in the form of books, theses, journals, reports, and newspapers as well as personal interviews. Secondly, existing practice in differentiation in KwaZulu schools will be subjected to a detailed critical examination. At this stage (1975) the "Bantu" and KwaZulu schools are still identical in every respect except for administrative control. For the purpose of this research it will be necessary to examine the position in all secondary/high schools which are four years or more old. These schools will include urban, rural, boarding and day schools. This part of the investigation will be conducted by means of questionnaires which are to be preceded by personal interviews with a number of principals of the schools concerned chosen at random. These questionnaires-cum-interviews or checklists will serve as a pilot study to determine difficulties in respect of language and concepts and to obtain first hand feedback from the selected group. On the basis of this feedback the final questionnaire will be compiled. The questionnaire survey is designed to determine existing practice in the secondary/high schools and to obtain the views of the headmasters and senior officers on the different aspects of the practical implementation of differentiation procedures. A critical analysis of the responses will constitute an important part of this study.

## 6. PROGRAMME OF THE STUDY

Chapter I sets out the scope and objectives of the study. In Chapter II a theoretical exposition is given by way of reviewing relevant literature with special emphasis on the philosophical-pedagogical perspective, the psycho-pedagogical perspective and the didactical-educational-planning perspective. Chapter III presents a discussion on two crucial factors

involved in differentiated education, namely, the psychology of ability grouping and the adaptation of instruction for ability groups. Chapter IV gives a survey of differentiation in the United Kingdom, while Chapter V surveys the problem in South Africa, particularly in Natal and the Transvaal. Chapter VI involves an intensive use of the survey method in respect of the present educational situation in KwaZulu. In the last chapter the different threads are brought together in the form of a summary of the findings of this study, the conclusions derived therefrom, and educational implications thereof. At the end of each chapter there is a list of references pertaining to that particular chapter only. A general bibliography appears at the end of the thesis.

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7. REFERENCES

1. Bozzoli, G.R. (1972) : "The real cost of education", presidential address delivered to the S.A. Association for the Advancement of Science conference held in Johannesburg on July 4, 1972.
2. Cilliers, J.L. (1975) : Education and the Child, Durban: Butterworths.
3. Cupido, A.J.J. (1969) : The implementation of a system of differentiated education in high schools for Coloureds, unpublished M.Ed. dissertation, University of South Africa.
4. De Clercq, J.L.W. (1973): KwaZulu en Konsolidasie, University of Zululand.
5. Davies, J.E. (1958) : Recent trends concerning examinations, promotion and differentiation in secondary education in European countries, Canada and the U.S.A., and the significance of these trends for secondary education in the Transvaal, unpublished D.Ed. thesis, University of Pretoria.
6. Dept. of Bantu Education: Bantu Education Journal, (1972) October 1972.
7. Dewey, J. (1959) : Democracy and Education, New York: MacMillan Co.
8. Duminy, P.A. (1968) : African Pupils and Teaching Them, Pretoria: J.L. van Schaik Ltd.
9. Durkheim, E. (1956) : Education and Sociology, Glencoe: Free Press.
10. Erasmus, O.C. (1970) : "Die skool en Aktualiteitsvraagstukke" in Sonnekus et al.: Psychologia Pedagogica Sursum, Stellenbosch/Grahamstown: University Publishers & Booksellers (Pty) Ltd.
11. Fischer, J. (1962) : "The Role of Education in National Goals" in Hanna, P.R. (editor): Education: An Instrument of National Goals, New York: McGraw-Hill Book Co.
12. Frandsen, A.N. (1961) : Educational Psychology, New York: McGraw-Hill Book Co.

13. Hayward, F. (1972) : "The role of the curriculum in differentiation" in Nel, B.F. (ed.): Differentiation, papers read at 10th Congress of the S.A. Association for the Advancement of Education held in Durban from 20th - 22nd January, 1972. Publication Series of S.A.A.A.E. No. 6.
14. Hayward, F. (1973) : "The Nature of Educational Theory" in Journal of Education, Vol. 5, No. 1.
15. Human Sciences Research Council (1972) : Report of the Committee for differentiated education and guidance in connection with a national system of education at primary and secondary school level with reference to guidance as an integrated service of the system of education for the Republic of South Africa and South-West Africa - Part I. Chairman: Dr. P.M. Robbertse, Pretoria.
16. Ilanga (23.7.75) : "Isinqumo seNkatha ngenkululeko: ngeke icelwe".
17. Jowitt, H. (1932) : The principles of education for African teachers in training, London: Longmans, Green & Co. Ltd.
18. KwaZulu Dept. of Education and Culture (1973) : The Education Manifesto of KwaZulu.
19. Lovell, K. & Lawson, K.S. (1970) : Understanding research in education, London: University of London Press Ltd.
20. Lynch, J.R. (1952) : Differentiated education in the Transvaal Secondary school 1900 - 1950: a critical analysis of the attempts made to provide differentiated secondary education in the Transvaal during the period under review, with a suggested solution of the problem, unpublished D.Ed. thesis, Potchefstroom University.

21. Mans, P.W. (1970) : A comparative and critical study of developments in differentiation and examinations in European secondary education in Natal and Rhodesia with special reference to existing practice in selected groups of schools in Pietermaritzburg and Bulawayo, unpublished M.Ed. dissertation, University of Natal.
22. Mouly, G.J. (1963) : The Science of educational research, New York: American Book Co.
23. Natal Mercury (9.5.75) : "African Education", Editorial
24. Nel, B.F. (1974) : Fundamental Orientation in Psychological Pedagogics, Stellenbosch/Grahamstown: University Publishers & Booksellers (Pty) Ltd.
25. Nisbet, J.D. & Entwistle, N.J. (1970) : Educational research methods, London: University of London Press Ltd.
26. Prozesky, M.N. (1967) : The comprehensive high school concept with particular reference to a selected group of private and government-aided boys' schools in Natal, and suggestions for its developing implementation, unpublished M.Ed. dissertation, University of Natal.
27. Ross, J.S. (1966) : Groundwork of Educational Theory, London: Harrap & Co.
28. Shiels, F.H. (1963) : A critical analysis of methods of selecting and streaming secondary school pupils and some suggestions towards solving the problem in Natal Schools, unpublished Ph.D. thesis, University of Natal.
29. Sonnekus, M.C.H. (1974) : The Learning Child, Johannesburg: McGraw-Hill Book Co.
30. Stenhouse, L. (1967) : Culture and Education, London: T. Nelson & Sons Ltd.
31. Strauss, H.J. (1969) : Christelike Wetenskap en Christelike Onderwys, Bloemfontein: SACUM Bpk.
32. Taljaard, J.A.L. (1974) : "Fenomenologiese Pedagogiek" in Fokus, Vol. 2, No. 4.

33. Thembela, A.J. (1972) : An investigation of some of the factors which influence the quality of teaching in African schools, paper read to the University of Zululand African Staff Association on October 11, 1972.
34. Thomas, R.M. & Thomas, S.M. (1965) : Individual differences in the classroom, New York: David McKay Co., Inc.
35. Transvaal Education Dept.: (1955) : Report of oversea mission in connection with differentiated secondary education. Chairman: Dr. A.H. du P. van Wyk. Pretoria: Government Printer.
36. Transkei Government : Report on Standard of Education in the Transkei. Chairman: G.L. Kakana. Umtata: Dept. of Education.
37. Transvaal Education Dept. (1973) : Education Bulletin, Vol. XVII, No. 1
38. Transvaal Education Dept. (1974) : Education Bulletin, Vol. XVIII, No. 1
39. U.N.E.S.C.O. (1962) : "World trends in secondary education", report reprinted from World survey of education - secondary education, Zurich: U.N.E.S.C.O.
40. Union of South Africa : Report of the commission on technical and vocational education. Chairman: Dr. F.J. de Villiers. Pretoria: Government Printer.
41. Van Zyl, P. (1973) : Opvoedkunde, Johannesburg: Boekhandel De Jong (Edms.) Bpk.

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**CHAPTER II**

**DIFFERENT PERSPECTIVES**

**ON THE INDIVIDUAL AS**

**A BECOMING PERSON**

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## CHAPTER II

### DIFFERENT PERSPECTIVES ON THE INDIVIDUAL AS A BECOMING PERSON

#### VIS-À-VIS DIFFERENTIATED EDUCATION

"We must hold that a scheme of education is ultimately to be valued by its success in fostering the highest degrees of individual excellence of which those submitted to it are capable".

(Nunn, 1956: 12)

#### 1. ORIENTATION

Seeing that the individual child as a becoming person grows up in a specific society, the members of that society base their concern with this child on a specific philosophy of life. For this reason a philosophical-pedagogical appraisal of the child as a becoming person is necessary. But within this society the "becoming persons" differ from one another in respect of abilities, aptitudes, achievements, talents, etc. Therefore, this necessitates a psycho-pedagogical reflection on the individual as a becoming person.

When we meet this becoming person in the formal school situation, we have to plan his teaching properly. Therefore, a consideration of the didactical perspective on this problem is essential. In this connection educational planning is vital.

In the light of the foregoing a discussion of pedagogics in general becomes necessary.

#### 2. THE PEDAGOGICAL PERSPECTIVE

In Chapter I (section 2.2.1) brief reference was made to pedagogics as an autonomous science. There was also mention of the facts that some educational thinkers do not accept this viewpoint and that other educationists object to the "neutrality" of this science on religious grounds. In this section pedagogics

is discussed with special reference to the problem at hand.

The suffix in the term pedagogics derives from the Greek word "agogos" which means to lead or to accompany, and the prefix refers to the Greek word "pais" or "paidos" meaning child. Man is essentially a dialogue. He derives his humanity or manhood from the social environment (Mitsein). In other words, Dasein is Mitsein, that is, being-there is being-with-others. The unfolding of an individual's personality is accompanied, guided or directed and finally judged by fellowmen in the light of an image of man conceived and described in terms of the philosophy of life of the group concerned. Pedagogics is thus the scientific result of educationists' efforts to attain true knowledge of the child - accompaniment phenomenon (Afrikaans: kinderbegeleiding) in order to aid (teach) the child more effectively (cf. Nel, 1975).

Redden and Ryan (1956: 39) define the "science of education" as "the systematized body of truths concerned with the best and most efficient means of bringing this influence (of the mature person upon the immature person directed toward the union of the educand with his Creator as final end) to bear in order that the individual may attain his proper place and purposes in this life, and eternal happiness in heaven".

Gunter (1964: 23) concurs with this definition except that his standpoint is neutral as he does not emphasize the religious aspect as above. He holds that "pedagogics or the science of education seeks to determine the nature of educational reality and why it is what it is and also tries to furnish guidelines for the improvement of educational practice". In this connection Perquin's (1964) weighty pronouncement is significant, namely, that the light in which the pedagogue views everything is the child's progress towards adulthood.

As previously mentioned in the first chapter, writings on pedagogics reflect two notions of this concept, viz.:

- (i) Some thinkers view pedagogics as a "pure", neutral, objective science in the tradition

of all (mainly natural) sciences.

- (ii) Other educationists, on the other hand, maintain that the "science" of education must also be prescriptive i.e. propagandistic in nature.

Exponents of both notions acknowledge the fact that education is for the individual child en route.

Whatever one's views are regarding the science of education (neutral or biased), it is the educator, in the final analysis, who is vitally concerned with the child's progress towards adulthood. It is actually the theme of this study that differentiated education offers the best medium for the actualization of the child's potentialities.

In the light of the foregoing reflection on the pedagogical perspective, some part-disciplines of pedagogics, which are relevant to the present study, are discussed below. A close study of each of these perspectives should contribute valuable information and understanding towards the task at hand (cf. O'Connor, 1958).

### 3. THE PHILOSOPHICAL-PEDAGOGICAL PERSPECTIVE

#### 3.1. Introductory

This part-discipline is commonly known as philosophy of education. It involves a radical reflection into the innermost character or foundation of that which presents itself or appears as education. For this reason it may be regarded as the basic discipline of pedagogics. A properly grounded consideration of the educational phenomenon in its entirety is therefore necessary for the delimitation of those areas forming the part-disciplines of pedagogics; and also for the choice of methods by which the subject may be studied (Nel, 1970). Nel (1970) observes that philosophy of education, being the consideration and radical interpretation of the entire field, is that

very part-discipline which emphasizes the unity of all branch-disciplines, and thus earns the name of "fundamental pedagogics", a term which is now firmly established in many university faculties of education.

Thus philosophy of education has to fathom theoretical questions and relate its findings to the practical pedagogical situation. Van der Merwe (1970) submits that it is the task of the philosophical-pedagogical perspective to design pedagogical criteria, to discern the universally true categories, but also to describe how these categories can be given practical meaning. Although these descriptive pedagogical categories may be revealed in a phenomenological approach, education in reality takes place on the basis of a variety of philosophies of life.

Behind every sound practice, not fumbling, there is a theory. Indeed, theory without action or practice is futile while at the same time practice without theory is fatal as it so often happens with quacks of various types. The physician, the musician, the engineer, the educator - all these are practitioners whose activities are based on systematized theories. Without theory the moon-landing or the heart transplant successes would have been impossible. Life itself can end in disaster if it lacks direction. If we are to live intelligently, we need a "theory" for life as a whole, that is, a philosophy of life.

Education, as a form of practice, has both a theory and a "philosophy" behind it. The latter is referred to as philosophy of education which derives from one's philosophy of life. A clear distinction must be drawn between theory and philosophy of education.

Nowadays educational theory and educational philosophy are being recognised and pursued as separate activities, and their relationships to each other and to psycho-pedagogics, socio-pedagogics, etc., are being clarified (Hayward, 1973). Theory of education is based on practical considerations whereas philosophy

of education is metaphysically oriented.

Theory of education is that activity which is undertaken when educators and planners decide what best means to adopt - when they decide how to examine, how to build a school, how to design courses, how to train teachers, how best to teach a subject, etc. The decisions are then acted upon by the education planners who do the best they can with their limited resources. The activity called theory of education (or theorising on education) is one of the vital functions of the educationist (who is more than a teacher). It is certainly not philosophy of education, but no person can escape the influences and consequences of his own and his fellowmen's philosophy of life.

Good theory proves its existence if it leads to sound practice. In effect, educational theory should determine precisely what shall and what shall not be done in education. As Hayward (1973: 20) puts it, "the value of the theory will be the goodness of the educational practice, the acceptability of the outcomes".

On the other hand, philosophy of education lies much deeper than theory of education. In fact, philosophy cannot prescribe at all on any practical issues (Hayward, 1973). Admittedly, philosophical beliefs do make their own distinctive contribution to educational theory alongside other disciplines.

Since education is the business of learning how to live, a people's philosophy of education is naturally in accord with their general philosophy of life. A brief delineation of the connection between a philosophy of life and a philosophy of education is given below as well as the relevance of philosophy of life to the task in hand.

### 3.2. The connection between a philosophy of life and education

Many thinkers down the corridors of history like Plato,

Aristotle, Locke and Kant, to mention only four, have discussed education in their works as subsidiary to their main purpose. Dewey and Gentile are the only two modern philosophers who have identified philosophy and education (cf. Curtis & Boulton, 1966). Dewey defines philosophy as the "general theory of education". In his Outline of Pedagogy and Philosophic Science Gentile states that in all times philosophy has been found to hold the problem of education in its bosom. The problem of education is really twofold. It is concerned with both the actual, man as he is, and the ideal, man as he ought to be. The resolution of this dualism is to be found in philosophy. It is in bringing together these two aspects of human nature that philosophy and education become identified (Curtis & Boulton, 1966).

Thus philosophy and education are correlated but also distinct. Philosophy is theoretical and speculative, whereas education is practical. Philosophy poses questions, scrutinizing factors of reality and experience, many of which are involved in the teaching-learning situation, whereas the actual process of educating is a matter of actively dealing with these factors, that is, teaching, planning and organizing programmes, administering organizations, constructing curricula, effecting measurement and evaluation, etc.

Philosophy and education are related in two main ways. Firstly, philosophy yields a comprehensive understanding of reality, a world view, which, when applied to educational practice, lends direction and methodology which are likely to be lacking otherwise. Secondly, by way of reciprocation, the experience of the educator in nurturing the young places him in touch with phases of reality which are considered in making philosophic judgments (Butler, 1968). Because of this, those who are actively engaged in educating can advise philosophers about certain matters of fact. In other words, while philosophy is a guide to educational practice, education as a field of investigation yields certain data as a basis for philosophic judgments.

The conclusion flowing from the foregoing is that every

form of education as realized in practice is based on a theory of education which in its turn depends on a philosophy of life. In other words, the philosophy of life guides educational theory and practice. As there are divergent conceptions regarding the fundamental problems of life, so there are also different philosophies for education.

A philosophy of life then is the fond belief an individual holds regarding the origin, essence and destiny of all that exists. It is a personal view, belief and conviction in connection with life as a whole. As no one is born with a set of beliefs or opinions, it stands to reason that a philosophy of life is acquired from one's milieu as part of one's cultural heritage. Thus a philosophy of life is as much a part of the historic past as of the individual present. Because human beings are not isolated selves but persons-in-society, it goes without saying that a philosophy of life is not only a personal matter but is also a social value or group concern just as religion is both personal and communal.

The fact of the close relationship between a philosophy of life and a philosophy of education can be described as "a necessary relationship" (Redden & Ryan, 1956: 16). In fact, education implies a philosophy of life. The saying that "as we look upon life so we teach" (Brubacher, 1965: 1) implies that any form of practical education always reflects a certain outlook on life. Likewise, the education of the KwaZulu child should also be based on a sound philosophy of life. A warning by Marique (cited by Redden & Ryan, 1956: 16) in this regard is pertinent:

"A system of education might be scientifically adequate and very efficient, the principles underlying it might be sound, in so far as their application would lead to the desired end, yet the whole spirit and trend of the system might be fundamentally wrong, because they are derived from a false philosophy".

### 3.3. The necessity for a specific philosophy of education as a point of departure

Every system of education is based on a philosophy of life.

When a developing nation is freed from colonial shackles and is granted the right to design and develop its own educational system, a process of re-awakening ensues; a process of self-discovery is set in motion. No metropolitan power, however well intentioned, can ever formulate an authentic philosophy of life for a subject community as a basis for their education. In the 1940's a Dutch colonial missionary (Tempels 1969: 169) stationed in the then Belgian Congo (now Zaire) confessed:

"We thought that we had children, 'great children', to educate; and that seemed easy enough. Then all at once we discovered that we were concerned with a sample of humanity, adult, aware of its own brand of wisdom and moulded by its own philosophy of life".

Needless to say, he who is to project the African image in all its inimitable dimensions, must be unmistakably of the African experience. What then should be the philosophy behind the embryonic KwaZulu education?

Addressing an annual teachers' conference, one KwaZulu educationist declared that "a new philosophy of life must be formulated and a dynamic nation will arise" (Themabela, 1973: 2). This statement must not be taken literally to mean presenting a ready made "philosophical recipe". At best, one can formulate a theory of education which is a theory (plan) for teaching. Indeed, no man can ever hope to formulate a new philosophy of life in the same way that nobody can ever deliberately create a new language, a task which would be much easier to accomplish. For this reason attempts by some White employers to create a "Bantu lingua franca" (referred to as "Fanakalo") for Black employees failed dismally. A philosophy of life is a dimension or aspect of culture created by society in the life time of the society. It is a group value which cannot be prescribed by any particular individual or individuals. The best that any single person or group of persons (sector of society) can do is to articulate the dormant (latent) philosophy that lies in the heart of the community. It is there: it exists as social heritage. The abovementioned educationist and other leaders have

expressed the desirability of articulating a viable philosophy of life and of education in KwaZulu. This is a commendable development.

Themabela (1973) has intimated that African education must take note of the fact that a dominant culture from outside had brought a modern form of education into the traditional culture. This foreign culture, which has political power and economic supremacy, has influenced the indigenous culture in four main areas, namely, skills of literacy and numeracy, use of an alien language for effective communication and acquisition of accumulated knowledge, Christian ethics and foreign economic and political systems. This irreversible process of acculturation has brought about some transformation of values and norms. A new image of man as well as a new philosophy of life have emerged.

### 3.4. The changing society and the emergence of a new philosophy of life

The traditional culture was characterized by, inter alia, the closed custom-bound society as opposed to diversity, extended family as opposed to the nuclear family, collectivism or communalism versus individualism, marked co-operation versus competition, subsistence economy versus complex money economy, a leisurely mode of existence versus the clock rush, etc. The advent of the dominant scientifically-technologically orientated culture had a profound impact on the receiving indigenous African culture and the latter could never be the same again. Its modernisation along the lines of the Western cultural tradition and the best it contains is inevitable. Technology is inseparable from a money economy. It assumes, inter alia, a competitive society, obedience to the clock and that the individual can detach himself from the matrix of his family and village and exercise his individuality. This once more is to emphasize the emergence of a new image of man, in particular the contemporary citizen of KwaZulu.

An eminent American scholar, R.M. Hutchins (1970) declares

that the main aim of education is not manpower but manhood, that is, adulthood. Since a child's life is naturally an unrelenting progress towards adulthood, his education must help and guide this progressive advance, so that in the last analysis, education derives its meaning from the idea and the reality of adulthood for its ultimate purpose. Therefore, education in practice attempts to offer the help that every child particularly needs in order to acquire the personal qualities demanded by adulthood. The concern of education is with the child as a present existing reality viewed in the light of his own adulthood, that is, in the light of what eventually he ought to become. Essentially and intrinsically education is thus dealing with an image of manhood as its comprehensive and ultimate aim; and as a concern with humanity, it must constantly endeavour to answer the basic question as to the nature and destiny of man (Nel, 1970).

In other words, adulthood is not a static concept but a dynamic phenomenon which changes with time and culture. Thus we may speak of the changing concept of man down the ages, of preliterate adulthood or of scientific-technological adulthood.

Every culture and every period of history has its own particular demands upon the adult sector, and, therefore, upon education. Thus the criteria of adulthood in the African tribal society are in sharp contrast to the requirements and demands of the present increasingly Western way of life. A new image of man, representing a westernized African personality in the contemporary South African setting, has emerged. Education must be attuned to this new personality of the contemporary era.

It was Edward Blyden who coined and first used the now famous term "African personality", thereby seeking to point out that the African has that in him which makes him proud to be African and nobody else. In recent times this pride manifests itself in the slogan "black is beautiful" and in the "black consciousness" movement, and in the reluctance of parents to give their children non-African names as in the past. The late President Nkwame Nkrumah of Ghana popularised Blyden's concept and stressed that what Africans wanted is education that will

develop this concept and lead to complete self-realization. Incidentally this is the central aim of KwaZulu education as contained in its manifesto (vide chapter 1, p. 3 ), and Dr. Nkrumah's declaration in 1957 holds equally true for KwaZulu today: "Our whole educational system must be geared to producing a scientifically-technically minded people" (cf. Hutchins, 1970: 52). In this regard Duminy (1968: 48) forecasts that "in Africa will then, most probably, be established something new, something 'typically African', i.e. a modern African civilization in the true sense of the word". In the KwaZulu context leaders of the recently reconstituted Cultural Movement (Inkatha) have stressed that "instead of Africans endeavouring to be carbon copies of others they want to be distinctly themselves" (Bengu, 1975: 16).

Just as the relatively static culture patterns of the traditional Zulu community with its inflexible codes and rigid way of life has given way to the dynamic existence as found in Western civilization with its high premium on personal freedom, responsibility and accountability, so the new adulthood in a Western-oriented society demands that through a new education the African child as becoming-adult shall be equipped to proceed independently in a highly diversified and polyvalent world where emphasis falls on the personal instead of the collective. The traditional characteristics are gradually being replaced by a westernized society with new aims and a new value system. The traditional collectivistic view of life is giving way to a more rationally objective and individualistic attitude to life, because Western culture emphasizes the individual.

As society advances from a "primitive" to a modern stage, so the autonomy of the individual increases. The resultant weakening in social cohesion is made up by an increase in relationships based not upon kinship but upon contracts. In this connection, Swift (1969) observes that the change is characterized by increasing importance of specialization and of rationality applied to the organization of social life by members of society. This change occurs through differentiation

in the functions of major institutions and the consequent growth of associations aimed at furthering specific interests. Thus there is a shift from a communal to an associational society. Furthermore, increasingly, the dominant value theme in advanced society is mastery of the world around - hence the importance of school education which is designed to develop the individual's potentialities.

The foregoing reflection indicates that adulthood has assumed a totally different character and emphasis has shifted from an inflexible conformity to a critical detachment and the assertion of individuality. What is called for is responsible independence and a personal accountability and response to situations in ways which are at once appropriate to current demands and in accord with the adopted value scheme (Nel, 1970). In the light of this development in KwaZulu contemporary society differentiated education now becomes a burning necessity.

Therefore, in contrast to the traditional indigenous education the aim or goal of the new Western-oriented education is the self-realization of the individual. Tribal education aimed at producing uncritical conformity to static patterns of living whereas the new code demands deliberate education of the individual conscience which represents an internalization of propriety, a consciousness of individual obligation, an acute awareness of what ought to be. While tribal education aimed at initiating the oncoming generation into the conventional behavioural patterns, the task of education vis-à-vis the new image of adulthood in an open westernized society is to bring the person to an understanding and acceptance of personal duty, to make him conscious of the new demands of propriety, and to guide him towards recognition of his responsibilities as a free person, that is, towards a more conscious identification with the ideals of his community and its particular philosophy of life (Nel, 1970). In short, collective responsibility must give way to the adoption of a personal stand. The human categories of freedom, responsibility, a sense of accountability and directedness towards the future as historicity and as a being-called-upon are salient features of the new education and the

new adulthood.

In the South African context the alien culture, as already pointed out above, has had a profound influence on the indigenous culture, especially in these spheres: politics economics and religion. The metropolitan power has introduced a democratic form of political organization which lays a high premium on individuality, a capitalistic money economy and Christianity. A new system of values has emerged in the African community.

The abovementioned "ideals" and the community's new philosophy of life, changed value system, religion, etc., need some amplification. Although acculturation is inevitable and even desirable, "we cannot benefit from what we borrow from the culture of other people unless we uphold and retain all that is best in our own culture" (Buthelezi, 25.9.71). In the scale of values in the traditional African culture courage, truthfulness, decency and a feeling for fellowmen took precedence. It is vitally important for a society in transition like that of KwaZulu to be certain of its core of values in order that it should be able to stand the disintegrating power of change (cf. Ottaway, 1957).

In this regard it has been stated that "we need to look at ourselves and to plan our development from our own Black perspectives, and not from all-White perspectives, as has been the case during all the (past) years" (Buthelezi, 1975 a : 6). A developing Black community must liberate itself from what has been called "mental whiteness" (Bengu, 1975), i.e. a sense of rejection of things African, or "Bantu mentality" (Ndaba, 1975), i.e. a blind acceptance of a "divinely" bestowed Black inferiority. The KwaZulu community's ideals and aspirations are embodied in the Cultural Movement (Inkatha) and expressed in these terms:

"Inkatha does not attempt to re-live the past or find a way of switching the clock back, it merely declares that since culture embraces the totality of values, institutions and forms of behaviour transmitted within a society, as well as mate-

rial goods produced by man, national unity and models of development should be based on values extrapolated from the people's culture and adapted to present day needs and situations".

(Bengu 1975: 16).

The KwaZulu people, just like citizens of other racial groups, want their children to acquire various skills to enable them to participate in the development of their country. They also want them to have the good things of this life as abundantly as anyone else (Buthelezi, 1975a).

The people's rejection of the notion of being "carbon copies of others" has also manifested itself in the sphere of religion. Leading KwaZulu theologians, including Bishop Dr. Alpheus Zulu (1972) and Rev. Dr. Manas Buthelezi (1974) have taken pains in their public utterances and in their preaching and administering of the gospel to make religion relevant to the African situation. Religion, like education, cannot operate in a vacuum.

Regarding the economics of the territory, the KwaZulu Chief Minister, Umtwana M.G. Buthelezi (1975b: 1) has spelled out the type of economy envisioned for the territory, which would satisfy the peculiar needs and suit the life style of his people, namely, "an economy based on a blend of a free enterprise with a pinch of communalism". African communalism, which must not be confused with communism, is a unique form of socialism, emanating originally from Tanzania and subsequently partly adopted by Zambia. While not discouraging free enterprise, it also ensures that the people as a whole have a stake of sorts in the wealth of their own land. This would be attained through state-owned organisations which would have controlling interests in all main economic enterprises. The profits earned would thus be for the nation and would be ploughed back into the country for its development rather than for the enrichment of some individuals.

In the formulation of a system of education for KwaZulu

a specific philosophy of life will have to serve as a point of departure. There will emerge a communal aim which should serve as a broad foundation for moulding the young in such a way that they will achieve self-realization and render service to their fellowmen, country, nation and their God.

One's outlook on life is determined by the nature, substance and validity of values, and one adopts an attitude on the strength of a structure of value priorities or a hierarchy of values. Moreover, one's attitude to life primarily determines one's actions in life, and one's own actions and those of others are judged on the basis of such attitude. In the last analysis, the attitude to life forms the basis for the individuality of nations. The term "citizen of a country" immediately implies a certain outlook or attitude to life peculiar to that country. An American, an Anglo-South African and a Briton will exhibit different outlooks on life though they may all speak the same language.

Thus "education" in a neutral milieu is unthinkable because it would lack content and direction, and therefore it cannot be described as education. Where education occurs, this is always done in, by and for a particular cultural group and in a specific national context. In the primary educational situation, viz. the family, the child is introduced to and nurtured in the cultural atmosphere of the nation. In fact, the family is the nucleus or cradle of a nation. This process is continued in the secondary educational situation i.e. the school. Thus a good school is national in the sense that it stands in the centre of national life; it embodies and radiates the best and noblest in the national life and bears a national character. It stands in a positive relationship to the country and nation with its traditions and aspirations, its past and future, its needs and problems (cf. Gunter, 1970).

In developing communities (like KwaZulu) there is the problem of the yawning discontinuity between the primary pedagogical situation in the traditional home and the secondary

(very artificial) situation based on a modernized culture, an alien content altogether. This phenomenon would be more pronounced in rural communities than in urban ones. The implication here is that quite a significant number of pupils might have one foot in traditional (home) culture and the other in modern (Western) culture. Because school education is based on an alien culture, the bulk of the Black pupils could be described as culturally deprived. Badenhorst (1972: 201) has made a study of this problem in KwaZulu and has come to the conclusion that, inter alia, "there are signs of under-actualization of learning possibilities as a result of ... unfavourable lived-experience of historicity, the strangeness of the learning matter and the ... unfavourable pedagogical and learning relationships". Because the African child is involved in his learning activities as a unique totality, he suggests that a phenomenological-existential method of approach based on a modern 20th century philosophical anthropology is the most suitable and effective to deal with such a pupil. In other words, the point of departure in teaching the African child should be a consideration of his situatedness, and the teacher's methods should be geared towards this end and the content of his education should be enriched in order to satisfy this desideratum. In this way disastrous consequences of a "yawning discontinuity" will be averted. It must be emphasized that the occupational destination of the African is in the Western orientated economy and not in his traditional subsistence economy which required no school education. Differentiated education offers the best opportunity for each child to actualize his potentialities. The gifted, the mentally retarded, the culturally deprived, etc., child receives attention and assistance according to his unique personality structure.

One aspect of the educational philosophy KwaZulu educationists would like to introduce is the democratic principle or democracy as a philosophy of life. Democracy implies equal opportunities for all. But this must not be interpreted to mean a levelling down. As Joseph Leighton (Gunter, 1970 : 80) puts it, "democracy means an equal opportunity for all, in order that everyone may be able to develop, to the highest possible

stage, his native capacities and thus contribute to the social wealth or culture the work of his own unique individuality". According to him, "what we need in place of levelling down is levelling up". The ideal of democracy then is to encourage individual development to the greatest extent which is consistent with social cohesion (Jeffreys, 1971; Dewey, 1959).

If the abovementioned democratic principle is accepted, it follows that all children should be given the opportunity which will enable each child to actualize his potentialities so that he may take his rightful place as an adult in a democratic society. The practical answer to this philosophical problem is differentiation on the basis of personal differences among pupils. This is in keeping with Adams's dictum that "education is the dynamic (practical) side of philosophy" (cf. Ross, 1966: 16).

Alongside the democratic principle is the Christian principle or the Christian philosophy of life to which all Christians (including KwaZulu citizens) subscribe. This implies that education in general in South Africa has a Christian character. Democratic and Christian principles are compatible and they tend to meet each other and to fuse into a comprehensive whole. Redden and Ryan (1956: 573) emphasize that "democracy is a way of life, essentially the Christian way of life, constructed on the infallible truths of right philosophy and divine revelation".

Man is a somatic-psychic-noëtic (spiritual) being. According to the Christian doctrine, "man's spiritual nature is not something just added to man, but the very essence of his being" (Ross, 1966: 115). The Christian view is that the primary objective of education is the attainment of the end for which God created each individual, and the secondary objective is the promotion and perpetuation of the worth of the individual (Redden & Ryan, 1956).

In practical terms, the foregoing reflection implies that human personality is of supreme value and constitutes the

noblest work of God. From such considerations there emerges the aim of education as the exaltation of personality or self-realization, the making actual or real the highest potentialities of the self. It becomes the main task of education to foster the realization of that perfect pattern in each individual life. The aim then is to enable each one to become his highest, truest self. Furthermore, if a fully realized human personality is of supreme worth, it follows that the goal of educative effort must be self-actualization for all, not only for a favoured few (Ross, 1966). To accomplish this aim is the paramount task of differentiated education. Needless to add that an educator with a Christian view of life accepts that the abovementioned requirements for his educational involvement will penetrate to all facets of education (cf. Transvaal Education Dept., 1973).

Having examined the philosophical-pedagogical background to differentiated education, attention is now turned to the psycho-pedagogical perspective.

#### 4. THE PSYCHO-PEDAGOGICAL PERSPECTIVE

##### 4.1. Introduction

This part-discipline is generally known as "educational psychology". This term is confusing and tends to imply (incorrectly) that educational psychology is "applied psychology" in the educational situation. To avoid this confusion certain universities prefer using the terms "empirical education" and "psycho-pedagogics". The latter designation is preferred in the present study. It must be stressed that educational psychology is a sub-division of education and not of psychology, although, admittedly, it draws, inter alia, on appropriate psychological data, so that it does not relate exclusively to the science of psychology but also to sociology, philosophy, biology, psychotherapy, and, according to Rombouts and Kelly, even to educational matters of a theological, ethical and logical

nature (Nel, 1974).

Psycho-pedagogics involves the problem concerning the nature of man. It focuses on the individual as a becoming person. In the ensuing paragraphs interest in the phenomenon of individual differences is traced from earliest times up to the present day, and it is indicated how eventually psycho-pedagogics emerged as a fully fledged discipline.

#### 4.2. Historical background to the study of individual differences.

It is a generally accepted axiom that individual differences are universal. The uniqueness of individuals is one of the most fundamental characteristic facts of life, and at all periods of human history, men have observed and described differences between individuals (Tyler, 1965). This variability among individuals is true not only of man but also of the animal and plant kingdoms.

As mentioned above, awareness of differences among his fellowmen has always been characteristic of man down the ages. This awareness is reflected in the various theories, beliefs or superstitions concerning the causes of such differences and the different interpretations given thereto according to his own traditional background. There is indisputable evidence among the earliest records of human activity that individual differences were recognized and utilized. In preliterate societies the tribal chief, artist and medicine man are instances of individuals who displayed special talents or personality traits. In this regard Anastasi (1958: 1) observes that "at any level of cultural development, specialization of labour itself implies a tacit assumption of differences among people".

It was stated earlier in this work that primitive communities encouraged and promoted conformity among members. The unique or the exceptional individual was usually viewed with suspicion. In such communities, where each family provided its own food, built its own shelter and made its own clothes, it

was probably advantageous for everyone to attain the same proficiency and knowledge. But in the contemporary, complicated and highly integrated society of today specialisation and uniqueness are decidedly essential for living and progress. Such a situation definitely calls for differentiated education for the young generation.

Thus people (and children in particular) differ in all sorts of ways - biologically, psychically and socially - from one another. This universal phenomenon of variability among individuals presents a challenge to the teacher. In the school situation he must take into account the differences in ability, intelligence, interest and vocational choice among pupils. More will be said on this challenge in the next chapter.

#### 4.3. Early recognition of individual differences

Mention has already been made of the fact that thinking people were aware of the phenomenon of individual differences many centuries ago. However, it was not until relatively recent years that these differences have been studied experimentally or subjected to quantitative measurement (Freeman, 1934). Plato was one of the first to consider the problem (Anastasi, 1958). A fundamental aim of Plato's ideal state was the assignment of individuals to the special tasks for which they were best qualified by nature. Thus in Book II of his Republic he perceived that there are clear differences, mental as well as physical, between individual human beings, and he ventured to classify people according to the occupations for which their mental abilities suited them. He thus categorized people into low-level and high-level manpower. Moreover, the soldiers of his ideal state were to be selected on the basis of a proposed series of "actions to perform" which were designed to sample the various traits considered essential for military prowess. These "actions" represent the first systematically described aptitude test on record (Anastasi, 1958). In the light of the foregoing Plato can be rightly called the "father" or pioneer

of differentiated education.

The versatile genius of Aristotle did not overlook individual variation. He propounded principles which attempted to define more closely the nature and limits of human development (Freeman, 1934). In his writings mention is made of both group differences including species, racial, social and sex differences in mental and moral traits and individual differences (Anastasi, 1958). He also considered the effect of education on individual persons with varying talent. It appears then that Aristotle is explicit in his recognition of individual variations and the possible influence of education upon individuals of different quality.

Individual differences received relatively little attention in the Scholasticism of the Middle Ages (Anastasi, 1958). Philosophical generalizations regarding nature of mind were formulated largely through theoretical rather than empirical means. Of particular interest for differential psychology is the "faculty psychology" advanced by St. Augustine and St. Thomas Aquinas. Such "faculties" as "memory", "imagination" and "will" have been regarded by some as the precursors of the traits and factors currently identified through statistical analysis of test scores (Anastasi, 1958). However, these recently determined factors differ in a number of important ways from the rationally derived faculties of Scholastic philosophy.

Associationism in its various forms, which flourished from the 17th to the 19th centuries, likewise had little to say about individual differences. The associationists were primarily concerned with elaborate mechanics whereby ideas became associated, giving rise to complex mental processes. They postulated general principles with no allowance for individual variation. For them the teaching-learning situation was a three-phase process: giving of the example, exercise and reproduction, this being applicable uniformly to all learners. However, Bain (1855), the last of the so-called pure associationists, gave some attention to individual differences in his writings.

At this juncture it would be worthwhile to include a simultaneous development in educational theory. There is evident a definite shift of interest to the individual child in the writings and practices of a group of "naturalist" educators of the late 18th and early 19th centuries including Rousseau, Pestalozzi, Herbart and Froebel. Educational policies and methods were to be determined, not by external criteria, but by direct observation of the child and his capacities. Emphasis, however, was still placed on observation of the individual as representative of individuals in general rather than distinct from other individuals. Although statements can be found in the writings of these educators to the effect that individuals differ and that their education should be adapted to these differences, still the emphasis is laid more heavily upon free, "natural" education in contrast to externally imposed procedures rather than upon individual differences themselves. (Anastasi, 1958). The terms "individual" and "human nature" are often used synonymously. Later developments placed differential psychology on a scientific basis, as indicated below.

#### 4.4. Later developments

Hitherto the views cited are those of men whose principles were based upon observation alone, not upon systematic and experimental study. However, in modern times research workers have investigated the problem of individual differences experimentally, and have given us a mass of data on a diversity of human characteristics, and, more important still, evidence of the individuality of man and the fact that each of us as a totality differs from every other human being. The scientific movement in child study and education in the early 1900's focused attention on individual differences among school children and youth (Bigge & Hunt, 1968). Ours has been called the "Century of the Child". In 1906 E.L. Thorndike stated that "the practical consequence of the fact of individual differences is that every general law of teaching has to be applied with consideration of the particular person in question". (Bigge & Hunt, 1968: 114).

Important contributions were made in this regard by biological science under the impetus of Charles Darwin's formulation of the doctrine of evolution during the late 19th century. Of particular importance to differential psychology is the work of the English biologist Francis Galton, one of Darwin's most eminent followers and the founder of the eugenics movement. It was Galton who first attempted to apply the evolutionary principles of variation, selection and adaptation to the study of human individuals (Anastasi, 1958). Moreover, he was also the "first to undertake a systematic and statistical study of individual differences" (Freeman, 1934: 7).

Another prominent influence in shaping differential psychology is to be found in the development of the modern science of genetics (Freeman, 1934). The rediscovery of Mendel's laws of heredity in 1900 led to vigorous experimentation on the mechanism of heredity. The highly successful research on the inheritance of physical traits in animals, of which the work on the fruit fly *Drosophila* is the outstanding example, has been reflected in differential psychology in a number of ways (Anastasi, 1958).

One of the chief research tools of differential psychology is statistical analysis. An intelligent interpretation of almost any study in differential psychology requires an understanding of certain fundamental statistical concepts. In statistical method, the contributions of pioneers like Galton, Pearson, and Fisher have provided the differential psychologist with efficient techniques for analysing his data (cf. Freeman, 1934).

Of equal importance with statistics as a tool of differential psychology is psychological testing (Anastasi, 1958). One of the most important Americans in the field of differential psychology, contemporaneous with but much younger than and following Galton, is James McKeen Cattell. The mental testing movement traces its origins to the pioneer research of Galton with simple sensori-motor tests (Anastasi, 1958). The term "mental test" was first used by Cattell in a publication

of 1890, in which he describes tests then being used in his laboratory in the University of Pennsylvania (cf. Tyler, 1965). Cattell was influenced considerably by Wundt while studying under him in Leipzig as well as by Galton's work on the drawing up of tests and statistics. In Cattell then two contemporary movements in psychology converged: the development of the experimental method and the measurement of individual differences (Anastasi, 1958). Since then many investigators such as Munsterberg, Spearman, Terman, Jastrow, Bolton and Gilbert, all of the U.S.A., Kraepelin, Oehrn and Ebbinghaus of Germany, Guicciardi and Ferrari of Italy, and Binet, Simon and Henri of France have carried out tests and individual experiments and have brought to light a great mass of interesting facts pertaining to individual differences (cf. Tyler, 1965; Anastasi, 1958; Freeman, 1934). These later researches involved the development of special aptitude tests, multiple factor batteries and measures of non-intellectual traits. Further development of differential psychology is discussed below.

#### 4.5. Emergence of differential psychology

At the turn of the century, differential psychology had begun to assume a definite shape. In 1895 Bonet and Henri published an article entitled La psychologie individuelle, which represents the first systematic analysis of the aims, scope and methods of differential psychology. Their opening sentence, which reflected the status of this branch of psychology at the time, read thus: "We broach here a new subject, difficult and as yet very meagerly explored" (Tyler, 1965: 11). This article posed questions, including the two main problems of differential psychology: firstly, the nature and extent of individual differences in psychological processes, and, secondly, the relation between the mental processes of a single individual.

In 1900 Stern published his work on individual differences - racial, cultural, occupational, social, sex differences, etc. -

entitled Über Psychologie der individuellen Differenzen.

Stern characterized the fundamental problem of differential psychology as threefold: (i) What is the nature and extent of differences in the psychological life of individuals and groups? (ii) What factors determine or affect these differences? In this connection he mentioned heredity, climate, social or cultural level, training adaptation, etc. (iii) How are these differences expressed and how can we recognize them? Later revised and enlarged editions of Stern's book appeared in 1911 and again in 1921 under the title of Die Differentielle Psychologie in ihren methodischen Grundlagen.

In the meantime investigators, particularly in the U.S.A., continued to conduct experiments on individual differences. In America committees were being appointed to investigate testing methods and to sponsor accumulation of data on individual differences. Data on almost every human characteristic and every aspect of human behaviour were collected so that "shortly after 1900 the foundations had been laid for virtually every branch of differential psychology" (Anastasi, 1958: 19). Anastasi (1958: 20) maintains that to these contemporary influences should be added the contributions of anthropology and social psychology, "two areas that have many points of contact with differential psychology today". Stratemeyer *et al.* (1957: 53) hit the nail on the head when they declare that "perhaps nothing is as clearly established in psychological research as the fact of individual differences".

The psycho-historical considerations in the foregoing suggest that differences between individuals are a fundamental phenomenon. Any human group must take cognisance of this fact, particularly so in the case of the school situation. Therefore, it can be rightly said that the most significant contribution made by educational psychology to education during the first half of this century is the emphasis of individual differences between pupils with regard to their intellectual, physical and personality characteristics (Dreyer, 1969). The recognition of the existence of individual differences between children and

their implications for education has led to important educational reforms in most Western countries. These reforms have given rise to the introduction of differentiated education. In this regard Kelly (1956: 211) declares categorically that "educational psychology recognizes that although all human beings, because of the fact that each is man, possess the same general mental capacities, nevertheless there are among individuals quantitative and qualitative differences in the development of these capacities". Indeed, almost every work on educational psychology deals, in one form or another, with individual differences. The phenomenon of individual differences has far-reaching implications for the teacher as will be indicated in Chapter III.

So far we have traced the interest in the individual in historical retrospect. In the next section we concentrate on a discussion of the emergence of psycho-pedagogy and how lately the individual is viewed.

#### 4.6. The emergence of "educational psychology"

Contemporary psychology may be approached through a retrospect of its origins, for psychology has a long past, if only a short history. The origin of psychology as a discipline can easily be traced back to Aristotle (384 - 322 B.C.) who even in his days wrote on such problems as sensation and memory. In fact, he is regarded as the father of psychology. (cf. Encyclopaedia Britannica, 15: 152, 1974). He defined psychology as the "soul and its 'accidents'" (Encyclopaedia of the Social Sciences, 11: 588, 1950). He postulated a "nutritive", a "sensitive" and a "rational" soul. To emerge as an independent discipline psychology had to be freed from the dominance of theology and philosophy, to await the maturity of the biological sciences and finally to become differentiated from physiology. For the longest period of its development psychology was shaped by the needs of philosophy.

It was not until the 18th and 19th centuries that an attempt was made to separate psychology from philosophy.

However, it could not assume an independent status because its view of man and its methods were tied down to those of the natural sciences. In this connection man was regarded as a biopsychic being, as an extension of the animal, as a conscious being with "psychic functions" which can be separately measured and thus quantified (Nel, 1974). The world's first psychological laboratory appears to have been established by Wilhelm Wundt in 1879 at Leipzig University, Germany, marking what has been called the birth of psychology as a science. As an "offspring" of psychology, educational psychology or psycho-pedagogics, as we prefer to call it here, inherited the naturalistic-scientific character of the "mother science".

Educational psychology developed as an "applied" science since attempts were made to apply psychological methods to educational problems. Thus it was regarded as a branch of "pure" psychology concerned with the application of psychology in the field of education. However, it was especially after World War II that the notion of application was changed or modified in the Anglo-American world (cf. Nel, 1974). Psycho-pedagogics became an independent discipline by applying on the one hand "pure" psychology to teaching matters and in the education of the child, and on the other hand by investigating its own problems. Thus we are faced with the paradoxical situation that although psycho-pedagogics is regarded as an independent science in Anglo-American literature, the idea of application still holds sway and the approach is from a psychological, not a pedagogical, point of view. In fact, in many quarters, including South Africa, educational psychology is still regarded as a branch of "pure" psychology along with abnormal, clinical, social, industrial, etc., psychology. However, it must be pointed out that "pure" psychology may have a right to claim the subject educational psychology if educational psychology were just a simple and straight forward application of psychological principles to education, or (and this is the important point) if psychology views the child from a pedagogical standpoint -

and then psychology is no longer within the defined field of its own science! So the idea of application can only exist when psychology stares itself blindly against the term "educational psychology" in which the word "psychology" appears, overlooking the fact that it is "education" in this term that is the important thing and not "psychology". It was for this reason that we adopted the "independent" term "psycho-pedagogics" which indicates the pedagogical situation as a point of departure.

#### 4.7. The nature and essence of psycho-pedagogics and its perspectives on the individual as a becoming person

Although we cannot claim that the idea of application in psycho-pedagogics was altogether discarded in Europe, nevertheless there developed a strong viewpoint against this idea among German and Dutch educationists. As far as the Germans are concerned we are thinking mainly of the viewpoints of Theodor Litt, Busemann, Hillebrand, Thomae, etc., and the viewpoints of the Dutch educationists like Ph. A. Kohnstamm, J. Waterink, M.J. Langeveld, H.W.F. Stellwag, N. Perquin as well as those of the South African pedagogicians Oberholzer, Nel, Sonnekus and others (cf. Nel, 1974). According to these authorities modern pedagogics is not an application of psychology to education; it should not attempt to reduce human beings to measurable objects by an overemphasis of psychological testing and thereby expressing human beings in terms of figures alone; but modern pedagogics emphasizes that the point of departure in the study of the child should always be the pedagogical situation. This point of view brought about a new approach in the investigation of the individual child, for instance, in regard to learning or behaviour problems. With the aid of the phenomenological method as the primary mode of approach an accountable pedodiagnostic method has been developed in contrast to a naturalistically orientated method of psycho-diagnostics (Nel, 1974).

This new approach purports to elevate or determine the person-image (i.e. the personality structure) in order to obtain a deeper insight into the essence of childhood or the causes of the child's difficulties. By "person-image" the said authorities do not mean the verification of a number of characteristics or qualities of the child by means of "tests" - mostly on a quantitative basis - the summation of which would give a complete picture of the child; but what they do understand by this term is the elevation or ascertainment of the world relations of a particular child who is examined in a pedagogical situation, and this implies that the pedopsychologist has to come to an encounter with such a child, penetrate the inner world of the child, analyse his world, and eventually withdraw or detach himself from the child and evaluate his observations objectively.

However, we know that current psychology has developed a psycho-diagnostic approach on a naturalistic-scientific basis emphasizing testing and measuring "psychic functions". In fact, the 1974 Encyclopaedia Britannica (15: 149) defines psychology as the "science of behaviour in man and other animals" (our emphasis). This naturalistic-mechanistic approach is untenable and unacceptable on the grounds that man (child) is reduced to the position of an animal, an extension of the animal kingdom. According to modern anthropological-existential psychology, and therefore modern anthropological pedagogics, such an approach can never give a profound insight into the deeper structures of the human being. Modern psycho-pedagogics does not discard altogether these tests as measuring devices, but the encounter and eventual empathy with the child takes place through the medium of discourse, while other media ("tests") are also used, as, for example, pedagogical media like composition, child's play, drawings, etc., or psychological media like intelligence tests, projective measures, etc. In accordance with these modern pedagogicians' approach the use of the terms "test" and "measurement" is discouraged, but instead they speak of "person-exploratory media" which are placed between the investigator and the child with the purpose of directing an appeal to the

child to communicate with these media and to respond to them. Therefore, the purpose of the media is to study the person of the child for the sake of the cognitive relationship with the child in the pedagogical situation, that is, to know the child as a person in his involvement with the world (Nel, 1974). Thus through the medium of the Rorschach inkblots the child establishes or constitutes another world into which the researcher should enter, analyse and evaluate. In this connection it is of importance to observe the child's attitude, his actions, his language and affective expression, his whole approach to the problem and whether his consciousness moves on a concrete and biologically bound level.

Thus the phenomenological method is of the greatest importance as a primary approach in the pedagogical situation. Current psychology with its emphasis upon testing and measuring also realized the strong influence of the home and the environment upon the child, with the result that great importance is attached to obtaining the "case histories" of children examined. These "case histories", containing a number of historical facts concerning the previous development of the child, are, however, inadequate in presenting the actual relations of the child to his world. The only method suitable for this purpose is the phenomenological method which interprets these historical facts in terms of the relation of the child to his world (i.e. his Dasein). Therefore, instead of obtaining a "case history" the historicity or anamnesis of the child is obtained. In the case of the African child cognisance must be taken of the fact that he is, on the one hand, part of a traditional cultural structure, and, on the other, a member of a Western-orientated Black community. The task of the pedagogician is to obtain a better understanding of the particular situation in which this child must actualize his becoming and learning. The phenomenologically oriented conceptions based on a modern 20th century philosophical anthropology appears to be the most acceptable for our views on the learning African child, who is involved in his learning activities as a unique totality

(cf. Badenhorst, 1972). These views emphasize the crucial role differentiated education could play in the school situation, where each child's Dasein is probed and catered for.

Furthermore, modern psycho-pedagogy regards the child as someone who is still immature, who is still dependent, non-responsible, in a state of helplessness, and in need of aid and support; he accepts the authority of the adult to lead him and to aid him on his way to adulthood and responsibility. In this atmosphere of mutual, trusting togetherness the child takes fresh courage to be a co-operator in the many educational activities, and he surrenders and entrusts himself to the educational assistance. The child will entrust himself to the educator's assistance on condition that he is accepted in trust (Erasmus, 1973). Indeed, when the child's respect and trust have been won, then the educator has the key which will give him access to the child's heart (Dreyer, 1965).

When a child thus experiences this feeling of "geborgenheid" (belongingness), he feels himself free to go out into the world, to explore his surrounding world, to come to an understanding of the persons, objects and things that surround him. For this reason modern psycho-pedagogy regards the human being (and thus the child) as someone who lives in an open world, who explores and changes it, making his own decisions and taking responsibilities in an open world. A spiritual being is thus no longer bound to instincts and the Umwelt (surrounding world) like animals are, but is free while he lives in an open world. A person constantly establishes or constitutes his world while an animal lives in a world determined by instinct, thus in a fixed or closed world.

As far as the school child's learning and conquering of his world are concerned, the major problems of psycho-pedagogy centre on the nature of the individual, the nature and content of the learning material, the economy of learning, the formulation of psychological-pedagogical principles, and the quest for the extension of knowledge of "behaviour" (Bernard, 1965).

All in all then the task of psycho-pedagogics, which is grounded in a phenomenological-anthropological-existential psychology, is to fathom the true nature of the child in his situatedness, in his intentional directedness upon his world. As soon as man is studied in his situation, it becomes clear that this concerns a person-who-is-becoming, thus a person who started as a human child. Psychology and pedagogics thus meet each other in genetic anthropology, that is, from the viewpoint of "development" of the human child, thus in the psychology of becoming or "developmental psychology", as it is traditionally referred to. When an adult and a child meet each other in a situation, we immediately have the adult-child-situation which we find as a primordial phenomenon in the family situation as parent (educator) - child (educand)-situation, which inevitably and necessarily constitutes itself into a pedagogical situation and which then forms our point of departure for all psychological reflection on the child. From this it appears that the pedagogical situation is the primary and primordial situation from which all psychology results (Nel, 1974). It is for this reason that Kohnstamm, Langeveld and others state that pedagogics is the more comprehensive science which includes psychology. Thus the close link and relationship between psychology and pedagogics is indicated on a phenomenological-anthropological-existential basis. Concerning the becoming of the child, it should be clear from the foregoing that one is here concerned with a psychology which is rooted in pedagogics, thus with psycho-pedagogics and not with pedagogical psychology (Nel, 1974).

A psychology which must have value for pedagogics will thus have to be built up from an anthropological viewpoint, the basic structure of which is determined by a pedagogical axiomatics that man starts as a tiny being and that, without education, he cannot be constituted as a fully fledged human being. From a phenomenological-anthropological point of view Langeveld declares that "without human upbringing, the young child will not come to fulfilment as a person. That man is a being who

brings up, is brought up and is committed to upbringing, is in itself one of the most fundamental characteristics of the image of man" (cited by Nel, 1974: 56).

The foregoing emphasizes how essential and unavoidable it is to take the pedagogical situation as the point of departure for a reflection on any pedagogical act and also how evident it is that psychological moments will occur in the act of becoming of the child. Thus psychological moments are embedded in the pedagogical situation: they constitute an inseparable part of pedagogical intervention, thus a part-discipline of pedagogics which is therefore termed psychological pedagogics, psycho-pedagogics for short.

Having attempted to elucidate the nature and essence of psycho-pedagogics and its bearing on the unique individuality of each child, our attention now is focused on yet another perspective on the becoming person.

The title of this thesis indicates that we are concerned not only with an exposition of psycho-pedagogical principles underlying differentiated education but also with their "significance for education in KwaZulu". This implies suggestions for a reorganization or restructuring of the said education. This is the realm of educational planning. For this reason this part-perspective of didactics constitutes an important aspect of our theoretical considerations in this chapter.

## 5. THE DIDACTICAL PERSPECTIVE IN RELATION TO EDUCATIONAL PLANNING

### 5.1. Introduction

It is necessary first to discuss the idea of didactics, the science that makes a systematic study of the teaching-learning phenomenon and then emphasize the necessity for proper planning in order to attain the desired ends. Van der Stoep &

Van der Stoep (1973: 1) give a comprehensive definition of didactics in which the role of planning in the didactic situation becomes evident:

"In the scientific context didactics may be described as a theory of what teaching entails; which conditions are valid for the progress of teaching events; the general principles to be considered in teaching; all the different forms which teaching may assume; the methods which may be relevant in the practice of teaching; what is understood by learning, learning activity and learning intention; what the subject of tuition is; in which way the subject-matter may be arranged; what the concept "school" really involves and what is meant by it in the accepted educational context; the role played by the school as an institution in the life of a child; which aids are necessary to a teacher and how they can and should be used; and in cases where the teaching activities do not succeed, which aspects may be considered by the teacher to enable him to work orthodidactically, i.e. remedially, correctively, in his classroom".

It can be inferred from this definition that educational planning has to do with planning for teaching and organizing the teaching practice for the guidance and help of learners. What is involved here is planning for education as teaching (i.e. onderwysbeplanning).

Langeveld has stated that the child is someone who wants to become somebody himself and as such wants to learn (Sonnekus, 1974). He typifies learning as a primordial manifestation characteristic of being a child from the outset, and as such teaching becomes an essential part of educational reality. In this mode of becoming human the pedagogic situation is at the same time a didactic one (Transvaal Education Dept., 1974).

Differentiation as a principle is a direct result of the didactic requirement of individualization. In a properly organized differentiated system of education this is or should be a guiding principle for the educational planner. In the ensuing paragraphs educational planning is viewed broadly in a

national perspective.

## 5.2. Historical orientation

In the foregoing reflection (section 4.3) Plato was described as the "father of differentiated education". Similarly, the earliest example of comprehensive planning in education is to be found in the Republic where Plato proposes a well-articulated scheme which takes account of the political needs of the city state - as he saw them - and which makes the school the servant of society. Many other instances can be gleaned from history. In the 16th century (c. 1560), John Knox described a national system of schools and colleges which would serve the Scots and lead them not only to spiritual salvation but also to material well-being. In his Great Didactic (1632), a few decades later, Comenius presented a detailed explanation of how schools should be organized and run in order to cement national unity and cohesion. This is a significant contribution by an educationist and points to the vital importance of the national facet in educational planning in our day and age.

The schemes of educational planners became more complicated as science and industry became more complex. Under the influence of the Encyclopaedists and the Physiocrats, La Chalolais (1763) suggested in some detail the establishment of a nationalized system of elementary education, dealing with all the children of all people, and intended to teach them useful, positive knowledge. At about the same time, Rousseau advised the Poles to take measures to build schools and provide teaching for all citizens. Indeed, his ideas were down to earth and realistic. The idea of planned education on a national scale appealed to the Benevolent Despots, and before long the outlines began to take practical shape. For instance, during the first half of the 19th century, Prussian authorities built schools and trained teachers in advance of existing demand, estimating how that demand might grow (Bereday, Blaug & Lauwerys, 1967).

The foregoing exposition must not be interpreted as meaning that there is nothing new in the idea of educational planning. In view of the fact that educational planning reflects contemporary aims of education it stands to reason that those aims could not be the same down the ages. For instance, modern aims would stress the preparation of efficient technicians instead of brave soldiers or obedient citizens. However, the true novelty lies in the methodology employed with its reliance on advanced and refined modes of analysis. But there is one important feature derived from our predecessors, and that is the reliance on the views of economists and on techniques employed in business management. Among 18th century economists we may cite Adam Smith who took interest in education as well as Alfred Marshall who devoted several chapters in his Principles of Economics (1891) to education and industrial training. School administrators have long derived lessons from the management of industrial and commercial enterprises. For example, the monitorial system was an application to the classroom of methods employed in the factory. Callahan (1962) in his illuminating work shows that in the first few decades of this century commercial and industrial groups exerted great pressure upon American educational administrators. These administrators were persuaded or forced to operate schools along the lines of managerial techniques of the time. Callahan concludes that this cult of "efficiency" led to an undermining of intellectual standards. He deplores the fact that even today the questions often asked, even by teachers and educationists, are of the type "How can we operate our schools to produce more engineers, mathematicians and scientists?" instead of "How can we provide an excellent education for our children?"

Callahan touches on an important issue, namely, whether educational planning should be economically motivated or psycho-pedagogically oriented. If the point of departure in educational planning is the child, as it should, then planning in education must be pedocentric and the whole educational

machinery must be geared towards this end. In fact, this is the central thesis of the anthropological-existential psychology of the 20th century in contradistinction to current naturalistic-scientific psychology which regards man as an extension of the animal, and ipso facto a cog in the economic machinery. Richmond (1966: 49) appears to concur with this view when he declares that "the difficulties with which we have to grapple (in educational planning) are fundamentally psychological, not economic". At this stage we could reflect on the concept "educational planning".

### 5.3. Elucidation of educational planning

Anderson and Bowman (1967: 15) give a succinct and pithy definition of educational planning as "the process of preparing a set of decisions for future action pertaining to education". They distinguish between two approaches, namely, (i) treating educational planning as an adjunct of general economic planning, or (ii) dealing with educational planning in its own right, with economic elements taken only as an aspect of it. In the first instance educational planning constitutes merely an extension of manpower planning. This approach reflects an orientation to planning of production and employment, and the goal becomes manpower production. The theoretical foundations of educational planning are then shared with those that underline manpower planning. On the other hand, when the aims and operations of education are considered in their own right as a focus of planning, the aim can be as manifold and complex as the functions education is expected to perform. In such a situation manpower considerations become merely one aspect of educational planning with no necessary priority over other goals. Then the "focus comes to be more on people, less on production of 'human resources' " (Anderson & Bowman (1967: 15).

The foregoing reflection confirms the view that planning and futurity are two sides of the same coin. The pedagogical

categories expectation and futurity are closely connected. Man encounters an incomplete world. His task lies in his being existentially called upon to complete his world. Man (child) is expected before his birth (cf. expectant mother), but he also enters the world with expectation, which is the foundation of his hankering after the future, as being someone who desires to become somebody himself in the sense of aspiring to complete his world and constitute his life space. Expectation describes the situation of tension directed to the future. Futurity denotes the anticipated image-of-what-will-be in the pedagogic situation. As an image of what ought to be, it is a distant view by the child of himself. It transcends present and past although it presents connection in continuity. In other words, it is a total image of the anticipated integration of present, past and future (Viljoen & Pienaar, 1971). This trilogy seems to be an integral part of being or rather three aspects of one phenomenon like the Christian Trinity (cf. Keen, 1970). The said trilogy constitutes man's historicity. The latter term refers to the world relationships which man has built up in the course of his life. This historicity of man also determines his present and his future. That is, one's past determines one's present situation but also one's future. Man's historicity prevents him from being isolated because it binds him to his past, to the customs and traditions that were instrumental in forming his psychic-spiritual life. Consequently he is also intentionally bound to his present whilst at the same time intentionally directed towards the future.

Thus when one reflects on educational planning with due regard of the manpower needs of the vocational dispensation, it is evident that the whole matter points to the question of helping to build a future for the child. In view of the fact that this child is the adult of tomorrow and the future, the help and support which he receives also, by implication, constitutes the building of a future for country and nation in the wider sense of the word, to which he must one day, with

the highest possible degree of knowledge and skill, but also more particularly with a positive orientation towards the occupation, make his labour available in order to make this future inhabitable and secure.

In all modern cultures the primary status of the individual is achieved through his occupational role. When we meet a stranger, "How do you do?" invariably presupposes "What do you do?" The adolescent becomes an adult when he undertakes a real job (Kiell, 1964). The child proves himself to be someone who can, and wants to work (Viljoen & Pienaar, 1971). The labour in the family situation, as in the school-didactic situation, is always a manifestation of initial labour under guidance which can, but really should result in ultimately meaningful adult labour. For this reason formative education is concerned with leading the child to eventual adulthood to which expression is given in all spheres of society, among others, in the vocational order within the all-embracing structure of the labour dispensation. That is, the child is motivated through the medium of school education to enter upon a future occupation with independence and responsibility and ultimately to achieve self-realization. It is for this reason that the educational and vocational order must be viewed in juxtaposition as two complementary fields which are distinguishable but inseparable.

In the light of the foregoing, it appears that it is pedagogically correct to assert that a child does not receive school education for the sake of the vocational order, because if that were the case he would be used as a means to an end and that would reduce him to a utilizable and skilled cog in the giant machine of the state. The task of the school should rather be seen as a formative educational task aimed at meaningful labour in the vocational order. This implies that the major concern in this context must, and indeed should be, the eventual religious-moral and culturally moulded person, who, with positive convictions and values, attains fulfilment in life by entering into and fulfilling his task. From this

it follows that if the country does not see its demands on the educational order with regard to future labour resources in this light, it will, in the revelation of its labour needs, display a narrow and truncated view of the future which has always heralded among nations decadence in their own ranks (H.S.R.C., 1972). This brings us to a consideration of some important factors vis-à-vis educational planning.

#### 5.4. Some important factors relating to educational planning

##### 5.4.1 Guidance of the child from non-adulthood to adulthood

In the pedagogical situation the nature of the child is such as to require authoritative guidance and the child desires it, while the educator represents an authority of adulthood. In this situation the seeker and giver of authority come together. The child needs education en route to adulthood. He requires information as to where he is, who he is and the goal to which he is proceeding. He does not automatically follow the correct course but must be guided and, if necessary, he must be compelled to change his present course and follow the correct one, because he does not know the way and cannot respond to the existential appeal in an accountable manner (Viljoen & Pienaar, 1971). In fact, pedagogy actually means the accompaniment of the child on his way to adulthood.

Therefore, the guidance of the child from non-adulthood to adulthood is largely entrusted to the schools by parents - hence the teacher is said to be in loco parentis. The home is the primary pedagogical situation and the school the secondary pedagogical situation. It becomes the teacher-educator's task, inter alia, to educate the pupils and to allow their potentialities to develop to the full for their own sake, so that they can be of service to the country and to society. To be able to take one's place in post-school life as a fully

moulded adult demands both formative education by the school within the framework of elements pertaining to the philosophy of life and formal education which enables the child to find a place in the national economy on the grounds of his acquired knowledge and skills as well as his moral and spiritual edification as a mature psycho-physical-noëtic being.

#### 5.4.2. Demands imposed upon education

Understanding the world of work as an aspect of life is of special importance to the field of education with its responsibility in preparing and orienting people for productive and meaningful lives. In modern societies a man (child) now determines to a large extent his way of life in his choice of an occupation. Siblings may find themselves worlds apart in adult life as a result of their careers or vocations. The farmer may find his brother-physicist's world unintelligible to him and his son-astronaut's world equally baffling. As technology and progress have increased the varieties of employment, classification systems have been developed to bring order and understanding into the occupational world. These systems have made evident the diversity and differentiation as well as the regularity and order in the world of work.

In our own country the national economy has undergone a marked metamorphosis in all spheres. Thus new demands are imposed upon man (the child) to occupy his place in the national economy as an adult. The way along which he is led to adulthood, namely education, is also beset by demands to make the child satisfy particular requirements. Society and the parent demand that the education system should offer education which will enable the child to adjust himself to the post-school occupational world but also that education should be the way in which the child must be led to religious-ethical adulthood, so that he can enter post-school life as a responsible employee and cultural being. Viewed in this light, the educational system as a whole can be said to aim at two quite

distinct things, especially in developing nations, namely (a) raising the general level of culture throughout the whole population and (b) collecting children of high intelligence or with other special gifts and sorting them out from their brothers and sisters so that they can be given "higher" education to enable them to actualize their potentialities instead of letting their talents wither and dwindle in mediocrity (cf. Hodgkin, 1965). Since in South Africa economic development and the extension of scientific knowledge have led to changes in the occupational structure, to the coming into existence of new occupations and the disappearance in respect of standards of knowledge for the pursuit thereof, a demand for qualified manpower, especially high-level manpower, has arisen. In any modern and forward looking country the manpower structure constitutes a pyramid whose apex represents high-level and the base low-level manpower. Similarly, the educational system of any country can be seen diagrammatically in the shape of a rough pyramid with several stages, each containing fewer schools and children than the one below. The "Education Manifesto of KwaZulu" (1973) expresses concern at "the current caricature pyramid constituted by African manpower with an oversize base but no apex", and urges that this situation "be rectified as soon as possible".

#### 5.4.3. Interdependence of educational planning and a country's economic development programme

The foregoing suggests that education must cater for the requirements of the child as well as of the national economy and that educational planning is the foundation upon which the future of the child and the national economy must rest. Therefore it is necessary to integrate an educational programme into a national economy development programme, since the latter is dependent on the educational programme, and this is only possible when planning regarding education and the national economy occur concurrently. Whilst the personality of the child must not be sacrificed on the altar of economic expediency, nevertheless the needs of the pupil and those of the

country usually coincide as suggested by the economic and educational pyramids mentioned above.

5.4.4. Man's (the child's) intentional directedness towards the future

As mentioned earlier, man aims in the present to plan his future on the basis of experience gained in the past. This is his historicity. He can thus be regarded as being directed towards the future. When viewed in this light, his intentional directedness towards the future presupposes a constant change, but always a change for the sake of an improvement. Consequently he is never satisfied with the status quo and his whole life is one of unrest - not in the sense of fear or anxiety but a form of tension or need which prompts constant reaching for the future. To say that an individual is never completely satisfied does not mean that he is a dyspeptic grumbler who is constantly complaining about his lot. On the contrary, it simply means that his condition can be improved and he knows it. No matter how healthy, wealthy or wise one may be, he can always be healthier, wealthier or wiser. In the envisaged future man (the child) is confronted with the task of giving meaning to his whole human existence on the strength of his labour. Man shall earn his living "by the sweat of his brow", as the biblical saying goes. Therefore it is right and proper to describe educational planning as a matter in which the future is created for the child, so that he will eventually himself be able to experience his future as a phenomenon of the present in accordance with his unique personality structure.

5.4.5. The country's "directedness" towards the future

Lying at the root of a philosophy of life, is a hierarchy of value-priorities which is encountered in a community or nation, always of decisive meaning in the people's life of choices and actions, their characters and convictions. In a

democratic state people, cognisant of the need to preserve social values (national values), will elect a government, choosing such leaders as will guarantee their values and norms by giving effect to them. In a developing nation like KwaZulu such a mandate has been given to the KwaZulu Government which enjoys a general support from the rank and file. The said government has been empowered to give substance to a vision of the future with due observance of the hierarchy of values which the nation's outlook on life carries from day to day.

In the light of the foregoing reflection, it is evident that in educational planning the country will be seen as a given physical reality with labour possibilities, on the basis of which the future is planned for the children of the nation. Therefore, manpower research, as a matter involving the determination and estimate of the requirements of the national economy as well as the exploration of the manpower potential which has to perform labour in the future, is meaningful, since it has to do with the creation of a future for the country (H.S.R.C., 1972).

## 5.5. Information vital to educational planning

### 5.5.1. Forms of educational planning

A person's effectiveness as a planner, especially in developing communities, will be determined largely by the following:

- (a) Knowledge of existing and envisaged schemes.
- (b) A clear conception of the social factors that promote development.
- (c) Knowledge of the political needs of the community as articulated by people's acknowledged leaders.
- (d) Knowledge of educational needs and the determination of effective methods of instruction (cf. Erasmus, 1973).

Needless to say, "if they are to be able to achieve the objectives of overall educational planning, it is essential that

those responsible for it be sufficiently knowledgeable about the methods and techniques of planning" (UNESCO, 1963: 24).

Therefore the educational planner occupies a key position in a department of education like an air pilot. He is in a position to chart out the course of an educational system and to suggest priorities to be adopted in order to reach the desired goal. He is able to visualize how far his "plane" can fly or whether it can take off or not. In the practical situation three main features of educational planning may be distinguished:

- (i) academic planning, which is concerned with curriculum development in the various phases of schooling,
- (ii) physical planning, which involves predicting future enrolments and the provision of facilities to accommodate the rising demand, and
- (iii) psychological services, which are designed to give a new dimension to counselling and guidance at all levels.

In the ensuing paragraphs various aspects of these three features are amplified.

#### 5.4.2. The manpower requirements of a nation

In view of the fact that the occupational sector is the pupil's ultimate goal when he attains the status of a fully fledged adult, education for the oncoming generation must be planned in such a way that it can be co-ordinated with post-school occupational training and/or practice. Therefore it is essential to know the quantitative and qualitative manpower requirements of the country before education can be planned - hence the value of the following estimates: Firstly, long-term estimates, say 15 to 20 years, with periodic adjustments, must be made of the manpower requirements, according to main occupational groups and level of education as they occur in the economic sector. Such data make it possible to plan aims, on a long-term basis, in respect of, inter alia, educational facilities, teacher training and the provision of teachers, curricula, syllabuses and the financing

of education.

Secondly, medium-term estimates, say 5 years, of the manpower requirements. On the basis of such data education can be planned at secondary level, especially, to keep pace with immediate manpower requirements by effectively undertaking, inter alia, curriculum and syllabus planning, provisions of educational facilities, teacher training and provision of teachers and school guidance.

Thirdly, long and medium-term manpower demand and supply studies must also provide a picture of the changing occupational structure. Such data are essential in view of the fact that economic development and the extension of scientific and technological knowledge have given rise to new occupations in commerce and industry, while others disappear, and an upgrading of standards of knowledge for the pursuit of occupations originates. Furthermore, such data will be valuable, inter alia, for the school guidance service, the provision of educational facilities and for curriculum and syllabus planning.

### 5.5.3. The schools' potential outputs

Occupations, curricula, and training programmes attract, require, or furnish outlets for different levels of ability. Occupations also provide outlets for different kinds of interests (Myers & Jordaan, 1970). This suggests that the potential is present among the school population to meet the future qualitative and quantitative manpower requirements of the country. For this reason data on the capacities, aptitude and interests of the child must be known, so that the future manpower potential can be determined and education can be planned in accordance with the capacities, aptitudes and interests of the child and the requirements of the national economy. Such data will only give an indication of the future manpower potential in broad occupational fields and educational levels. Data concerning the occupational choice of pupils after leaving school will consequently also have

to be taken into account to determine the flow of the manpower potential to the economically active population.

#### 5.5.4. Demographic considerations

Facts and figures are essential on, inter alia, the future growth and demographic composition of the population for purposes of effective planning. Projections for a period of 15 to 20 years are necessary for the various age groups of the school and university population between the ages of 6 and 25 years so that, inter alia, the erection of school buildings, extension of educational facilities and the training of teachers can be planned. Such planning must also take into account manpower requirements so that planning can be undertaken in respect of the commercial, technical, agricultural, natural science, human science and art fields by building schools, extending educational facilities or extending tertiary education.

#### 5.5.5. Financing of education

In order to keep pace with the manpower requirements of the occupational sector educational planning must take cognisance of financial implications. The richer the country the better it will finance its education. The reverse is true of poorer nations. Thus cognisance must be taken of what part of the national income is invested in education, how much can be invested in education in the future and what amount should be invested.

#### 5.5.6. Teacher training and provision of teachers

The teacher is an important component of the pedagogic-didactic situation, and no educational system can succeed without competent teachers. Thus the great task of the teacher attains fulfilment in the aim of formative education, namely, the guidance of the child, as a non-adult, to adulthood along a specific path (viz. education) and with the

aid of specific means (i.e. subject-matter). In this way the child arrives at the acquisition of factual content and skills, which are the basic tools that he will implement to give meaning to the realities of life. Consequently educational planning will have to take the training and provision of teachers into account to provide for the requirements of both the child and the national economy.

#### 5.6. Guidelines

In educational planning, education must be viewed as an inseparable unit from its earliest stage until its termination at tertiary education level. It is only for practical and pedagogical considerations that education is divided, as far as possible, into organisational units according to the pupil's unfolding. This is done because the child, according to the phase of his becoming, imposes demands on education which make it essential that there should be a demarcation of educational activities to ensure the purposeful and effective progression of education. When educational planning occurs to provide for the requirements of the child as well as of the occupational sector, the demands which primary, secondary and tertiary education should satisfy must be determined so that the educational programme can be planned to provide the person-in-becoming with knowledge demanded by the occupational sector.

In the light of the foregoing reflection, educational planning can be described as the continued embodying of a vision of the future pertaining to formative education in the framework of a formulated educational policy, with due observance of priorities and costs attached to an educational system as well as of economic and political conditions, the application and development possibilities of such a system as well as the needs of the pupils and the country served by the system.

This brings us to the stage of synthesizing the theoretical perspectives outlined in this chapter.

## 6. SYNTHESIS AND PERSPECTIVE

In this chapter an attempt was made to view the child as becoming being and to probe the philosophical, psychological and didactical bases of differentiated education. The part played by educational planning in this regard was emphasized. Each of these three part-perspectives of pedagogics was scrutinized and its significance for the task in hand revealed.

Education, as a form of practice, has a theory and a philosophy behind it. The latter is referred to as philosophy of education or philosophical pedagogics which derives from one's philosophy of life. The philosophy of life guides educational theory and practice just as the compass guides a ship. Education derives its meaning from the idea and the reality of adulthood for its ultimate purpose. The concern of education is with the child as a present existing reality viewed in the light of his own adulthood, that is, in the light of what eventually he ought to become. The advent of the dominant scientifically-technologically oriented culture had a profound impact on the receiving indigenous African culture and the latter could never be the same again.

Just as the relatively static culture patterns of the traditional Zulu community with its inflexible codes and rigid way of life has given way to the dynamic existence as found in Western civilization with its high premium on personal freedom, responsibility and accountability, so the new adulthood in a Western-oriented society demands that through a new education the African child as becoming-adult shall be equipped to proceed independently in a highly diversified and polyvalent world where emphasis falls on the personal instead of on the collective. Thus adulthood assumes a totally different character and emphasis has shifted from an inflexible conformity to a critical detachment and the assertion of individuality. Therefore, in contrast to the traditional indigenous education, the aim or goal of the new Western-

oriented education is the self-realization of the individual. In the light of this development in KwaZulu contemporary society differentiated education now becomes an urgent necessity.

The reflection on the psycho-pedagogical perspective revealed an interesting historical development whereby psychology grew out of philosophy and only attained its autonomy as an independent science with the establishment of Wundt's laboratory in 1879. Psychology assumed the techniques and methods of the natural sciences which were naturalistically oriented and regarded man as an extension of the animal. Educational psychology inherited the naturalistic-scientific character of the "mother science" and was regarded as a branch of "pure" psychology concerned with the application of psychology in the field of education.

On the other hand, there developed a strong viewpoint against this idea of application among German and Dutch educationists. According to them psycho-pedagogics is not an application of psychology to education, as the point of departure in the study of the child should always be the pedagogical situation. Man cannot be reduced to a measurable object as current psychology advocates in its naturalistic man-as-object-study-approach. With the aid of the phenomenological method as the primary mode of approach an accountable pedodiagnostic method has been developed in contrast to a naturalistically oriented method of psycho-diagnostication.

In recent times the most significant contribution made by psycho-pedagogics is the emphasis of individual differences between pupils and their implications for education. Educational reforms in this regard have given rise to the introduction of differentiated education in most Western countries. These individual differences present a challenge to the teacher and education authorities of a country as indicated in the next chapter.

In the light of the foregoing exposition educational reforms in KwaZulu are inevitable. Hence a reflection on didactics in relation to educational planning became pertinent in this context. The problems of educational planning are essentially pedagogical, not economic. The primary concern of the planner must be the child who is on his way to adulthood. Educational schemes must take into account the pupil's ability, aptitude and interests. Adulthood implies an occupational or vocational role in society. Man achieves fulfilment in life through the world of work. The child is intentionally directed towards the future - his whole being is telescoped on a vocation, so that education serves as preparation for that vocation.

Individuals differ in intellectual capacity and interests, and this is reflected, inter alia, in the kind of work they do. Different individuals will have different vocational goals. An educational structure based on individual differences will have no difficulty in coping with manpower requirements. It is pedagogically unsound to let manpower needs dictate policies which violate the principles of individual differences. Man must not be reduced to a mere cog in the economic machinery of the state. A sound educational planning must have the same purpose as pedagogy, viz. the accompaniment of the child on his way to adulthood. All other considerations must be subservient to this objective.

The foregoing exposition should serve as background to a reflection on ability grouping and its implications for the pedagogic-didactic situation in the next chapter.

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7. REFERENCES

1. Anastasi, A. (1958) : Differential Psychology, New York : Macmillan Co.
2. Anderson, C.A. & Bowman, M.J. (1967) : "Theoretical Considerations in Educational Planning" in The World Year Book of Education, London : Evans Brothers.
3. Badenhorst, H.J. (1972) : Die Leerwêreld van die Bantoe-kind as Belewenswêreld : 'n Psigopedagogiese Perspektief, unpublished M. Ed. thesis, University of Pretoria.
4. Bain, A. (1855) : The Senses and the Intellect, London : Parker.
5. Bengu, S.M.E.(September, 1975) : "The National Cultural Liberation Movement" in Reality, Vol. 7 No. 4.
6. Bereday, G.Z.F., Lauwerys, J.A. & Blaug, M. (editors) (1967) : "Educational Planning" in The World Year Book of Education, London : Evans Brothers Ltd.
7. Bernard, H.W. (1965) : Psychology of Learning and Teaching, New York : McGraw-Hill Co.
8. Bigge, M.L. & Hunt, M.P. (1968) : Psychological Foundations of Education, New York : Harper & Row.
9. Brubacher, J.S. (1965) : Eclectic Philosophy of Education : A Book of Readings, Englewood Cliffs : Prentice-Hall.
10. Buthelezi, M. (1974) : "The Relevance of Black Theology" in South African Outlook, Vol. 104, No. 1243.
11. Buthelezi, M.G. (1971) : Shaka's Day Address, Dlangezwa High School, 25th September, 1971.
12. Buthelezi, M.G. (1975a) : Opening Address to the 57th Annual Conference of the Natal African Teachers' Union held at the Edendale Lay Ecumenical Centre, Pietermaritzburg, from the 27th to the 30th June, 1975.

13. Buthelezi, M.G. (1975b) : "Business Times Interview" in Sunday Times, 21st September, 1975.
14. Butler, J.D. (1968) : Four Philosophies and their Practice in Education and Religion, New York : Harper & Row.
15. Callahan, R.E. (1962) : Education and the Cult of Efficiency, Chicago : University Press
16. Curtis, S.J. & Boulton, M.E.A. (1966) : A Short History of Educational Ideas, London : University Tutorial Press Ltd.
17. Dreyer, H.J. (1965) : Psicologiese-pedagogiese Beskouinge oor die Teorie en Praktiek van Meeskundeonderrig, unpublished D. Ed. Thesis, University of S.A.
18. Dreyer, H.J. (1969) : Intellektuele Ontwikkeling en die Implikasies daarvan vir Bantoe-onderwys, Inaugural Address, Publications of the University of Zululand, Series 1, No. 13.
19. Duminy, P.A. (1968) : African Pupils and Teaching Them, Pretoria : Van Schaik.
20. Encyclopaedia Britannica (1974), Vol. 15.
21. Encyclopaedia of the Social Sciences (1950), Vol. 11.
22. Erasmus, O.C. (1973) : "The Progression of Education in Educational Situations and during the Course of Education" in Monograph 1973 - 6, S.A.A.A.E.
23. Erasmus, P.F. (1973) : Die Bydrae van die Wetenskap tot die Ontwikkeling van Onderontwikkelde Gebiede, H.S.R.C. Report No. 4, Pretoria.
24. Fischer, J. (1962) : "The Role of Education in National Goals" in Hanna, P.R. (editor) : Education : An Instrument of National Goals, New York : McGraw-Hill Book Co.

25. Freeman, F.S. (1934) : Individual Differences, London : G.G. Harrap & Co.
26. Gunter, C.F.G. (1970) : 'n Christelik Georiënteerde Opvoedingsfilosofie, Stellenbosch/Grahamstown : Universiteitsuitgewers en Boekhandelaars.
27. Gunter, C.F.G. (1974) : Aspects of Educational Theory, Stellenbosch : University Publishers & Booksellers.
28. Hayward, F. (July, 1973) : "The Nature of Educational Theory" in Journal of Education, Vol. 5, No. 1.
29. Hodgkin, R.A. (1965) : Education and Change, London : University of London Press Ltd.
30. Human Sciences Research Council (1972) : Report of the Committee for Differentiated Education and Guidance ... for the R.S.A. and S.W.A.-Part I, Pretoria.
31. Hutchins, R.M. (1970) : The Learning Society, Harmondsworth : Penguin Books Ltd.
32. Jeffreys, M.V.C. (1971) : Education : Its Nature and Purpose, London : Allen & Unwin Ltd.
33. Keen, E. (1970) : Three Faces of Being : Toward an Existential Clinical Psychology, New York : Appleton - Century - Crofts.
34. Kelly, W.A. (1965) : Educational Psychology, Milwaukee : Bruce Publishing Co.
35. Kiell, N. (1964) : The Universal Experience of Adolescence, London : University of London Press Ltd.
36. KwaZulu Government (1973) : Education Manifesto of KwaZulu, Dept. of Education and Culture, Eshowe.
37. Myers, R.A. & Jordaan, J.P. (1970) : "Individual Differences and the World of Work" in Davitz, J.R. & Ball, S. (editors) : Psychology of the Educational Process, New York : McGraw-Hill Co.

38. Ndaba, E.P. (1975) : "The desirability of articulating a sound philosophical basis of education in KwaZulu", a paper read at a symposium on "The Educational Priorities of KwaZulu" held at the University of Zululand on the 5th April, 1975.
39. Nel, B.F. (1974) : Fundamental Orientation in Psychological Pedagogics, Stellenbosch/Grahamstown : University Publishers & Booksellers (Pty) Ltd.
40. Nel, C.F.B. (1970) : Some Aspects of Adulthood as seen in Philosophical-Pedagogical Perspective with Reference to the Zulu's New Image of Man, Inaugural Address, Publications of the University of Zululand, Series I, No. 14.
41. Nel, C.F.B. (1975) : "Some thoughts on education and teaching at the tertiary level and an introduction to ephebagogics", a paper read to a symposium of the lecturing staff of the University of Zululand held on the 13th February, 1975.
42. Nunn, T.P. (1956) : Education : Its Data and First Principles, London : E. Arnold Ltd.
43. O'Connor, D.J. (1958) : An Introduction to the Philosophy of Education, London : Routledge & K. Paul.
44. Ottaway, A.K.C. (1957) : Education and Society, London : Routledge.
45. Perquin, N. (1964) : Pedagogiek, Roermond-Maaseik : Romen & Zonen.
46. Redden, J.D. & Ryan, F.A. (1956) : A Catholic Philosophy of Education, Milwaukee : Bruce Publishing Co.
47. Richmond, W.K. (1966) : Educational Planning : Old and New Perspectives, London : Michael Joseph.

48. Ross, J.S. (1966) : Groundwork of Educational Theory, London : Harrap & Co. Ltd.
49. Swift, D.F. (1969) : The Sociology of Education, London : Routledge.
50. Tempels, P. (1969) : Bantu Philosophy, Paris : Présence Africaine.
51. Thembela, A.J. (1973) : African Education at the Dawn of a New Era, Address to the 55th Annual Conference of the N.A.T.U.
52. Transvaal Education Dept. (1973) : Education Bulletin, Vol. XVII, No. 1, March, 1973.
53. Transvaal Education Dept. (1974) : Education Bulletin, Vol. XVIII, No. 1, March, 1974.
54. Tyler, L.E. (1965) : The Psychology of Human Differences, New York : Appleton - Century - Crofts.
55. UNESCO (1963) : Elements of Educational Planning, Paris.
56. UNESCO (1965) : Problems and Strategies of Educational Planning, Brussels.
57. Van der Merwe, B. de V. (1970) : The Crisis of Authority, Inaugural Address, Fort Hare University Press.
58. Van der Stoep, F. & Van der Stoep. O.A. (1973) : Didactic Orientation, Johannesburg : McGraw-Hill Book Co.
59. Viljoen, J.A. & Pienaar, J.J. (1971) : Fundamental Pedagogics, Durban : Butterworths.
60. Zulu. A.H. (1972) : "The Dilemma of the Black South African", T.B. Davie Memorial Lecture, University of Cape Town.

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## **CHAPTER III**

**ASPECTS OF ABILITY GROUPING**

**AND IMPLICATIONS FOR**

**DIFFERENTIATED EDUCATION**

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CHAPTER III

ASPECTS OF ABILITY GROUPING AND IMPLICATIONS FOR DIFFERENTIATED  
EDUCATION

"The aim of ability grouping is to bring together pupils who will be able to work together and to progress together under conditions permitting the fullest possible development of the individuals involved"

(Turney, 1936: 84)

1. INTRODUCTION

The goal of providing equal educational opportunities for the optimum development of all children presents a challenging problem. The extent of individual differences in the capacity to learn has directed the attention of educators and administrators to the need for adjusting methods of instruction and school tasks to the learning capacity of each pupil. Educators generally believe that in order to stimulate successfully and to guide properly the individual pupil, the classroom situations must be adjusted carefully to his ability to learn. There are many ways in which school work may be adapted to individual differences. Frandsen (1961: 220) warns that providing "identical curricula and methods of teaching" is not a solution to the problem of individual differences among pupils. Behr (1974 b: 9) is more explicit and categorical: "It is wrong to demand the same degree of performance from all pupils, and to blame the child entirely for his failure". The view is also being expressed by educators throughout the world that no child should be summarily categorized as ineducable (Behr, 1973).

The individual differences in mental abilities and in school achievements constitute a basic factor in education. Therefore, one of the most outstanding problems in education is to work out methods of dealing with large numbers of pupils in such a way that each pupil will receive the direction, guidance, and special work which he requires in order to improve himself to the maximum of his capacities (Kelly, 1956). Since pupils

differ so widely in capacity to learn with regard both to the rate of learning and the level of attainment, the problem is to adapt school training and instruction to the varying needs, interests, and capacities of the pupil in such a way as to prepare him best to live his life and to render the most valuable service within his powers and capacities. This view tallies with Reel's (1958: 4) aim of education, namely, "to promote the development of a well-integrated person, capable of exercising such responsibility in society as his powers allow." It is not intended that the school should make all pupils equal, but it is important that the school should make all pupils better.

The extent to which individual differences may be affected through education is important. Psycho-pedagogics can merely demonstrate the existence and significance of individual differences. Methods of teaching, curriculum content, and devices of administration must be adapted to individual differences in order to solve this problem (Kelly, 1956).

Although the extensive differences among the pupils in a typical classroom complicate the problem of providing individualized teaching and guidance, each child needs a curriculum in which he can efficiently develop his useful talents to optimum levels (Frandsen, 1961). Each child needs to experience daily successes in learning tasks in which he is interested and which he considers worthwhile. There are several ways in which schools seek to provide for pupils' needs. Frandsen (1961) states that at the high school level children are guided to some extent into differentiated curricula suited to their individual interests and patterns of abilities. He further maintains that each of the three ability groups constituting the educable pupil population (i.e. the bright, average and dull) should be homogeneous with regard to I.Q. and that curricula and methods of teaching should be differentiated.

This phenomenon of adapting instruction and school tasks to individual differences among pupils is today generally known as differentiated education or individualization. This type of education is a feature of post-primary schools in probably all developed countries including White education in

South Africa. These considerations point to the importance of differentiation in African education as well. More will be said in this regard later in the chapter. Attention is now turned to the concept ability grouping and its significance for educational differentiation.

## 2. THE THEORY AND PRACTICE OF ABILITY GROUPING

### 2.1 The challenge of individual differences for the African teacher

Teachers of the African child must realize that individual differences in respect of mental ability, academic aptitude, and school attainment are a reality and constitute the most basic factors in education or upbringing. These differences pose a challenge to the teacher to examine and update regularly his methods, techniques, aids, etc. Teachers should not be satisfied or complacent with their traditional teaching methods - methods which have long become obsolete - but they must feel obliged to keep abreast of times regarding new methods and insights pertaining to dealing with big numbers of pupils, so that every individual pupil receives the guidance, attention and special consideration which are essential for the maximum development of his abilities (cf. Dreyer, 1969). This leads us to a reflection on ability grouping which should promote the said 'maximum development'.

### 2.2 Grouping procedures

Pupils in the same standard or form may be classified in two ways, namely, in heterogeneous groups, which take no account of the ability and aptitude of the pupils, or in homogeneous groups based on general ability or on ability in a particular subject (i.e. setting). Needless to say, "extreme heterogeneity would not be a desirable situation for the learning of school subjects" (Turney, 1936: 82). A brief exposition of these two forms of grouping is given below.

### 2.2.1 Homogeneous grouping

A pedagogically grounded homogeneous grouping is the classification of pupils into comparatively homogeneous class groups on the strength of achievements and scholastic ability. The dominating aim of homogeneous ability grouping has been to improve the learning situation by bringing together pupils who will be alike in achievement at the end of a period of learning (Turney, 1936). It should be pointed out, however, that no matter what criteria are used for grouping, the class will still include individuals with a wide variety of interests and aptitudes, abilities and motivations. In this sense, there is no perfectly homogeneous group but merely a group which has been selected on the basis of certain similarities (Stratemeyer, F.B. et al., 1957). Nevertheless there is no doubt that the greatest success in internal differentiation will be obtained when pupils are divided into homogeneous groups (cf. Steyl, 1966). It is obviously much easier to make suitable provision for a group of pupils whose needs are similar than for a group in which there is a great variation in needs. The homogeneous grouping of pupils facilitates the application of differentiation in its logical entirety in respect of aim, content, method, measurement, evaluation, and certification. Homogeneous grouping is the natural solution for the problem which arises as a result of the fact that group teaching, on the one hand, is a practical necessity, and there are, on the other hand, pedagogical requirements in respect of individuality and self-activity which must be catered for. However, the problem is to get really homogeneous groups and to decide according to which criteria the class groups must be homogeneous. Moreover, one must guard against the danger of grouping pupils according to administrative instead of pedagogical considerations; that is, grouping for the convenience of the administrator instead of for the benefit of the pupil. Moreover, there is a general view among most educationists that it is the lower intelligence group rather than the higher one which benefits most from homogeneous grouping and that the reverse is true in the case of heterogeneous grouping (cf. Brown, 1972; Yates, 1971).

### 2.2.2. Heterogeneous grouping

This form of grouping refers to the classification of pupils with divergent abilities and capacities in the same class. It represents a natural and true-to-life situation in the co-existence of people. A strong case can be made out for heterogeneous grouping when a system of separate schools is used, because in that case the pupils are selected for their various courses at the end of the primary school course and homogeneous grouping will take place by means of subject-grouping (Van Wyk Report, 1955). In a comprehensive school which enrolls pupils of all types, there is a heterogeneous school population with widely differing abilities, aptitudes and interests. In heterogeneous grouping the less gifted pupils are inspired by the more gifted ones to work harder. However, on the debit side, it may happen that gifted pupils will not be called upon to exert themselves in accordance with their potential, since the tempo and standard of work is often adapted to the "average" child. The ensuing exposition of the bases of classification will throw more light on the grouping phenomenon.

### 2.3. The classification of the educable school population into ability groups

A variety of criteria are employed in the classification of pupils in an educational system. However, each of these criteria has its limitations and cannot always be regarded as absolutely correct and as an indication of the full potential of the pupil. The most effective use of these criteria would be their collective utilisation in order to obtain a global picture of the pupils.

As pointed out earlier, differentiated secondary education presupposes the division of a heterogeneous school population into ability groups for the purposes of effective instruction. As a prerequisite to any scientific adaptation of the school system to individual differences there must be a general testing programme before or at school entrance so that the differences in capacity may be known (Ellis, 1936). As Engelbrecht (1936: 29) puts it, "the problem of pupil classification must be

attacked through carefully planned experimentation". The following criteria may, inter alia, be used to effect this division (Shiels, 1963):

- (a) The intelligence quotient (I.Q.).
- (b) The scholastic achievement.
- (c) The bent towards a vocation.

In this regard Shiels (1963) states that it is not only the intellectual side of the child which is important, but provision must also be made for his physical, emotional, social, and future occupational needs and his later vocational training. Thus as a means of measurement, the I.Q. should only be considered as indicating a trend, and the following factors ought to be taken into account as well: scholastic achievement, effort, interest in a vocation and physical condition. These factors point to the importance of the guidance service in an educational system, a matter which will receive attention later in this chapter.

The part played by the factors mentioned above in the overall situation is not denied, but mental testing plays a crucial role with regard to ability grouping or classification. Through mental tests it is possible to identify the four ability groups found in any pupil population, namely, the gifted, the normal, the dull-normal and the mentally retarded. According to recent research in South Africa, these four groups represent about 9%, 66%, 16% and 9% of the White pupil population respectively (H.S.R.C., 1972). In terms of I.Q. scores the sub-normal group scores 80 or less, the dull-normal 80 - 89, the normal 90 - 119 (average 90 - 109, above average 110 - 119) and the gifted 120+ (120 - 129 gifted, 130+ highly gifted). It would be interesting to find out what the position is in Kwa-Zulu in this regard. Our next concern is with the principles underlying classification.

### 2.3.1 The bases of classification

Man is a multidimensional personality. In psychology personality means "the whole of a person's outstanding charac-

teristics, his abilities, his emotional and social traits, his interests and attitudes" (Lovell, 1971: 74). Personality is multidetermined by genetic, cultural, social class and familial forces which interact with one another to constitute the whole man. The education of the whole man originates from the principle that every pupil is entitled to the fullest development of his complete personality, so that his talents can unfold to the full in order to enable him to take his rightful place in a changed and still changing community life. A heterogeneous school population necessitates that there will be differentiated educational aims which will take the ability and requirements of each child into consideration (Van Wyk Report, 1955). The sectioning of pupils into groups in the school situation cannot be avoided.

The results of ability grouping appear to depend less upon the fact of grouping itself than upon the theory behind the grouping, the accuracy with which grouping is made for the purposes intended, the differentiation in content, method, and speed, and the technique of the teacher, as well as upon more general environmental influences (Cornell, 1936). Boyer's (1936) view is that ability grouping must be defined in such a way as to exclude a rigidly standardized procedure on any group level. It must enhance the effective educational growth of pupils by providing social settings which are significant for both group and individual. There must be provision for temporary or supplementary groupings for specific purposes within the several ability groups or cross grouping may be introduced.

The ideal would be the non-grouping of pupils and the arranging of a separate course for every pupil, but this is obviously out of the question for financial and practical reasons. The only practical alternative for administrative and teaching purposes is to divide the pupils into classes or groups. The fundamental aim of sectioning pupils into classes is to group them in such a way that their requirements can be met in the most efficient manner. Flexibility in grouping is a sine qua non. The future progress and welfare of the individual pupil should be the main consideration in grouping procedures (Behr, 1971). One of the most decisive factors in

respect of grouping appears to be the child's intellectual ability. A detailed discussion of the concept intelligence is therefore absolutely necessary.

### 2.3.2 The concept "intelligence"

#### 2.3.2.1 Nature and definitions of intelligence

Various definitions of intelligence are given by different authorities with the result that up to date there is no general agreement among psychologists, educationists and others concerning the actual meaning and proper definition of intelligence. The numerous definitions and attempts at defining intelligence may be classified according to that aspect of intelligent behaviour which is emphasized. Thus some writers define it as the ability to learn; some as the ability to engage in abstract thinking; still others say that intelligence is in proportion to the individual's effective adaptation to new circumstances; while some psychologists have a more analytic approach to the definition of intelligence. This diversity in the definition of the term "intelligence" may account for much of the controversy regarding differences in abilities between ethnic groups and subgroups.

A good way out of this confusion seems to lie in grouping the various definitions into three categories according to emphasis, namely, the functionalistic, the structuralistic and the pedagogical approaches which are discussed briefly below.

#### 2.3.2.2 Theories of intelligence

##### 2.3.2.2.1 The functionalistic approach

Here intelligence is defined according to its function. There are several exponents of this view, but only a few will be mentioned. Lovell (1971) states that British psychologists have reached a measure of agreement that a good working definition of intelligence (although not necessarily a good one) is: (a) the ability to see relevant relationships between objects or ideas; and (b) the ability to apply these relationships to new but similar situations. Vernon (1960) perceives three broad cate-

gories for defining intelligence. These are: (a) biological; (b) psychological; and (c) operational. Biological definitions emphasize the individual's capacity to adjust or adapt to environmental stimuli. Psychological definitions stress mental efficiency and the capacity for abstract reasoning which requires the use of symbolic language. Operational definitions involve making detailed specifications of intelligent behaviour and then finding measures of these specifications. Intelligent behaviour thus becomes expressed in terms of these measures. Heim (1970: 29) defines intelligent activity as consisting of "grasping the essentials in a given situation and responding appropriately to them". Heim's definition goes a long way towards embracing the biological and psychological views of intelligence in the design of intelligence tests whilst at the same time satisfying the common sense view of intelligence.

#### 2.3.2.2.2. The structuralistic approach

Emphasis here is placed on the structure of intelligence. In 1904, Spearman, using a prototype factor analysis, formulated his Two-factor Theory. According to him there was one fundamental ability underlying all cognitive activities, a general factor which he called 'g'. Further, each test was thought to require a specific ability, 's', unique to each test. A testee with high general ability would therefore be expected to perform well in most aspects of an intelligence test, whilst at the same time displaying variations in test scores arising from his special talents.

Spearman's oversimplified theory was soon superseded by the work of Burt who proposed the hierarchical group-factor theory widely supported in Britain. Spearman's choice of test material was restricted and insufficient to allow for the existence of groups of tests which reflected common skills. Many tests, for instance, require verbal ability, in addition to a specific ability. Therefore Burt suggested "group" factors as well as 'g' and 's'.

An American psychologist, Thurstone, was not satisfied with the all-inclusive measure 'g' because it revealed so

little of the special talents of each person. In the 1930's he employed another factor analytical procedure which compounded 'g' and 's' to give several factors referred to as primary mental abilities. Examples of these are verbal comprehension (v), number ability (n), word fluency (w), perceptual flexibility and speed, inductive reasoning, rote memory (m) and deductive reasoning. Thurstone did not deny the possibility of a general factor, but his factor approach enabled him to isolate independent mental abilities which he regarded as more productive when applied to educational or vocational guidance than would a single score of intelligence.

Hebb (1949) distinguished between Intelligence A and Intelligence B. The first component is an innate potentiality which is neither observable nor measurable while the second component is the average level of intellectual development at some later date. Intelligence B depends largely upon the influence of the environment, and intelligence tests purport to measure this component. Child (1973) identifies Intelligence A and Intelligence B with the genotype and phenotype, respectively, of intelligence. In 1955 Vernon (1969) added to Hebb's definition Intelligence C which represents the score of an individual on a recognized intelligence test.

Lastly, we mention two controversial contemporary, sophisticated models of human ability expounded by Cattell and Guilford. In Cattell's (1963, 1967) theory two general factors are postulated, namely, fluid (gf) and crystallized (gc) general ability. gf is regarded as a measure of the influence of biological factors on intellectual development and thought to be comparable to inherited ability. gc represents the outcome of cultural experiences such as parental and educational contacts. Clearly gf and gc are not directly related to Hebb's Intelligence A and B respectively because the latter cannot be directly assessed, whereas Cattell has claimed to have measured both gf and gc.

Guilford's (1968) model of the intellect was first proposed in the 1950's. In this ambitious model no less than 120 mental factors are postulated, of which he claims to have exposed about 80. These mental factors are derived from three independent

dimensions which he calls operations, contents and products; that is, each intelligent act requires the individual to carry out various thinking "operations" (such as memory, convergent thinking, divergent thinking) using "content" media (such as symbols, figures or semantics) in order to "produce" such things as classes, relations or implications. With this three-dimensional arrangement, 5 operations X 4 contents X 6 products, we get 120 possibilities for intellectual factors.

#### 2.3.2.2.3 The pedagogical approach

Here reference must be made to Langeveld's phenomenological approach to the problem of intelligence, namely, that intelligence is the power of the individual to break through his Umwelt or his world in his continuous confrontations with new situations (cf. Nel, B.F. et al., 1965). In other words, one is intelligent to the extent that one is able to understand one's world and to cope successfully with its demands. Incidentally, this is the approach that was followed in African traditional society in assessing a child's intelligent behaviour. In this way a child could be categorized bright, average, dull, or feeble-minded.

### 2.3.3 Various forms of mental testing

#### 2.3.3.1 General

In this section we shall mention the various tests designed to measure intelligent behaviour and the raison d'etre for such tests.

From the foregoing it must be evident that intelligence is a multidimensional phenomenon. Originally intelligence tests were devised to determine an individual's general intellectual level, but it soon became clear that only certain aspects of intelligence were being measured thereby. There is now a special stress laid on verbal ability as well as the ability to handle numerical and other abstract and symbolic relationships (Anastasi: 1968).

Now, as many of the so-called intelligence tests measure a combination of the abilities that are required for academic work, a change in terminology has come about and some intelligence tests have become known as scholastic aptitude tests (Anastasi, 1968). In this regard Bernard (1965: 208) declares that "an intelligence test might justifiably be considered an aptitude test - one that indicates an important part of capacity to perform in many areas". He observes that there are, in fact, intelligence tests called Differential Aptitude Tests, The General Aptitude Test Battery, and the Factored Aptitude Test, and that there are others with similar names.

Along with the change in name has come a shift of emphasis in the content. There is now more emphasis laid on verbal skill and quantitative reasoning (American Council on Education, 1959).

The term "intelligence" is also assuming a better connotation. Some make a distinction between academic and practical intelligence, while others speak of abstract, mechanical and social intelligence. Warters (1964) holds that abstract intelligence has to do with the ability to understand concepts and the connections that exist between them. These concepts are generally expressed by means of symbols, and as symbols are words, the ability is named verbal, and if these are numbers or geometrical figures, it is referred to as the numerical or quantitative ability.

A further elucidation of this problem is supplied by English and English (1967: 268) who distinguish between abstract, mechanical and social intelligence as follows: "Abstract intelligence - the ability to deal effectively with abstract concepts and symbols, social intelligence - effectiveness in relations with persons, mechanical intelligence - effectiveness in dealing with concrete objects as mechanisms".

We now proceed to a brief exposition of the various types of tests mentioned in the foregoing.

#### 2.3.3.2. Aptitude tests

According to Bernard (1965), an aptitude test is designed

to estimate probable future performance. Good (1959) describes it as a group of characteristics, native or acquired, deemed to be symptomatic of an individual's ability to acquire proficiency in a given area. It is evident that the aptitudes, which make for prediction, are stable. Super, as quoted by Ahmann and Glock (1959: 380) elaborates: "Whether largely innate or largely acquired, the aptitudes about which we know something appear to become crystallized in early childhood and that after that they are relatively constant". Bernard (1965) states that an aptitude test may also be considered a prognostic test, as it attempts to predict the future performance of the individual in a specific area. Thus there are reading-readiness tests which predict the probable course of the pupil's acquisition of reading skills. There are musical ability, or aptitude, tests that predict the individual's probable success in singing or playing some musical instrument. Aptitude tests have also been designed to predict success in mechanical pursuits, foreign languages, and various branches of mathematics (Bernard, 1965). Duminy (1969: 84) holds a similar view: "... aptitude tests ... are designed to indicate a person's potential ability or aptitude for performance in a certain, most limited, field of education, like music, languages, art".

#### 2.3.3.3. Achievement tests

An achievement test measures proficiency in certain areas of school work. Specifically, it measures the results of teaching and learning. Achievement tests may be divided into two types, namely, those that concentrate on factual knowledge and those that concentrate on comprehension and the application of knowledge in new situations (cf. Engelbrecht, 1970: 28). The former may be called the memory type of test and the latter the thought type of test, or the reproductive and the productive (interpretational) types respectively (Ndaba, 1969). On the broadest general plane achievement tests are found which measure the influence of education on logical thought, critical evaluation of conclusions, technique of problem-solving and creative thought. It is also on this plane that achievement tests surpass the traditional intelligence and aptitude tests (Anastasi, 1968). In this connection Engelbrecht (1970: 28) observes that "scho-

lastic achievement in the broadest sense also refers to non-intellectual outcomes of education such as interests, attitudes, appreciations and social adjustments".

#### 2.3.3.4. Test batteries

Several group tests contained in a testing programme are called a battery of tests. The history of the development of the group battery of tests is interesting. The nature of the correlations between the scores that were obtained in different tests were investigated statistically. Such investigations were carried out by Spearman in 1904 and 1927, Kelly in 1928 and Thurstone in 1935 and 1947, and later this method became known as factor analysis (Anastasi, 1968). The data that were gathered in this way showed the presence of a number of relatively independent factors. Factors such as verbal comprehension and numerical reasoning are present in traditional intelligence tests whilst spatial, perceptual and mechanical aptitude tests more often than not are found in separate special aptitude tests.

One of the most important consequences of factor analysis was the development of group aptitude test batteries. Instead of one total score a score is obtained for each test. This gives a better image of the different abilities of a person in contrast with the general image which is provided by intelligence tests. Now in one all-embracing and systematic programme all the information is obtained which earlier could only be elicited with the help of special aptitude tests. Most of these test batteries are a combination of general intelligence and achievement tests. Human nature is so complicated that a limited number of factors cannot give a full picture thereof. With regard to the selection and classification of students for the secondary and higher education test batteries normally comprise these factors: verbal comprehension, numerical ability and general reasoning. As mentioned in the final chapter, tests employed in Bantu Education are of this nature (cf. H.S.R.C., 1975).

#### 2.3.4. Intelligence, I.Q. and environment

In this connection these crucial questions could be posed: Is there an intelligence test which can be applied to all population groups, say in South Africa, and have valid conclusions therefor? Is there a culture-free intelligence test? Let authorities in this field answer these questions.

Lovell (1971) contends that intelligence is reflected in a person's all round ability in daily life. The thinking skills involved give powers of insight, understanding, conceptualization, quickness of thought and practical judgment. These skills are dependent to some extent on the environmental stimulation received since birth. Lovell (1971: 58) observes that intelligence is affected by early learning and its transfers and that it "can only be measured by a test appropriate to the culture". Elsewhere (pp. 72 - 73) he reiterates the view that "most psychologists are now agreed that no material can be used in intelligence tests which is cultural neutral". Indeed, the overwhelming opinion from the evidence is that there is no such thing as a "culture-fair" or "culture-free" test. As Dennis Child (1973: 171) puts it, "whichever medium we try to communicate in - verbally, spatially, and so forth - it is evident that cultural differences produce variations in test results". Individuals evidently develop only that portion of their potential which is required by their environment (Bernard, 1965). Thus if there is no uniform degree of familiarity with the tests employed, as a result of cultural differentials between different sections of the population, no worthwhile conclusions can be drawn (cf. Lovell, 1971). In fact, comparison in this sphere is inappropriate and fraught with misconceptions. The view of Berry (1969) is that if we engage in such cross-cultural comparisons we are actually trying to compare the incomparables. Vernon (1969: 110) warns against the tendency to "evaluate the intelligence of other ethnic groups on the same criteria" as intelligence "develops differently in different physical and cultural environments".

In the case of Europeans in South Africa, the intellectual stimulation received from the environment is fairly uniform for

all children. They all receive more or less the same kind of education which employs the same language, concepts, and pictorial or other symbols. Furthermore, they are all trained to study printed questions and write down their answers quickly. These factors vary, of course, between schools, between social classes and between families within such classes, though not enough to account for more than 25 to 30 per cent of the I.Q. variability (Lovell, 1971).

Therefore, worthwhile investigations could be undertaken not only into the intellectual development, but the whole living world of the particular child - his Umwelt or milieu (cf. Dreyer, 1969, 1973). For instance, in the case of the African child, his Umwelt will have to be investigated thoroughly before far-reaching conclusions about his intelligence or educability can be drawn (cf. Duminy, 1966). The specific life-situation of the South African Black child contrasts sharply with that of his White counterpart. The latter, as we have already mentioned above, is born and bred in the scientific-technological world of Western culture. On the other hand, the former's world is an environment without any experience, on the child level, of the highly specialized technological demands characteristic of modern Western society.

Before leaving off this aspect of our discussion, it is important to put the matter in its proper perspective in order to obviate misconceptions and mischievous allegations. The point at issue is the environment or culture into which one is born irrespective of one's colour or race. It is as impossible to escape the influences of one's historico-cultural milieu as it is impossible to jump out of one's skin. Respondents from the same culture (irrespective of colour) tend to give like responses in intelligence tests. In this regard, Lovell (1971) states that the closer the culture of the race to that of the race for which the intelligence test was devised, the more likely the average scores for the two races will be the same; or, again, the longer the migrants have been within the new culture, the more likely it is that their scores will be equal to those of the native peoples. With regard to the African

situation in the South African context, Duminy (1966: 12) is even more explicit: "The Bantu child need not, as far as intellectual potential is concerned, stand back to any race". He maintains that what is sometimes seen by superficial observers as a permanent backlog in reality involves explicable and even remediable educational and cultural phenomena.

It would appear then that the way out of this quandary lies in the formulation of tests that take into consideration the cultural milieu of the testees. A uniform degree of familiarity with the test material should be ensured. No test group should have an unfair advantage over another. In this way the danger of test results being exploited by racists and the lunatic fringe of political parties for their own selfish ends can be avoided.

#### 2.3.5. Overview

In the light of the foregoing reflection, the pupil population could now be properly classified according to certain criteria, bearing in mind, of course, that, besides the mental criterion, in the interests of the child as many other accountable criteria as possible will have to be taken into consideration to ensure a reliable grouping or classification of pupils. In this way "exceptionality" (i.e. mental superiority and sub-normality) and "normality" can be identified and congenial educational provision geared thereto. This leads us to a detailed account of adaptation of instruction for ability groups as set out below.

### 3. THE ADAPTATION OF INSTRUCTION FOR ABILITY GROUPS

#### 3.1. Introduction

In the light of the foregoing reflection we now focus our attention on the principle of individualization in practice and the role of guidance in this regard. These are central problems in this treatise. Frequent references will be made to different

educational systems in an endeavour to elucidate the problem in hand. In short, the whys and wherefores of instructional differentiation will receive the spotlight in this section.

### 3.2. The system of differentiated education

#### 3.2.1. Why differentiation has become imperative

In modern democracies the high school has become the people's college. While nobody would like to see a single child deprived of an education, there still remains the fact that traditional subject offerings must be revised and invigorated and supplemented, that new areas of useful experiences must be added, and that methodology and teaching must be reorientated and rejuvenated to meet the needs and demands of the young millions attending secondary schools. Ways and means must be devised to strengthen the holding power of these schools in an endeavour to reduce or eliminate the rate of drop-outs and the phenomenon of "square pegs in round holes".

The late 19th century saw the introduction of legislation for free, compulsory and universal education in most European countries and the U.S.A. However, at this stage the principle of universal education was not extended to include secondary schools, which continued to be selective institutions, and, in Europe at least, retained some of the aristocratic features of the previous eras (Kazamias & Massialas, 1965).

The process of industrialization, urbanization and secularization gathered momentum in the 20th century and in its wake brought about radical educational changes in all communities which were affected by them (Cupido, 1969). In the early 1950's Kandel (1951: 17) observed that "we are now passing through one of those periods of transition which see the efflorescence of new theories of education, whose practical realization is dependent upon conditions beyond the control of educators". This period of transition has been characterized by three "explosions": in population, in knowledge and in aspirations, with far-reaching educational implications. More-

over, the 20th century has witnessed two catastrophic world wars which created certain conditions conducive to educational change. It has seen overwhelming events, technological and scientific spectaculars like earth satellites, moon landings, docking in space, heart transplants, heart-and-lung transplants, etc.

The introduction in all countries of compulsory school attendance to an age not lower than sixteen years as soon as circumstances permit was advocated by the International Labour Conference in 1945. It recommended that in all cases school attendance should be compulsory up to the age for admission to employment, with continuation of education compulsory up to the age of eighteen years (Kandel, 1951).

Turning to South Africa, we find that the school-leaving age for European pupils is sixteen years. Although Coloureds and Indians enjoy free education, theirs has not been compulsory up to 1974. In recent decades some African states have introduced free, compulsory education, for example, Ghana, Ivory Coast, Guinea, Dahomey, Chad, Gabon, Liberia, to name a few (cf. Sasnett & Sepmeyer, 1966).

Thus in most industrially developed societies the compulsory school-leaving age has been raised to include post-primary education, and attempts have been made to broaden the social base of recruitment into secondary schools and institutions of higher learning (Cupido, 1969). Just as the need for primary or elementary education was recognized with the scientific and industrial revolution a hundred years ago, so present-day thought has to be directed to the kinds of primary and secondary education which provide the needs of an individual growing up in a modern industrial society (Solomon, 1967).

With the great influx of pupils into schools in recent decades, a changing philosophy of education has emphasized the point that the children of all the people should be given the opportunity to secure appropriate training in secondary schools (Butler, 1961). Not only is elementary education considered the

heritage of every pupil but secondary schooling is also regarded as his right. Child labour laws, compulsory attendance, the demands of the professions and industries, and the prerogatives of youth compel secondary schools to cater for an ever increasing number of adolescents. Today, society is demanding more training for its youth and a different kind of training. The high school must afford educational opportunities for those who knock at its door (Butler, 1961).

Therefore, the large increase of pupils means that more and more of these pupils come from all levels of society rather than from the upper level as was the case in the distant past. Not only the able and academically minded section of the post-primary school population seeks the advantage of secondary education but more pupils from all social and economic levels of society are also seeking more training. The schools have to cope with a markedly mixed intake, in the true sense of that term. Obviously the competence and expertise of the administrator and the educator will be put to a severe test in such a situation.

The most significant aim of the new educational trend is to inspire the pupil to the pursuit of a standard of excellence which is commensurate with his ability, aptitude and interest. This concerns the gifted as well as the less talented child who is now in a position to attain his goal through greater effort and perseverance. The provision of equality of educational opportunities means that the differences in the abilities and aptitudes of the pupils must be considered and that different types of courses should be offered to meet the wide range of individual differences. Thus differentiation at secondary school level becomes imperative in all educational systems of developed countries, and, to some extent, of developing societies.

In the South African context the distribution of intelligence in the European population at large, based on test results obtained with the New South African Group Test (S.A.G.T.), is given in the table below (cf. Behr, 1971).

TABLE I

Distribution of intelligence obtained with the N.S.A.G.T.

Ability Grouping	Percentage of Population	I.Q.
Subnormal	± 2,3	69 and lower
Borderline	± 6,9	70 to 79
Dull-average	± 16,0	80 to 89
Average	± 49,6	90 to 109
Above average	± 16,0	110 to 119
Superior	± 6,9	120 to 129
Very superior	± 2,3	130 and above

The above table illustrates the fact that the educable ordinary school population is composed of three groups, namely, (i) a group of dull-average pupils or slow learners with I.Q. ranging from 80 to 89 and comprising about 1/6 of an ordinary unstratified, heterogeneous class; (ii) a group of average and slightly above average pupils with I.Q.'s from 90 to 119 and comprising about 3/4 of the class; and a group of bright pupils with I.Q.'s above 120 and comprising about 1/12 of the class (Behr, 1971). The table also emphasizes the danger of applying uniform standards to a class of mixed abilities. Such procedure is followed for the benefit of the average majority but at the expense of the dull and bright minorities. Differentiated education is intended to rectify this anomaly which gives a semblance of bowing to the "tyranny" of the majority at the expense of minorities.

### 3.2.2. The bases of differentiation

From the foregoing exposition it is evident that rates of learning vary infinitely in tempo for pupils with different degrees of intelligence and from different environments. We cannot postulate uniform norms of attainment at any stage for all pupils.

It has been estimated that somewhere between 10% and 20% of the school-age population deviate sufficiently from the cultural norms to require special social and educational services (cf. Sawrey & Telford, 1969; H.S.R.C., 1972). We must apply the principle of individual differences and this means differentiated norms for different pupils. Every pupil's capacity is the measure of his attainment. The school must make provision for these varying capacities and the problem of differentiated education is to offer effective teaching to pupils of varying ability. Differentiation at secondary school level can take place by means of different aims, different content of subjects, varying rate of teaching methods, adjustment classes or by means of the comprehensive school (Van Wyk Report, 1955).

To obtain a still greater degree of homogeneity in the same class or standard, the bases of achievement, intelligence and age are extended to such an extent that groups are formed in a certain class. The pupils are classified into certain streams, for example, the A-stream includes all the bright pupils, the B-stream the average pupils and the C-stream the weak pupils. In big schools these sections may form different classes, whilst in smaller schools the teacher should be aware of these three sections in his class and adapt the work and method accordingly.

Differentiation, then, is based on the fact that pupils differ and that different opportunities should be created to fulfil the needs of every pupil. Educators must now recognize the vital role played by the three A's in the pedagogic-didactic situation: that is, ability, aptitude and age. To differentiate in a general way these variations in capacity to learn, the terms "bright", "average" and "dull" are commonly used, which may be abbreviated BAD (cf. Butler, 1961). Thus the schools must purposefully cater for the "BAD" in the pupil population.

The need for differentiation increases at the higher levels of education. In primary education all pupils get the same work in the same time; that is, general education is offered. However, this does not mean that individual differences must be

ignored at the primary school level. On the contrary, the aim of the primary school should be the general moulding of the child and its teaching should be based more on the individual aptitudes of children (Van Wyk Report, 1955; H.S.R.C., 1972). Ability groups should be the rule and not the exception, and the level of achievement should be in accordance with individual ability. Failure and retardation should be eliminated by means of adjustment classes and remedial work. At secondary school level pupils have a choice between either academic, technical, vocational, agricultural or domestic science training.

### 3.2.3. The meaning of differentiation

Differentiated education in general means that as far as possible provision is made for the development of the ability, talent and interest of each child. It seeks to educate all children by providing equal though not similar educational facilities, taking individual differences among children into account. "Subject-matter and method must be matched with the individual pupil's ability" is the operative slogan of differentiated education. Inevitably such a system of education calls for differentiated aims, pupil grouping, curricula, subject-matter, method, examinations and certification (Van Wyk Report, 1955; H.S.R.C., 1972).

Differentiated secondary education presupposes the division of a heterogeneous school population into ability groups for the purpose of effective instruction. Pupils should be classified into homogeneous groups. Intelligence tests, achievement in school and the bent towards a vocation should be taken into consideration.

Effective differentiation is also based on differentiated curricula. The subject-matter for secondary education must be chosen in such a way that it will make provision for the religious, moral, social, intellectual, aesthetic, physical and vocational development of the adolescent. The academically inclined pupil can manage the subject-matter with less effort,

but the weak pupil finds it to be beyond his capacity. The purpose of differentiated secondary education is to plan the subject-content in such a way that it will be in accordance with the level of intelligence, aptitude and interest of the individual pupils. The syllabuses must be drawn up in such a way that the content will link up with and emanate from the intellectual requirements and the abilities of the various ability groups.

Differentiated education presupposes that differentiated methods will be used so that the subject-matter can be dealt with in such a way as will suit the intelligence and capabilities of each of the different ability groups. Bright pupils should have opportunities to proceed more directly to independent work, abstract generalizations and to extended applications of concepts, while more concrete methods should be used when teaching the dull pupils; that is, for the latter group there should be more concrete experience and greater practice of concepts and skills.

Differentiated examinations should be used and differentiated certificates issued which should indicate clearly the standard of scholastic achievement. In this way each pupil is judged and rewarded according to his ability and aptitude.

In the light of the foregoing we can now proceed to discuss the techniques or methods of differentiation.

#### 3.2.4. The techniques of differentiation

For purposes of further elucidation of the concept of differentiation we shall examine briefly some techniques of differentiation in other education systems (cf. H.S.R.C., 1972; Transvaal Education Dept., 1973; Brown, 1972).

##### 3.2.4.1 Differentiation in tracks or streams (differentiation in subject-matter)

This form of differentiation entails the classification of pupils into homogeneous ability groups according to I.Q. and the

offering of a specific subject at different levels. This stream (track) grouping may be extended so that a pupil takes all his subjects at the higher, middle or lower level.

#### 3.2.4.2. Setting or cross grouping

When pupils take different subjects at different levels, cross grouping or setting occurs. This method of grouping is used particularly in England, Scotland and the U.S.A. For instance, a pupil may be in the A group for mathematics, D for English and B for geography.

#### 3.2.4.3. Differentiation according to choice of subject and courses of study

This form of differentiation is the most common in certain countries, e.g. West Germany, France, Belgium, Norway, Sweden and England. A core of basic subjects is prescribed for all pupils. There is, in addition, a wide choice in respect of a field of study and choice of subjects. These courses are mainly of an academic, technical, commercial, domestic science and agricultural nature. This form of differentiation may occur either in separate single track schools (i.e. external differentiation) or under one roof in a comprehensive school (i.e. internal differentiation).

#### 3.2.4.4. Differentiation in tempo

Within a comprehensive or single track school differentiation may also occur with regard to the tempo at which children learn. This technique amounts to the fact that one pupil, for example, takes five years to complete a course while another may take seven years as a result of the fact that he has to repeat two years. In this case there is no differentiation in the subject-matter or in the method of examination. In the U.S.A. this system is especially characteristic of the non-graded school, that is, where there is no division into standards. Consequently, pupils do not fail standards but write an examination at the end of two or three years, which permits them,

if successful, to proceed to the following phase of two or three years, or which dictates that they should remain in the former phase for a further year.

3.2.4.5. Differentiation by enrichment of the syllabus

A minimum subject content is prescribed for a specific subject and pupils are divided into homogeneous ability groups according to some criterion. The learning programme of the quick-tempo group is enriched with additional subject-matter, but everybody writes the same examination at the end of the year.

3.2.4.6. Advanced placement programme

In the U.S.A. especially, this method is related to the enrichment of the learning programme. Enrichment may be accomplished in various ways, but by means of this programme an attempt is made to allow the clever pupil to take part in the college programme at an earlier stage. In the final year at the secondary school, therefore, certain subjects are taught at the college level and the student receives credit for them when he is admitted to a tertiary educational institution.

3.2.4.7. The parallel syllabus plan

This plan is used in Massachusetts, U.S.A. The pupils progress in two parallel streams. The syllabus of a particular subject includes the same subject-matter, but one stream completes the work in eight years while the other takes six. Pupils are transferred periodically from one group to the other in accordance with their abilities and progress.

3.2.4.8. The individual progress plan

\* This scheme originated in Colorado, U.S.A. It makes provision for every pupil to work and progress at his own individual tempo. As soon as the pupil has completed the work of a

particular standard, he may be promoted. This may happen at any time during the school year. At the commencement of each school year the pupil merely continues from where he left off the previous year.

#### 3.2.4.9. The semester plan

A further differentiation technique found in the American schools is the so-called semester plan by which pupils are promoted or failed at the end of each six months. Thus pupils who fail would have to repeat only six months' work.

### 3.3. Overview

The various techniques employed in educational differentiation discussed above are based on the premise that pupils differ from one another in background, special aptitudes, interests and in methods of working. Various innovations have been evolved in an attempt to adapt instruction to individual differences. Educational innovations as such have no particular virtue. Their whole value depends on the competence, quality and expertise of the teachers. More important still, there must be a sound scheme for identifying the nature of the individuality of each child. The traditional school acted in terms of the "average child", which is merely a statistical concept and not an individual unique person. In a situation like that there is no precision in determining whether the learning as organized is really suited to the hypothetical average member of the group. The teacher's job is to assign the right tasks at the right time, to chart the learner's course, to help him on his way, to show him how far he has progressed. The pupil must be properly matched to his curriculum. The teacher can only do this if the pupil's whole personality structure has been evaluated. This is the task of guidance which is discussed below.

### 3.4. The role of guidance in a sound differentiated programme

### 3.4.1 Preamble

The complexity of modern society makes properly organized guidance services essential in contrast to preliterate societies whose simple social and cultural structures called for no such guidance. In the pretechnological societies there were, by and large, only three possible occupations, namely, those of hunter, shepherd or tiller of the soil, and very often environmental factors would limit the choice to one or two of these occupations, thereby simplifying still further primitive man's choice-making. Thus the primitive young person did not find himself in a polyvalent milieu where he would be faced with a multiplicity of alternative careers from which to choose. Usually he followed in the footsteps of his father who gave him the necessary guidance and training.

As developments took place in social organization, economy, science and technology, society gradually became more complicated. From a behaviouristic-psychological point of view, a need for guidance is found wherever the environment is sufficiently complex to permit a variety of responses and whenever individuals are not equipped to react instinctively or habitually to the stimuli of the environment (cf. Traxler & North, 1966). The behaviour-psychologist would see guidance as a form of stimulus-response behaviour. On the other hand, from a psycho-pedagogical perspective, we would see guidance as the help and guidance given by the adult to the non-adult so as to lead him up to the point where he can decide for himself.

Radical changes have taken place in developed societies within the last half century, and by now economic life and the employment market have become so complex that the ordinary child and his parents are lost without specialized information and guidance. Phenomenal developments in pure and applied science and the mechanization and electronization of industry have led to minute vocational specialization and to an infinite number of vocational choices, many of which are new and require an ever higher degree of basic education and training.

South Africa was also caught up in the vortex of breath-taking changes brought about by industrialization and urbanization. Until late in the 19th century the chief and traditional forms of occupation were arable farming and animal husbandry. However, the discovery of gold and diamonds changed the picture drastically. The erstwhile agrarian society was transformed into an industrial community. The growth of huge industries and the pyramiding of the financial structure led to dense concentrations of the population in towns which sprang up rapidly in what had been rural areas. These changing environmental conditions have placed a much greater responsibility upon young people for making wise choices. Educational and psychological agencies have become aware of large differences among individuals in their potential for success in different areas (Traxter & North, 1966).

Industrialization lays premium on literacy, numeracy and appropriate skills. The introduction of free, compulsory education in all developed countries is a logical step to satisfy the economic needs of the day. This mass education makes available to virtually everyone within reach of a school a common body of the skills and information that are essential for functioning in a civilized world. However, the needs of the pupil population cannot be met by the procedures and provisions of mass education alone. In this regard Lindgren (1967: 580) states that "every student needs some special and individualized attention at some time or other during his educational career". This is the job of the guidance specialist who is charged with the task of helping the individual student - with individualizing education. The opportunity to get the right type of education a pupil needs is "the birthright of each child" (Froehlich, 1958: 1). Irrespective of the place of domicile or the size of the school attended the child must receive an education consonant with his needs, talents and interests.

Thus the need for guidance in today's schools has grown out of the belief in educational opportunity for all. As the practical expression of this belief, guidance serves as a

primary means for providing the contact and help needed in the school on a personal level. Guidance serves a triple function: through it the individual is aided to develop in ways that will enable him (a) to strengthen the use of his own abilities, (b) to make wise choices, and (c) to face the problems he will encounter in and out of school (Mortensen & Schmuller, 1960). This strengthening of the individual's determination and power to use his own abilities is the "central function of guidance" (Mortensen & Schmuller, 1960: 4). Glanz (1967: 4) declares that "guidance is the primary instrument for the individualization of the entire process of education."

The foregoing reflection reveals that in the course of time guidance assumed a new dimension in that it began to concern itself with the whole individual, in all aspects of his life, and with the interrelationship between him and society (Behr, 1974a). The aim of guidance has come to signify the helping of youth "to attain a life that is individually satisfying and socially effective" (Jones, 1963: 4).

### 3.4.2. The nature and essence of guidance

#### 3.4.2.1. Definition of concepts

The terms "guidance", "counselling" and "personnel work" were rarely, if ever used, in a school setting until the 20th century (Traxler & North, 1966). However, since about 1910 these terms have gradually found their way into common usage until they have become an integral part of the basic vocabulary of education, particularly in the U.S.A. (Traxler & North, 1966).

The term "guidance" had its origin in the "vocational guidance movement" (Froehlich, 1958: 4). "Vocational guidance" was first used in a printed document in 1908 by Frank Parsons, the founder of the Vocational Bureau of Boston, and "father of the vocational guidance movement" (Traxter & North, 1966: 3). The meaning Parsons attached to the term amounted to the provision of help to the youth, to aid them in choosing an occupation. It appropriately described the narrow range of activities undertaken by some early guidance workers. They conceived

of guidance as helping some persons find jobs and assisting others to gain advantage in their economic situation by finding better jobs. According to Froehlich (1958: 4), "the whole orientation was in terms of the world of work". Similarly Jones (1963) states that in its beginnings guidance was centred on problems related to vocations. In 1913 the National Vocational Guidance Association was founded in the U.S.A. and was largely concerned with finding jobs for the youth in order to keep them gainfully employed and thus reduce juvenile delinquency. However, it was soon discovered that merely finding a job for a youth was not enough. The solution lay in matching the job with the abilities and needs of the individual (cf. Behr, 1974a).

Thus the early vocational counsellors soon realized that they were not dealing with a segmented individual, that they could not counsel one part and pay no attention to the rest of the counsellee. They discovered that it was essential to counsel with the whole person - with his hopes and prejudices, his aims and ambitions, with vocational and personal problems. Thus they began to drop the term "vocational" and to speak of themselves not as doing vocational guidance work, but as rather doing guidance work (Froehlich, 1958). Guidance became conceived of as being concerned with the all-round development of the individual - his physical, mental, moral, social, and spiritual self - focusing upon the individual and his problems in their totality. The Van Wyk Commission (1955: 34) reports that in all the countries visited (i.e. U.S.A., Canada, U.K., Belgium, Holland, Sweden, Denmark) seldom are the words "vocational guidance" used but only the word "guidance" which "implies more than the term vocational guidance since it includes not only that, but also the idea of guiding a pupil throughout his school career in order to supply the necessary advice in choosing and planning a course".

In the light of the foregoing it can be stated that the guidance function consists in the enhancement of individual growth and development. In this broad sense, guidance may be

described as the "personalization of education both in theory and in practice" (Mortensen & Schmuller, 1960: 3).

The definition of Mortensen and Schmuller (1960: 3) puts the matter in a nutshell: "Guidance may be defined as that part of the total educational program that helps provide the personal opportunities and specialized staff services by which each individual can develop to the fullest of his abilities and capacities in terms of the democratic ideal". Thus this definition implies that the individual has not only certain rights but also distinct responsibilities within the society. It implies further that in order to achieve the objectives of guidance pupils, parents, teachers, guidance specialists, inspectors, school administrators, school board members, and the community must work co-operatively as a team. Furthermore, it connotes that the major goals of guidance and of the school are identical, namely, the preparation of desirable citizens who accept effective roles in society.

There are also the questions of (i) the relationship between guidance and teaching, (ii) who should be given guidance at school? and (iii) should guidance be a subject or a service? Writers such as D.S. Arbuckle, R. Ojemann, J.A. Kelley, D.V. Tiedeman, R. Strang, and others have attempted to equate guidance with teaching. However, the view that guidance results can be achieved mainly in an ordinary classroom is disputed by those who perceive it as a specialized activity pertaining to self-defining and self-conceptualizing processes (Mathewson, 1962). In pursuant of the latter viewpoint, Behr (1974a) takes the stand that although only a minority of pupils may have overt adjustive, orientational or learning problems, all will need guidance in getting the most out of school, developing personal-social understandings and skills, and orienting themselves to future opportunities. Needless to say, all this will need specialist intervention. Moreover, the term "school guidance service" definitely establishes that it is not a school subject which is at issue, but a service which is confined to those who are of school-going age (H.S.R.C., 1972).

Although guidance, as portrayed above, is a totality concept, nevertheless certain major facets of it may be distinguished in the school situation, namely, educational and vocational guidance. The term educational guidance was first used in 1914 by T.L. Kelly who explained it as the help given to a pupil in his choice of studies and other adjustments there. More will be said below on these two facets.

Sometimes there is confusion regarding the relationship between guidance and counselling. Although in South Africa the terms mostly used are guidance (Afrikaans "voorligting") and vocational guidance (Afrikaans "beroepsvoorligting") rather than counselling, nevertheless the term school counsellor (Afrikaans "skoolvoorligter") is invariably used in both Black and non-Black schools. Counselling is a key concept of guidance and basic to its functioning. Behr's (1974a) view is that guidance and counselling are closely interwoven and involve absolute skill in interpersonal relationships and the understanding of personality structure as well as a unique style of communication, which only evolves in the counsellor in the course of time, following upon adequate and expert training.

Thus the views expressed by the various authors cited above and others immediately suggest that the function of guidance is far broader in scope than the one that has traditionally been accorded to teachers. Guidance always involves the adjustment of the whole person to his total environmental situation. It can, therefore, be rightly considered as a pedagogical concept since it involves the help and guidance rendered by a mature person to the child who is still on his way to maturity. Education implies intended exertion of influence by the mature upon the immature, with the basic idea that to educate means to "lead higher", to enable the immature to become mature and self-responsible. The child is not responsible for his existence or being-there; he is in fact the responsibility of the adult both in the biological and in the spiritual (moral) sense. The adult is, therefore, duty bound to render guidance in this process of becoming, of growing.

#### 3.4.2.2. The aim of the school guidance service

The aim of guidance as a service within a system of secondary education should be an auxiliary service whereby pupils are guided, according to their person-structures, as regards educational and vocational matters so that they will receive differentiated education in accordance with their abilities, aptitudes and interests and the requirements of a nation. In this way the aim of an educational system would be realized (H.S.R.C., 1972). In the light of this reflection, it is evident that guidance should not be offered as a subject but as a service which permeates the whole spectrum of the school situation.

#### 3.4.2.3 The methodological aspects of the school guidance service

There are some particular methodological aspects of the school guidance service which reflect the specialized efforts of the school guidance officer on behalf of the child. These aspects of the service include, inter alia, the following (H.S.R.C., 1972):

- (i) The general informative aspect which is involved when the school guidance officer supplies pupils with factual vocational information.
- (ii) The pedo-diagnostic aspect which is employed when the guidance officer, for purposes of compiling a "picture" of the person, or because of the distinction between pupils who are ready for school and those who are not, amasses a pupil's anamnestic and/or psychometric data and integrates and interprets them for himself. Compiling a person's profile is a prerequisite for any of the possible working methods of the guidance officer, except in the provision of general information.
- (iii) The counselling aspect which is applicable when the guidance officer, on the strength of pedo-diagnostication, gives the pupil, or the teacher and parent for the sake of the pupil, advisory support by interpreting the pupil's personal profile in an educationally accountable

manner. For the most part this counselling will be directed towards preventing, at an early stage, the primary school pupil's less serious problems with regard to matters of education and person-structure from becoming permanent manifestations.

- (iv) The orthopedagogical aspect which is involved when the guidance officer, on the strength of pedo-diagnostics, has established the manifestation of certain shortcomings in the pupil and commences remedial or therapeutic treatment to re-orientate the pupil. These therapeutic efforts of the guidance officer on behalf of the pupil will be particularly valid in problems concerning person-structure and thought and learning processes.
- (v) The referential aspect which involves all cases where the guidance officer, on the strength of pedo-diagnostics, discovers that the pupil concerned will benefit from more extensive and specialized pedo-diagnostics, counselling and pedo-therapy on the part of the personnel of the school guidance clinic. Besides the specialists in each of the fields of orthodidactics, logopedics, orthopedagogics, socio-pedagogics and vocational guidance, the co-opted services of pediatricians are also available to the clinic.

These methodological aspects of the school guidance service represent the distinguishable, possible methods of approach according to which the guidance officer can give expression to that which is proposed in the various fields of the school guidance service, namely, educational guidance, vocational guidance and guidance concerning the person-structure, whose correlation is discussed below.

#### 3.4.2.4. The correlation between educational, vocational and person-structure guidance

Langeveld states that the child is someone who wants to be somebody himself, and the task of the adult is to assist or guide him to realize this ideal. Guidance as a service within an education system attempts to make provision for the assistance which the school-going young person needs, and it implies that

the young person as a non-adult wishes to be led towards adulthood which is the supreme aim. Vocational maturity is one component of adulthood. In view of the fact that education purports to elevate pupils to adulthood and that no teacher can instruct without educating, differentiated efforts will have to be made on behalf of pupils in their progression towards adulthood. For this reason pupils must be guided in educational and vocational matters with due observance of their person-structures. Educational, vocational and person-structure guidance implies distinguishable but inseparable components of the school guidance service. The three areas of concern are completely integrated in the form of the school guidance service and each is implicit in and supports the others (H.S.R.C., 1972).

#### 3.4.3. The urgent need for a school guidance service

Guidance is indivisible. It is a process which must commence at the primary school level, or even earlier, and link up with the secondary school stage. This linking-up refers to the basic principles and aspects of guidance which must be included in both services, because the auxiliary service at both educational levels will be concerned with the child in his full school context, the basis and foundations of which are already laid in the primary school. Therefore, it will often be necessary, in practising school guidance at secondary school level, to refer back to the efforts of the school guidance officer on behalf of the child at primary school, in order to be able to understand and explain, with greater insight, the young person's development at a particular stage. This implies that the auxiliary service at primary school level must not only be completely responsible, but that the guidance has a remedial as well as prophylactic function. This approach on the part of the school guidance service at primary educational level will mean that young people with problems will not receive specialized attention only at a more advanced age at secondary school, but that they will already be guided at primary school in such a way that problems are as far as possible obviated. In this way, an attempt will be made to prevent problems from becoming ineradicable at a later stage (H.S.R.C., 1972).

It was mentioned earlier that the guidance service must give all young people the benefit of the full guidance programme, that is, it must serve all non-adults who are in need of aid or support from primary to secondary school age. This implies that the service must not only be available to young people who experience problems, but that the full guidance programme will be of positive benefit to every child from his primary to his secondary school career, irrespective of whether or not he experiences difficulties.

#### 3.4.4. Personnel involved in guidance

##### 3.4.4.1. The teacher-counsellor

A distinction is made in respect of the effectiveness of the services rendered by teacher-counsellors and those rendered by professional counsellors. A view is expressed that the former are first and foremost teachers in orientation and outlook, and are viewed as such by their pupils (cf. Arbuckle, 1966). The teacher-counsellor is a staff member who devotes part of his time to counselling and the rest to teaching. The drawbacks of such a teacher-counsellor are numerous and seem to eclipse the merits, if any.

In Froehlich's (1958) work cogent reasons are cited why it is more desirable to have a full-time counsellor rather than his equivalent in teacher-counsellors, namely:

- (a) Every teacher at times must also be a disciplinarian. If a person tries to be both a teacher and a counsellor, it may turn into a Dr. Jekyll-Mr. Hyde sort of relationship. The child will not know, during casual contacts, which person he is dealing with.
- (b) Pupils will open up more to a person with whom they do not come in daily contact. It is a little hard on both parties for the pupil to pour out his deepest problems to a counsellor one period and have that same person as his teacher during the next period.
- (c) A full time counsellor will be able to operate more efficiently than several part-time counsellors because he can concentrate his attention on guidance matters.

- (d) By offering a full-time counselling job, a school has a better chance of securing a person prepared for guidance work than if it tries to operate with several teachers as counsellors, each of whom has only a period or two a day for counselling.

The arguments in support of the teacher-counsellor position usually deal with the benefits to be derived from having the counsellor maintain contact with the classroom, the greater acceptance of the teacher-counsellor by other teachers, convenience of scheduling when several persons have counselling duties, and the greater ease of having a budget approved when counselling time is dribbled among the staff rather than when it is concentrated in a full-time position. Whilst in some schools these arguments may carry weight, "but in most schools they are probably excuses for not shifting to a more adequate counseling program" (Froehlich, 1958: 214). Behr (1974a: 7) also strongly criticizes the idea of a dual role of a teacher-counsellor and dismisses it as "an anachronism" which is inconsistent with the sound principles of guidance. There are several other authorities who point out that the pedagogic role of the teacher is very different from the listening and effective role of the counsellor.

This whole problem is also very much relevant to the education of the African child. Here it is a matter of "half a loaf is better than no bread". It is a necessity. It is sensible to begin at least with a teacher-counsellor than having no guidance service at all. Needless to say, this is a peripheral service which can do no more than scratch the surface of the iceberg. The ideal would be to have a full-time counsellor.

Although we stress the important role of a full-time counsellor in the school situation, nevertheless it is essential that all teachers should have some knowledge of "practical guidance". It is the task of every teacher to offer guidance, from the primary school onwards, on personal appearance, health, relationships, public behaviour and other personal matters, and in teaching a subject to point out its vocational possibilities.

For this reason it is imperative that teacher trainees should follow a course in guidance as part of Educational Psychology so that they should be of assistance in guidance of a general nature. In this way the guidance officer can devote his attention to specialized education and vocational guidance (H.S.R.C., 1972). Moreover, teachers with some knowledge of guidance, however elementary, will make the work of the professional counsellor easier by creating a congenial atmosphere in the school. A hostile or nonchalant staff can frustrate the efforts of a counsellor. There must be a sound teacher-counsellor co-operation.

#### 3.4.4.2. The professional counsellor

##### 3.4.4.2.1. His training

It is reasonable to assume that the professional training of the counsellor should be closely related to the professional functions of his position as a counsellor. The standard level of professional counsellors in the U.S.A. is a two-year post-graduate course (cf. Arbuckle, 1966). In the first year a theoretical background to guidance is provided, while in the second year the course takes on a more practical form in which students are supervised in fieldwork.

In South Africa there is no fully fledged professional training to enable counsellors to fill their roles satisfactorily (Prozesky, 1967). This view is confirmed by the H.S.R.C. Committee on Differentiated Education (1972: 111) exhortation that "advanced training in guidance should be offered in order to equip the guidance officer for his task". This Committee states that South African universities offer guidance as a subject or part of a subject in the curriculum for the teacher's diploma and the B.Ed. degree. Guidance is also offered as a part of psychology. The provincial education departments organise vacation courses for qualified teachers to acquaint them with guidance. Prozesky (1967) observes that careers masters (i.e. teacher-counsellors) are found in the schools, many of whom have received some form of in-service training in

vocational guidance, and that professionally trained psychologists also operate within the various provincial systems.

Various authorities are agreed on the question of a properly organized training programme for professional counsellors. Behr's (1974a: 14) view is that the training of the counsellor must be "rigorous and of post-graduate standing". He feels that the counsellor's status in the school in terms of salary and career structure must be commensurate with his role. He pleads that "these are issues which our universities and education departments need to investigate and resolve". Behr's plea is echoed by the H.S.R.C. Committee (1972: 210) which states that "since advanced training in guidance must be offered by the universities, a degree in education or school guidance should be awarded" (their emphasis). They suggest that the school guidance officer must have a knowledge of Educational Psychology, Philosophy of Education, Didactics, Social Pedagogy, Clinical Child Psychology, and Guidance in order to be able to carry out his guidance task in the school. The course must embrace a theoretical grounding as well as practical training at a clinic. The whole course should take four years to complete.

#### 3.4.4. His duties

Central to the whole concept of the guidance service is the calibre of the counsellors. In addition to certain personal qualities, the counsellor must possess psychological expertise and intimate knowledge of the pedagogical setting - hence he must be trained as a pedagogue (cf. H.S.R.C., 1972). He is able to draw on a reservoir of skills from many sources, and is strategically placed to contribute to the overall efficiency of the school through follow-up and research activities without undermining the teacher's position or arousing the latter's personal defences (Behr, 1974a).

Thus the counsellor plays a crucial role in the educational establishment. Behr (1974a) describes the duties of a counsellor as follows:

- (a) He has to intervene actively in the life space of the pupils within the schools.

- (b) He is a mobilizer of resources; he acts as a link between the school psychological and medical services, and establishes liaison with the home and social welfare services.
- (c) He is in possession of crucial information related to pupils, which can be rapidly retrieved in crucial situations.
- (d) He has to know the intimate and complicated dynamics of the classroom group as a social system with the delicate network and interplay of the nomothetic (i.e. role-centred), idiographic (i.e. person-centred), biological, sociological, anthropological, and other dimensions.
- (e) He has to fulfil a supportive role in respect of teachers, who themselves have personal needs and goals. It is a fact that the teacher projects in the classroom situation his own fears and aggressions, and this is also true of his pupils. A particular child may symbolise for the teacher a person he feared or admired, and so unconsciously feelings of hostility, jealousy, or affection may be aroused towards him.

The foregoing reflections emphasize very strongly the fact that guidance must be handled by experts in order to avoid pitfalls. Behr (1974a) warns that guidance in the hands of immature and inadequately trained personnel could easily degenerate into a subtle form of persuasive communication coercing pupils into the acceptance of courses, careers, and types of education that fit the utilization of the pool of talent to meet the economic and other objectives of society at the expense of the individual's own personal abilities, aspirations, and needs. Moreover, guidance in the wrong hands could degenerate into a kind of sickly therapeutic for incompetent teaching by diverting blame away from the school and its staff through labelling pupils who are not coping with their work as immature, lazy, disinterested, inattentive, and so on.

#### 3.4.5. Overview

It appears that White educational authorities have realized the vital importance of guidance in a sound differentiated pro-

gramme. Consequently serious attempts are being made to improve the current situation. The foregoing reflections have far-reaching implications for African education. However, in view of the fact that the whole problem of ability grouping and attendant instructional differentiation as well as guidance in respect of African pupils will be probed in depth later in this treatise, treating the matter at this stage would be tantamount to prejudging the issue.

#### 4. GUIDELINES

From the foregoing discussion it would appear that successful teaching and meaningful learning consist in the recognition of individual differences among pupils and adapting instruction to such differences. As Mursell (1954: 172) puts it, "meaningful learning must proceed in terms of the learner's own purposes, aptitudes, abilities, and experimental procedures". Inevitably, this means ability grouping in one form or another and the adoption of the various techniques of differentiation e.g. setting, streaming, comprehensive schools, team teaching, etc. to suit the circumstances of each country. Moreover, the nature of the individuality of each pupil can only be determined by a properly organized guidance service. All this points to the urgent need for the introduction of differentiated education in the African school situation. Indeed, we wholeheartedly agree with Reisner (1936: 38) that "the needs of our heterogeneous school population will be met only as we succeed more and more completely in getting the right children together to follow those school experiences that are adapted to their abilities and their economic future". So these reflections lead naturally to a discussion of the next chapter, namely, a survey of relevant vital innovatory patterns in the British educational system in an attempt to get a fuller understanding of how these devices aid differentiated education and what lessons we can derive therefrom, if any.

5. REFERENCES

1. Ahmann, J.S. & (1959) : Evaluating Pupil Growth, Boston: Glock, M.P. Allyn & Bacon, Inc.
2. American Council on Education (1959) : College Testing.
3. Anastasi, A. (1968) : Psychological Testing, London: Macmillan Co.
4. Arbuckle, D.S. (1966) : Counselling: Philosophy, Theory and Practice, Boston: Allyn & Bacon, Inc.
5. Behr, A.L. (1971) : A Textbook of Educational Method, Pretoria: Van Schaik Ltd.
6. Behr, A.L. (1974a) : "Guidance ...." in Guidance and Counselling, Publication Series No. 8 of S.A.A.A.E.
7. Behr, A.L. (1974b) : "Some aspects of remedial education with special reference to the slow learning child," paper read to the second annual conference of the S.A. Pedagogical Society, 26/27 June, 1974, University of Zululand.
8. Behr, A.L. (1973) : New Horizons in Special Education, Pretoria: Van Schaik.
9. Bernard, H.W. (1965) : Psychology of Learning and Teaching, New York: McGraw-Hill Book Co.
10. Berry, J.W. (1969) : "On Cross-Cultural Comparability" in International Journal of Psychology, Vol. 4, No. 2.
11. Brown, B.F. (1972) : New Directions for the Comprehensive High School, New York: Parker Publishing Co.
12. Boyer, P.A. (1936) : "The administration of learning groups in elementary schools" in N.S.S.E.: Thirty-fifth Yearbook of Education.
13. Butler, F.A. (1961) : The Improvement of Teaching in Secondary Schools, University of Chicago Press.
14. Cattell, R.B. (1963) : "Theory of fluid and crystallized intelligence: a critical experiment" in Journal of Educational Psychology, Vol. 54.

15. Cattell, R.B. (1967) : "The theory of fluid and crystallized intelligence checked at the 5-6 year-old level" in British Journal of Educational Psychology, Vol. 37.
16. Child, D. (1973) : Psychology and the Teacher, London: Holt, Rinehart & Winston.
17. Cornell, E.L. (1936) : "Effects of ability grouping determinable from published studies" in N.S.S.E.: Thirty-fifth Yearbook of Education.
18. Cupido, A.J.J. (1969) : The Implementation of a System of Differentiated Education in High Schools for Coloured Children, unpublished M.Ed. thesis, University of S.A.
19. Dreyer, H.J. (1969) : Intellektuele ontwikkeling en die implikasies daarvan vir Bantoe-onderwys, Inaugural Address, Series 1, No. 13, University of Zululand.
20. Dreyer, H.J. (1973) : 'n Onderzoek na die vorming van getalkonsepte by die kind: 'n tussen-kulturele studie, unpublished doctoral thesis, University of S.A.
21. Duminy, P.A. (1966) : The Educability of the South African Bantu, Fort Hare University Press.
22. Duminy, P.A. (1969) : General Teaching Method, Cape Town: Longmans.
23. Ellis, R.S. (1936) : The Psychology of Individual Differences, New York: Appleton - Century Co., Inc.
24. Engelbrecht, F. (1936) : "Pupil classification as affected by organization and by administrative practice" in N.S.S.E.: Thirty-fifth Yearbook of Education.
25. English, H.B. & English, A.S. (1967) : A Comprehensive Dictionary of Psychological and Psychoanalytic Terms, Ohio: Longmans.
26. Frandsen, A.N. (1961) : Educational Psychology, New York: McGraw-Hill Book Co.
27. Froehlich, C.P. (1958) : Guidance Services in Schools, New York: Harper & Row.

28. Glanz, E.C. (1967) : Foundations and Principles of Guidance, Boston: Allyn & Bacon, Inc.
29. Good, C.V. (1959) : Dictionary of Education, New York: McGraw-Hill Book Co.
30. Gross, R.E. (ed.) (1965) : British Secondary Education, London: Oxford University Press.
31. Guilford, J.P. (1968) : "The Structure of Intelligence" in Whittla, D.K. (ed.): Handbook of Measurement and Assessment in the Behavioural Sciences, Reading, Mass.: Addison-Wesley.
32. Havighurst, R.J. & Moorefield, J.E. (1967) : "The Disadvantaged in Industrial Cities" in Witty, P.A. (ed.): The Educationally Retarded and Disadvantaged, University of Chicago Press.
33. Hebb, D.O. (1949) : The Organization of Behaviour, New York: Wiley.
34. Heim, A.W. (1970) : The Appraisal of Intelligence, Slough: N.F.E.R.
35. Human Sciences Research Council (1972 Reprint) : Report of the Committee for Differentiated Education and Guidance... for the R.S.A. and S.W.A. - Part I, Pretoria.
36. Human Sciences Research Council (1975) : Catalogue of Tests, Pretoria.
37. Jackson, B. (1966) : Streaming: an Education System in Miniature, London: Routledge & K. Paul.
38. Jones, A.J. (1963) : Principles of Guidance, New York: McGraw-Hill Book Co.
39. Kandel, I.L. (1951) : The New Era in Education, London, Harrap & Co. Ltd.
40. Kazamias, A.M. & Massialas, B.G. (1965) : Tradition and Change in Education, Englewood Cliffs, N.J.: Prentice-Hall, Inc.
41. Kelly, W.A. (1956) : Educational Psychology, Milwaukee: Bruce Publishing Co.
42. Kirk, S.A. (1962) : Educating Exceptional Children, Boston: H. Mifflin Co.

43. Lindgren, H.C. (1967) : Educational Psychology in the Classroom, New York: Wiley & Sons, Inc.
44. Mathewson, K.H.(1962) : Guidance Policy and Practice, New York: Harper & Row.
45. Mursell, J.L. (1954) : Successful Teaching, New York: McGraw-Hill Book Co.
46. Nel, B.F. et al. (1965) : Grondslae van die Psigologie, Universiteitsuitgewers, Stellenbosch.
47. Peel, E.A. (1958) : The Psychological Basis of Education: Edinburgh: Oliver & Boyd.
48. Prozesky, M.N. (1967) : The Comprehensive high school concept with particular reference to a selected group of private and government-aided boys' schools in Natal, and suggestions for its developing implementation, M.Ed. thesis, University of Natal.
49. Reisner, E.H. (1936) : "Social Change and its effects on school organization in the United States" in N.S.S.E.: Thirty-fifth Yearbook of Education.
50. Shiels, F.H. (1963) : A Critical analysis of methods of selecting and streaming secondary school pupils and some suggestions towards solving the problem in Natal schools, unpublished doctoral thesis, University of Natal.
51. Solomon, A. (1967) : A Comparative study of the systems of technical education and training of craft apprentices, technicians and engineers for the electrical engineering industries in certain European countries, the United Kingdom and the Republic of South Africa, D.Ed. thesis, University of S.A.
52. Steyl, I. (1966) : Differensiasie en die Hoër Handelskool in Suid-Afrika, met spesiale verwysing na Beroepsge-differensieerde Kursusse, unpublished doctoral thesis, University of Natal.
53. Stratemeyer, F.G. et al: (1957) Developing a Curriculum for Modern Living, New York: Teachers' College, Columbia University.

54. Transvaal Education Dept. (1955) : Report of Oversea Mission in connection with Differentiated Secondary Education (Van Wyk Report) Pretoria: Government printer.
55. Transvaal Education Dept. (1973) : Education Bulletin, Vol. XVII, No. 1.
56. Traxler, A.E. & North, R.D. (1966) : Techniques of Guidance, New York: Harper & Row.
57. Turney, A.H. (1936) : "The Psychological basis of grouping" in N.S.S.E.: Thirty-fifth Yearbook of Education.
58. Vernon, P.E. (1960) : Intelligence and Attainment Tests, London: University of London Press.
59. Vernon, P.E. (1969) : Intelligence and Cultural Environment: London: Methuen
60. Warters, J. (1964) : Techniques of Counseling, New York: McGraw-Hill Co.
61. Yates, A. (ed.) (1966): Grouping in Education, London: Wiley & Sons.
62. Yates, A. (1971) : , The Organization of Schooling: A Study of Educational Grouping Practices, London: Routledge & K. Paul.

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**CHAPTER IV**  
**HISTORICAL TRENDS AND**  
**PRESENT PATTERNS IN**  
**IN BRITAIN**

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CHAPTER IV

HISTORICAL TRENDS AND PRESENT PATTERNS IN DIFFERENTIATED  
EDUCATION IN BRITAIN

"In recent years there have been many changes in the organisation of secondary schools and a great increase in the number of comprehensive schools which provide for children of different abilities and attainments".

(Dept. of Education and Science, U.K., 1973: 6).

1. PREAMBLE

Several South African educationists who have written on differentiated education have touched on the educational system of Britain on a comparative basis. Such writers include Lynch (1952), Davies (1958), Shiels (1963), Solomon (1967), Prozesky (1968), Cupido (1969), Dobie (1969), to mention only a few. For this reason the present writer will not repeat their expositions of the said educational system but will confine himself to the innovatory aspects of the system and the resultant reorganization at secondary school level with special emphasis on the comprehensive high school which purports to cater for the wide range of abilities among pupils. In order to put the matter in its proper perspective a brief historical sketch of the development of the whole spectrum of education in Britain will be given, with special reference to educational differentiation.

As a rule, the terms "Britain" and "United Kingdom" are used synonymously to mean England, Wales, Scotland and Northern Ireland together. However, in this chapter Britain will refer to England and Wales, which constituted a political unit as well as an educational entity at the time of writing this treatise (1975).

2. HISTORICAL DEVELOPMENT

## 2.1. Bird's eye view

English education has been less consciously nationalist than that of continental European countries, but it has been deeply influenced by social class structure. Traditionally, the English have held that the activity of the government should be restricted to essential matters such as the defence of property and should not interfere in education, which was the concern of the family and the church. Thus England and Wales have a long tradition of education for those wanting to go to university, but the provision of education for all dates only from the end of the 19th century when the government began to take a more positive responsibility for social welfare. For centuries formal education beyond the elementary stage was the sole prerogative of the privileged few.

The first government grants for education were made in 1833, but the main development of publicly provided primary education dates from the Elementary Education Act of 1870, which accepted the principle of compulsory elementary education with government aid. Its object was virtually achieved by the end of the 19th century. Public provision of secondary education dates from 1889 in Wales and 1902 in England. The system in England and Wales is now governed by the Education Act of 1944, which aimed to widen and improve educational opportunities at every stage.

The Established Church of England exercised a profound influence on English education from time immemorial. Ever since Henry VIII's breach with Rome in 1545 the church dominated education. England, more than any other great state of western Europe, delayed the organization of a public school system and relied upon philanthropy to do the work of the state in education (Duggan, 1948). The earliest provision for elementary education was in parish and "dame" schools. By the late 18th century there was a fairly wide network of charity schools, mainly established through the Society for Promoting Christian Knowledge. Then, as a result of the social and economic changes generated by the Industrial Revolution and the enormous growth in population, voluntary provision for elementary education was greatly extended.

The Sunday Schools (for children at work during the week) were among the first to try to provide facilities on a national scale. They were followed at the beginning of the 19th century by the monitorial schools of the National Society (as it was usually known; its full title being the National Society for Promoting the Education of the poor in the principles of the Church of England, which absorbed the Society for Promoting Christian Knowledge) and the non-denominational British and Foreign School Society. Their educational methods were associated with the names of Bell (1753 - 1832) and Lancaster (1778 - 1838), founders of the monitorial schools where the headmaster was in sole charge and taught only the monitors (selected older children) who passed on the instruction they had received to groups of pupils.

England has a much longer tradition of secondary education (for boys) provided by the endowed grammar and public schools; nearly all were religious foundations. One public school, King's School, Canterbury, traces its origins back to the 6th century; Winchester and Eton, founded with associations with the universities of Oxford and Cambridge, date from the 14th and 15th centuries, and many others from the 16th century, the classic period for the foundation of the endowed grammar schools. These schools prepared their pupils, by way of the universities, mainly for the learned professions, especially the Church and the Law. Latin and, later, Greek were the essential subjects; "grammar", meaning Latin grammar, gave the schools their name. Some of them began to be known as "public" schools as they outgrew their purely local associations.

University education dates from the late 12th and early 13th centuries with the foundation of Oxford and Cambridge: their first colleges were established in the middle of the 13th century.

Such technical education as existed by the time of the first government grants for education came through trade guilds and the apprenticeship system. The original guild schools of the Middle Ages usually gave elementary instruction in the vernacular as a foundation for the industrial education received by the apprentices in the guilds themselves. Some guilds established

schools of great repute, which have had long histories. The Merchant Taylors' School of London is probably the most notable (Monroe, 1954).

The universities and nearly all the older schools were, since they were religious foundations, confirmed as the preserve of the Established Church of England by the Act of Uniformity of 1662. The exclusion of non-conformists led to the establishment of "dissenting academies" which were active until the greater religious toleration of the late 18th and early 19th centuries. These academies had a breadth of curriculum, unique at the time, which exerted a great influence on educational reform in the 19th century (Duggan, 1948).

The consequences of the Industrial Revolution during the early 19th century led to efforts to bring pressure to bear on the government to prevent the exploitation of children in mines and factories. The humanitarians were backed up by the influence of the Methodist and Evangelical Revivals and legislation was brought in under which the government accepted some responsibility for the improvement of social conditions. The 1830's, when Parliament made its first grant for education, was also the decade in which the first Reform Act (reforming parliamentary representation), the first substantial Factory Act, and a law abolishing slavery in the British Empire were passed.

The growing interest in education by the second half of the 19th century and its increased importance in national policy was shown by the establishment of commissions of inquiry: on the state of popular education (the Newcastle Report, 1861), on nine of the public schools (the Clarendon Report, 1864), and on other secondary schools (the Taunton Report, 1868).

## 2.2. The Acts and Reports of 1870 - 99

The growth of a national education system throughout the 19th century continued without a clear plan or a national decision. It is interesting to recall that compulsory education for any age-group in Britain is only 100 years old. The cornerstone of the modern system was laid by the Elementary Education

Act of 1870, which was passed three years after the second Reform Act gave the vote to the working-class people in towns. The Education Act accepted the principle that the establishment of a system of elementary schools should be the responsibility of the state. Thus this Act, the most important educational development of the century, for the first time empowered the government itself to provide educational facilities. Popularly elected School Boards could be set up to manage schools for pupils between the ages of 5 and 13 in areas where no voluntary schools existed or the provision of elementary education was inadequate. This was the beginning of the controversial "dual" system of two types of grant-aided elementary schools, one provided by the churches and voluntary bodies (nearly all religious bodies) and the other by the State through school boards. In 1880 elementary education became compulsory and in 1891 education was given free in most centres. The compulsory age was raised to 12 years in 1899.

The effect of progress in elementary education was to emphasize how much needed to be done for secondary and for scientific and technical education and also for the administration of the educational system. Grants were made for science classes from 1859; the Technical Instruction Act of 1889 empowered local authorities to spend part of the rates on technical instruction; and some school boards started to provide secondary education, finding that they could not restrict themselves to providing elementary education where facilities for secondary education were in demand and were obviously inadequate. A Royal Commission report on secondary education (the Bryce Report, 1895) made recommendations on the content of secondary education and the administration of the system which were embodied in the Act of 1902.

The government's powers were strengthened by the Board of Education Act of 1899, which established a Board of Education and provided for a consultative committee.

### 2.3. Education for Girls

Educational history throughout the world seems to indicate

that education for girls occurs as an after-thought, and development in this regard usually assumes a snail's pace. England is no exception. The establishment of Queen's College, in Harley Street, London, in 1848, marked the first step towards secondary education for girls. Two other well-known schools followed: in 1850 the North London Collegiate School under Frances Mary Buss, and in 1854 Cheltenham Ladies' College, which from 1858 to 1906 was under an equally famous headmistress, Dorothea Beale. In 1869 the Endowed Schools Act laid down that, in forming schemes under the Act, "provision shall be made as far as conveniently may be for extending to girls the benefits of endowment". In 1873 the Girls' Public Day School Trust was formed and by 1891 it had established 36 high schools.

At the same time higher education was gradually being made available to women. Bedford College, London, was started in 1849. However, it was not until 1920 in Oxford and 1948 in Cambridge that women were accorded the full status of members of the university. All the colleges of London University established for women only now take men as well.

#### 2.4. The Education Act of 1902

The Education Act of 1902, known, after its sponsor, as the Balfour Act, implemented the main proposals of the Bryce Commission and made some significant changes in educational control. It introduced for the first time a co-ordinated national system of education, and, with its emphasis on local administration, is still the basis of much of the education system. School boards were abolished and elected councils of counties, county boroughs, boroughs and urban districts (created at the end of the 19th century) made the local education authorities (L.E.A.'s). Their duties included appointing non-elected education committees, some of whose members were to have educational expertise.

All L.E.A.'s took over the school boards' responsibilities for elementary education. The larger authorities (the councils of counties and county boroughs) were additionally made responsible for the provision of secondary and technical education

and their powers also included training teachers (great shortages of teachers had been shown up by the extension of education), providing scholarships and paying students' college and hostel fees. These aspects of the education system developed rapidly.

Another important feature of the Act was the power it gave to L.E.A.'s over voluntary schools, while maintaining and strengthening the "dual" system. The continuance of voluntary schools on a stable economic basis was ensured by the requirement that L.E.A.'s should maintain schools which wished them to do so; in this event they would assume control of secular instruction and the management of the schools.

#### 2.5. The Period 1918 - 38

The succeeding Acts and official reports concentrated on widening opportunities, as indicated below.

The Education Act of 1918 (the Fisher Act) raised the upper age of compulsory attendance without exemptions to 14 and it charged L.E.A.'s with the duty of providing advanced and practical instruction for older children in secondary schools other than grammar schools. It also provided for part-time compulsory attendance at day continuation schools for boys and girls between 14 and 18 who had given up full-time schooling, although this last provision was not put into effect because of the economic difficulties after the end of the first world war in 1918.

In 1926 the consultative committee of the Board of Education issued a report on the education of the adolescent (the Hadow Report). This report, which influenced subsequent educational organisation deeply, proposed a complete educational break for all children at the age of 11 and transfer to separate schools for older children, according to ability. The report also recommended the raising of the school-leaving age to 15, so as to ensure at least four years' progressive schooling for children over 11 years of age.

The Hadow Report inaugurated a new era in education. The term "elementary" education was discarded and replaced by "primary", which we have also inherited in South Africa. More important still, the Report was the first major study of the problems involved in developing post-primary education at a level different from that provided by selective-entry secondary schools, and of the needs of their pupils. Therefore it must be regarded as an important milestone in the growth of differentiated secondary education and in the development of an appropriate rationale in this connection (cf. White, 1971).

Thus the Hadow Report was the most influential of the reports of the inter-war years, and was the main shaping force behind the 1944 Act. It was an attempt to codify and rationalize the existing structure of secondary education in accordance with those pressures towards a more egalitarian and more uniform form of education summed up in the slogan "secondary education for all". The Report accepted the concept of a child-centred form of education, but failed to reconcile such an ideal with the obvious relationship between levels of formal educational achievement and occupational choice by placing the concept in a peculiarly English context which emphasizes the development of "character". The idea of regarding education as a continuous process in which secondary education followed six years of primary education was also established. With endless qualifications and reservations the Report recognized the existence of vocational aims in the curriculum, though scarcely enthusiastically, for it was conceived in that very English educational tradition which attaches so much importance (but less in practice than in theory) to the ideal of a "general education". Technical education was scarcely mentioned, but the new secondary schools which were to be set up after the Report were expected to give a practical bias to their third and fourth year courses. The principle of secondary education for all was accepted but although the Report recognized the limitations of the conventional grammar schools and was sure that they were not suitable for the majority of children, it found difficulties in outlining a viable concept of mass secondary education (Griffiths, 1971).

The next Report, set up in 1933 under the chairmanship of Will Spens, considered "secondary education with special reference to grammar schools and technical high schools". The Spens Report of 1938 advocated an expansion of the existing junior technical schools which recruited boys and girls from the elementary schools at 13 and also recommended the continued development of secondary education in separate grammar, technical and modern schools - the "tripartite" system. The Report took an irreproachably child-centred view. According to it, "the curriculum should be thought of in terms of activity and experience rather than of knowledge to be acquired". Yet, although it castigates the grammar schools for holding precisely the reverse idea, the Report cosily went on to say "... we see no reason to recommend any revolutionary change in the subjects and activities for which the grammar school must offer facilities". Instead, the Report recommended the setting up of technical high schools in addition to the grammar schools and the "modern schools" which had appeared as a result of the decade or so of Hadow reorganization. These technical high schools were to be quite distinct from the grammar schools, although they were to have a similar curriculum until the age of 13. After this the curriculum should be designed so as to permit a liberal education with science and its applications as the core and inspiration. What the study of Greek and Latin were to the idea of a liberal education, the study of engineering, it was suggested, might be to the scientific and technical education provided by the technical high schools. These were revolutionary proposals which, however, have never been put to the test. The traditional dislike of technical or overtly vocational education, unless it occurs under the possibly "civilizing" and certainly prestigious shelter of the grammar schools, proved too strong, so that in 1970 only 62 000 children of secondary school age were enrolled in technical high schools (Griffiths, 1971).

However, on the credit side it can be said that in giving rise to the technical high schools the Spens Report set in motion a development which may eventually result in the reali-

zation of one of the Hadow Report's recommendations, namely, that a practical bias might be seen as a means of providing a sound general education. There was evidence that the junior technical schools and some trade schools, providing a powerful pre-vocational incentive to their pupils, and a sense of reality and practical importance of most of their educational objectives, enabled many pupils who had been rejected by the grammar schools to obtain a good education. Outputs of these schools proceeded to pass academic examinations in increasing numbers. The principle underlying the introduction of technical high schools was to apply this same kind of motivation to children of higher academic ability, and to build a broad curriculum for them around a core of studies of the technological data of the 20th century. The fact that technical high schools have not increased in numbers as anticipated in the Spens Report, the Norwood Report of 1943, or The New Secondary Education, Ministry of Education Pamphlet No. 9 of 1947, is not because of any failure of the principle but rather because of its success - that is, the result of parity of esteem and requirements between the grammar and the technical schools. White (1971) observes that even before the comprehensive school system began to swallow up all the other kinds of secondary schools, the grammar schools had seized upon the possibilities of technological studies, so that differences between the curricula of grammar and technical high schools were greatly diminished. The acceptance of technical and technological studies as being academically respectable and worthy of study by the most academically able pupils should lead to their more widespread and hopeful use as core subjects in the education of the below-average children. As White (1971: 59) puts it, "as long as there was a general feeling that technical subjects were mainly for the non-academic children, the idea was a non-starter".

Widespread developments took place in the 20 years after the first world war, especially in the increase in the number of publicly provided secondary schools giving a grammar school education, the development of separate "senior" schools for other older children from elementary schools, and the advance of technical education. The Education Act of 1936 was designed

to make the reorganization of secondary education possible, but many of its provisions, including the raising of the school-leaving age from 14 to 15 from September, 1939, were nullified by the outbreak of the second world war. However, preparations for thoroughgoing educational reforms began during the war.

## 2.6. The Education Act of 1944

The Education Act of 1944 involved a thorough recasting of the educational system of England and Wales. Its advent and far-reaching implications may be likened to the Bantu Education Act of 1953 in the South African context except that this Act was not generally accepted and welcomed by the people affected as was the case with the British Act.

The main promise of the Act to the British children was free secondary education for all. This promise and the effort to bring together existing educational services meant changes in administration, school organization and the state's relations with religious bodies. The aim of the Act was to reform the law relating to education in England and Wales, and it introduced the most sweeping changes in that law since the Act of 1870. Indeed, it replaced and reformed almost all previous laws relating to education.

Prior to this Act British educational law had had social as much as educational objectives, emphasizing the protection of children rather than the promotion of education beyond the elementary stage. For instance, stipulating a compulsory school attendance age was traditionally designed to protect children from employers' malpractices. On the other hand, the 1944 Act was, comparatively speaking, educational, and aimed at providing every child, irrespective of his social background, with an opportunity to receive an education suited to his age, ability and aptitude. This was a significant pronouncement on differentiated education.

A synopsis of the main changes proposed in the Act is given below.

- (1) It abolished the Board of Education and in its place it created a Minister of Education who was charged with the duty positively "to promote the education of the people of England and Wales".
- (2) It made the county and the county borough councils the local authorities for education and gave them their powers and duties for education.
- (3) It reorganized education in three "progressive" stages called primary (for pupils up to 12), secondary (for pupils over 12 and under 19), and further (for pupils of any age after leaving school). The compulsory school age was raised to 15, and could be raised to 16 without further legislation. Fees were abolished in maintained (i.e. state) schools.
- (4) Denominational schools were incorporated in the state system as "aided" or "controlled" schools. A daily act of worship and regular religious instruction were made compulsory in state primary and secondary schools.
- (5) It made registration and inspection of independent schools compulsory from a date to be specified.
- (6) It gave the L.E.A.'s certain welfare functions: medical inspection, free medical and dental treatment, "milk, meals and other refreshments", clothing (if need be), board and lodging for needy children, and clothing for physical training for any children.
- (7) It made the L.E.A.'s responsible for the special education of handicapped children.
- (8) It enabled L.E.A.'s to pay fees for pupils at fee-paying schools, to grant scholarships and awards for further and higher education, and to pay maintenance grants for children in state schools.
- (9) It gave the L.E.A.'s the duty to make arrangements for "leisure-time occupation in organized cultural training and recreative activities" and to provide, after a date to be specified, compulsory part-time education equivalent to one day a week in "county colleges" for those under 18 not getting other education.

(10) It required the L.E.A.'s to pay their teachers according to scales agreed to by the Burnham Committee and approved by the Minister. It enacted equal pay for women.

Legally, the provisions of the Act are now in operation, with two very important exceptions. The compulsory attendance of young people at county colleges will be delayed until the Minister decides to enforce it: that is, probably for ever (Burgess, 1972). The compulsory school age was raised to 16 only in 1972.

The Ministry of Education's interpretation of the type of secondary education to be provided under the 1944 Act was the touchstone applied to every local development plan submitted. On this interpretation, to provide an adequate secondary education in accordance with age, ability and aptitude, it was necessary to establish separate schools with different programmes to which children were recruited at 11 by means of selection tests. If, in exceptional circumstances, such provisions were made in a single school, then the school must be large enough to comprise the three separate schools under one roof.

The tripartite system of grammar, technical and secondary modern schools did not, in fact, flourish. The Ministry had never been specific about the proportion of "technically minded" children in the population, but, in terms of school places provided in practice, it was about 5%. Since, on the average, grammar school places were available to 20%, this left 75% of the child population to be directed to the secondary modern schools for which the Ministry advocated ad hoc courses not designed to lead to any form of qualification. More will be said on secondary schooling later in this chapter. Suffice it to say at this stage that the 1944 Act enabled the L.E.A.'s to experiment with different types of schools and encouraged some of the new secondary modern schools to try out new curricula and new methods. The failure of the Act may be ascribed to the inabilities of the educational practitioners (the L.E.A.'s and the school staffs) to convince parents generally that education in a secondary modern school, however successful that school

was, was better suited than that offered in the grammar school to the needs of children who had failed to pass the grammar school entrance examination (White, 1971).

## 2.7. Developments since 1944

Since 1944 nearly all aspects of the educational system have been examined in the light of modern educational thought and practice and the need to accommodate the changing requirements of society, particularly the pressures created by a growing population and demands for wider educational opportunities.

Primary education and the transition to secondary education were examined in Children and their Primary Schools, a report of the Central Advisory Council (England) under the chairmanship of Lady Plowden, published in 1967. Among the Plowden Report's recommendations were a new structure for primary education composed of a three-year infant and a four-year junior course (involving the establishment of "middle" schools which children would enter at the age of 8 and leave at 12, the age, it was considered, when secondary education should begin); the establishment of educational priority areas in the poorer neighbourhoods to which more teachers and finance would be channelled - "a policy of positive discrimination in favour of areas where children are most deprived socially"; the expansion of nursery education; and the involvement of parents more fully in the life of primary schools. Implicit in these recommendations was the ending of 11+ selection - the practice of allocating pupils to different types of secondary schools or courses on the basis of selection tests at the age of 11. More will be said on this later in the chapter.

In 1963, the Newsom Report, Half our Future, was published. It was concerned with children of average and less than average ability in the 13 to 16 age groups. In order to combat boredom and frustration the Report recommended meaningful participation by these pupils in classroom activities. It urged that a wide range of courses should be provided and that attention should be paid both to imaginative experience through the arts and to

their personal and social development. It proposed lines for guidance to adolescent boys and girls on sexual behaviour and suggested that the school courses in the final year should be outward-looking, as an initiation into the adult world of work and leisure. Thus the Newsom Report laid down important guidelines regarding the education of the less endowed children in accordance with their abilities and aptitudes. This is an important facet of differentiated education.

## 2.8. Further Education

"Further education" is a third stage of English education. This is a broad term which covers all education beyond the secondary stage. Section 41 of the 1944 Act defines it as follows:

- "(a) full-time and part-time education for persons over compulsory school age, and
- (b) leisure-time occupation, in such organized cultural training and recreative activities as are suited to their requirements, for any persons over compulsory school age who are able and willing to profit".

Within this general definition there exists the system of "higher education". L.E.A.'s are responsible, under the 1944 Act, for providing full-time and part-time courses of further education with the aim of enabling people to start courses at various stages and to attain the highest qualifications to which their abilities entitle them and also for providing, through the adult education system and the youth service, facilities for leisure-time education for recreational ends. Further education is also provided at a few direct-grant institutions, including the national colleges and the agricultural colleges, and at a number of independent colleges. Voluntary associations play an important part in the provision of non-vocational further education.

The importance of further education within a system of differentiated education cannot be overemphasized. The implication here is that the terminal point of compulsory school

attendance must not serve as a cul-de-sac for one's learning but that there should be continuation whereby one's abilities are developed further.

## 2.9. Higher Education

"Higher education" consists mainly of work at universities, which are self-governing, and at various colleges under local education authority control - colleges of education, polytechnics and those technical and other colleges of further education which undertake advanced work. The advanced courses are those above the standard required for the Advanced level of the General Certificate of Education. This is a definition of standards used by the committee under Lord Robins' chairmanship set up in 1961 to examine the future of higher education in Great Britain (i.e. England, Wales, Scotland and Northern Ireland). The Robbins Report, Higher Education, was published in 1963.

A number of completely new universities have been founded in the second half of the 20th century. In this context, the Open University, which provides its own degrees and is open to applicants irrespective of academic qualifications, is of particular importance. It received its charter in 1969 and began its courses (based on the calendar year) in January, 1971, for its first 25 000 registered students. This number rose to 38 000 in 1973. The university provides degree and other courses using a combination of television, radio, correspondence and residential courses together with a network of viewing and listening centres. Although no formal academic qualifications are required to register for these courses, the standards of its degrees, which are awarded on a system of credits for each course completed, are as rigorous as those of other universities.

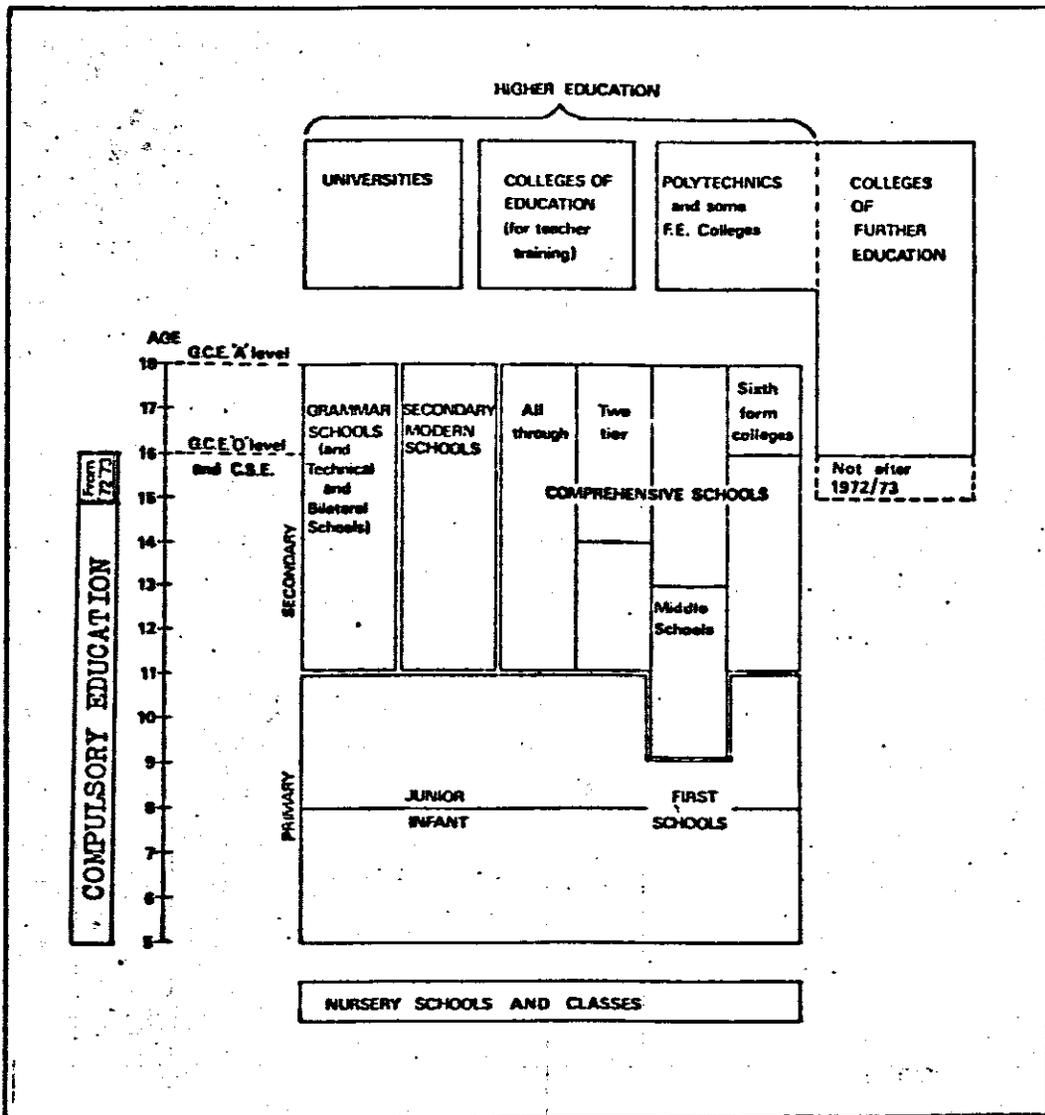
Having briefly reviewed the whole spectrum of English education, we now turn to current patterns in this regard with particular emphasis on innovations and change in the sphere of secondary education, with a brief reference to the pre-secondary stage.

3. CURRENT PATTERNS IN SECONDARY EDUCATION

3.1. Introduction

The tendency in Britain today is to regard education as a continuous phenomenon commencing at the nursery stage and proceeding to the sixth form at the age of 18 as illustrated in Figure 2, which shows the main elements in the provision of maintained schools and of higher education.

FIGURE 2: EDUCATIONAL PROVISION IN ENGLAND AND WALES



(Source: Dept. of Education and Science, 1972: 11)

Primary education is no longer regarded as a distinct type of education which is different in quantity and quality from the secondary school stage. One of the most important and striking features of English education is the organic connection between these two stages of education, a connection which induces a smooth transition and facilitates the organization of a well articulated system of education.

With these introductory remarks as background, we now proceed to examine secondary education.

### 3.2. Secondary Education

#### 3.2.1. The status quo

##### 3.2.1.1. General

The various reports mentioned in the foregoing sought to implement the principle of educational differentiation. The 1926 Hadow Report marked a significant milestone in this regard and the principles outlined in it have since guided educational policy in Britain. The 1938 Spens Report envisaged three types of secondary education varied to meet the different needs of the pupils concerned, that is, the tripartite system, which was ostensibly pedocentrically orientated. In these and other reports the need for post-primary differentiation was recognized in the proposals that education beyond the primary level should be provided in three distinct types of schools. However, the rigorous selection examination meant that children at the early age of 11+ had to be typed as academic, technical or modern. This procedure has been severely criticized by educational psychologists who could find no justifiable grounds for such selection at this early stage (cf. Burt, 1943).

The abovementioned reports culminated in the passing of the 1944 Education Act which has formed the basis for reforms in future years. This Act aimed at providing equality of educational opportunity in accordance with the age, ability and aptitude of each pupil. It is the cornerstone of differen-

tiation in secondary schooling by means of separate schools, which are discussed briefly below.

### 3.2.1.2. Types of schools

#### 3.2.1.2.1. The grammar school

This is the traditional academic school which is held in high esteem in Britain. It is designed for the education of the intellectually superior pupils only and its curriculum is progressive from a broad base of general subjects to a comparatively narrow platform of specialized studies in the sixth form in preparation for university entrance at the age of 18. The subjects normally offered include religious instruction, English language, English literature, modern languages (French, German, Italian and Spanish), Latin, Greek, mathematics, chemistry, physics, biology, history, geography, art, music, woodwork and metalwork for boys, housecraft for girls, and physical education. Some take additional subjects like engineering, architecture, economics, commercial subjects, and philosophy, and a few do gardening, agriculture and horticulture.

In 1969 there were 1 089 grammar schools taking 631 948 pupils taught by 35 000 teachers, about 75% of them graduates. They vary greatly in size. Over three-quarters of them, for example, have between 400 and 800 pupils. The average size of classes is 20,9 and the pupil-teacher ratio 16:1. A pupil in a grammar school is very much more likely to be taught in a single-sex class than a mixed one. There are 361 boys' schools, 373 girls' schools, and 364 mixed (Burgess, 1972).

#### 3.2.1.2.2. The secondary modern school

Most British children go to these schools which offer a general education with a practical bias, closely related to the interests and environment of pupils. These are the pupils who could not make the grade in respect of grammar or technical school requirements, that is, about 60% of the age group. These schools have not attained any distinctive ethos of their own. In fact, most parents regard them as the last resort in a

desperate situation.

The subjects offered at these schools include English, history, geography, religious knowledge, mathematics, general science, (often biology for girls), music, art, light crafts, useful crafts, i.e. woodwork and metalwork for boys, housecraft and needlework for girls, and games. The distinguishing characteristics of this type of school are manifest in the level of difficulty of work (Shiels, 1963).

At first no external examinations were written since it was presumed that the pupils were of too modest ability for success. However, it was soon discovered that pupil ability ranged from subnormal to much above average. Consequently, an increasing number of the modern schools began to offer academic courses leading to the General Certificate Examination (G.C.E.) (ordinary level). With the introduction of the Certificate of Secondary Education (C.S.E.) the secondary modern schools achieved greater status, possibly because they offered courses that could lead to the possession of certificates. However, this development did not eradicate the stigma which seems to be attached to attendance at these schools. On the whole, these schools have not functioned as ideally as had been expected, largely because the rigid division of pupils into certain "types" coupled with the use of seemingly inflexible selection procedures which earned public criticism from many informed quarters could not form the basis of a sound educational system (Dobie, 1969).

Even the quality of the staff leaves much to be desired. In 1969 over 63 000 teachers, of whom about 10% were graduates, taught over one million children in 2 954 secondary modern schools (Burgess, 1972).

### 3.2.1.2.3. The secondary technical school

As mentioned earlier, the Spens Report recommended the replacement of the existing junior technical schools with the secondary technical schools as an alternative to the grammar

schools, offering a five-year course starting at 11+. Thus theoretically intake was from among the same ability groups as were eligible for grammar school education. However, these schools failed to catch on in spite of apparent parity of status with the grammar schools. They tended to be overshadowed by the greater prestige of the latter. Both parents and teachers tended to view these schools as a second best.

As might be expected, the technical school curriculum is basically similar to that of the grammar school, though it may not offer Latin and Greek, or more than one foreign language. It is doubtful whether these schools do more mathematics or sciences than grammar schools but they are certainly biased still towards particular trades like engineering or building. The pupils might get rather less history, geography, English literature and music, though art may take a higher, if industrially biased, position. There were 109 technical schools in 1969 catering for 56 000 pupils taught by 3 000 teachers, about a third of whom were graduates (Burgess, 1972).

#### 3.2.1.2.4. Bilateral and multilateral schools

These titles describe forms of combination of the three types of secondary school in the same establishment. If two schools or departments are involved the establishment is referred to as bilateral and if three, multilateral. The theory is that proximity will facilitate transfer of pupils from one "stream" to another. However, in practice this is doubtful. These schools are now being swallowed up into other categories as secondary reorganization proceeds.

Critics of the status quo envisaged a type of school which would go the whole hog in meeting the individual needs, interests and abilities of pupils, unhampered by rigid selection procedures. Wheeler (1939: 224) was expressing the sentiments of most informed critics of the time when he observed that "there should be varieties of provision to fit the chief varieties of ability and interests found at one period, for example, 11+ to

16". Thus was born the idea of the comprehensive school, which is discussed in the ensuing paragraphs.

### 3.2.2. Secondary Reorganization

#### 3.2.2.1. The comprehensive concept

As is the case with many countries today, Britain is changing its pattern of secondary schooling, by abolishing the much criticized selection tests by which the bright go to the grammar schools (in some areas to technical also) and the rest are dismissed to the secondary modern schools. The traditional schools are being replaced by comprehensive schools which are essentially non-selective in respect of intake. Just as there is no 5+ examination to start infant school, so there is no 11+ to enter a comprehensive. Into the social melting-pot of the comprehensive school are thrown children of all degrees of intelligence and from every type of home background. With its enormous specialized staff and its excellent range of equipment the comprehensive school aims to tailor each individual pupil's education to his own needs, interests and abilities. Thus reorganization of secondary education along comprehensive lines is a change from a selective to an all-inclusive system, a sort of an open house to all comers thirsty for education, irrespective of native endowment or socio-economic background.

The advent of the comprehensive school on the British scene is actually the logical outcome of the clamour by psychologists and educationists for child-centred education. There is no need for any system of selection for admission to comprehensive schools because it is their task to discover the needs of their pupils and to offer suitable courses to meet them. Because these schools are child-centred rather than syllabus orientated or teacher dominated, they tend to be flexible in their timetables and curricula. They have been introduced to give administrative effect to the conviction that not only have different pupils different educational needs but that the scholastic requirements of the same pupils may vary from

subject to subject, and may vary for the same progress through the school (Conway, 1970). In other words, a truly comprehensive school accepts all children of secondary school age in a defined area or district, whatever their ability or social class. Within the maintained sector of education, only if a boy or girl required specialized help or tuition or has physical, intellectual or emotional handicaps should he be permitted to attend another school (Ross et al., 1972).

Because of its egalitarian principle, the comprehensive school is the pet child of the Labour Party whereas the Conservative Party is indifferent towards it, to say the least. The Labour government came to power in 1964 and in 1965 they issued Circular 10/65 asking L.E.A.'s to prepare plans for the reorganization of secondary education on comprehensive lines. An appreciable number of L.E.A.'s complied with the said circular irrespective of political affiliation (Corbett, 1971). However, when the Conservative government took office in 1970 they issued Circular 10/70 withdrawing the Labour circular and suggested the maintainance of the status quo. Again, the Labour Party returned to power in 1974. Soon after taking office in March the Labour government issued Circular 4/74 withdrawing the Conservative circular.

In the said Circular 10/65 all L.E.A.'s were asked to reorganize their schools along comprehensive lines. Six patterns were suggested:

- i. "All-through" comprehensive schools for ages 11 - 18 (the most popular kind).
- ii. Tiered schools where all pupils transfer at 13 or 14 from a lower tier (the Leicestershire pattern).
- iii. Parallel tiered schools where only some pupils (a) choose or (b) are selected for transfer to the upper tier (the Teeside pattern).
- iv. Tiered schools where all pupils (a) choose or (b) are selected at 13 or 14 between long-course and short-course upper tiers (the Bradford scheme).

- v. Schools for ages 11 - 16 followed by (a) a sixth-form college (e.g. Preston, Luton) or (b) a junior college. A common variant has one 11 - 18 school providing sixth-form education for several 11 - 16 schools.
- vi. "middle schools" straddling the age of 11, e.g. 8 - 12 years or 9 - 13 years, leading to variations of schemes ii, iv or v. This solution, popular with teachers, relies on suitable buildings to work well.

From the foregoing it is apparent that there are various ways in which comprehensive education is being developed in England and Wales. It is accepted that a local authority may adopt more than one form of organization in the area for which it is responsible. Therefore, there is no typical British comprehensive school. The common factor is that each contains secondary pupils of every ability except the educationally subnormal. Some schools work in systems retaining selection, some are single-sex, some retain segregation by ability and should more properly be termed bilateral or multilateral schools. However, one thing has become clear - the British comprehensive schools are not, as early enthusiasts suggested, a social experiment. In a society with class and racial differences the "neighbourhood school" has emerged, reflecting all sections of a local community in the proportions in which they are present, and not distorting them as in a system where one class dominated the selective schools and another the rest. One cannot hide from society in a big neighbourhood school. Social engineering is not attempted. Tensions are present but at least they offer to the adolescent an opportunity to come to terms with reality, if not to effect an improvement through experience.

The question of size in a comprehensive school remains a controversial subject. However, "the size of a school does not seriously affect the validity and efficacy of educational principles" (Conway, 1970: 15). In practice factors such as age-range, geographical locality, available resources (particularly buildings), and the strength of teacher-opinion are decisive, but a theoretical optimum size would consider additional

factors such as the need to produce a viable sixth form, the composition and size of the community which the school serves, the economies of scale in a larger school, permissible staffing ratios, and the availability of trained directing personnel. Generally speaking, the earliest comprehensives were unpopular as being too big and supposedly inhuman, and the more recent ones because they have been "small". Admittedly, the small school, which is rich in homeliness and community life, requires a generous staffing ratio to foster educational progress adequately, and pupils also miss the stimulus of sharing ideas in large groups, especially in advanced subjects. Current opinion seems to be that the comprehensive admitting five classes of 30 children annually is the smallest successful size and is more likely to be an 11 - 16 school. A large school of ten-form entry or more offers problems of management, although there is evidence that children like it, and it is usually very efficient. Recent statistics of all-through comprehensives show that 55% have between 600 and 1 200 pupils, 25% have over 1 200, 20% under 600 and a fraction of 1% over 2 000 pupils (Anderton, 1972).

There are many factors other than size which determine a comprehensive school's success. They include the following:

- i. Its internal organization geared to cover essential educational tasks.
- ii. Its pastoral care of pupils, social organization, and the partnership of pupils, parents, teachers and outside influences in an adolescent's growth.
- iii. Its links with the neighbourhood, and its degree of involvement in community provision.
- iv. Its relationship to the primary schools which feed it.
- v. Its concern for training its staff and student teachers, and its attitude to changes in educational method.
- vi. Its educational philosophy - democratic or authoritarian, conservative or modernist.

It appears that the comprehensive school movement has been growing from strength to strength, particularly in the last few years. According to the new Circular 4/74, by January, 1973, 38% of all secondary schools in England and Wales, housing 48.4% of the pupils, were designated comprehensive. Of the 163 authorities existing up to 31st March, 1974, 72 had received approval to reorganize totally on comprehensive lines, 76 had reorganized in part, and only 15 had received no approval to reorganize. Given the present momentum, by 1980 comprehensive schools will be the standard pattern of secondary education throughout Britain (Anderton, 1972).

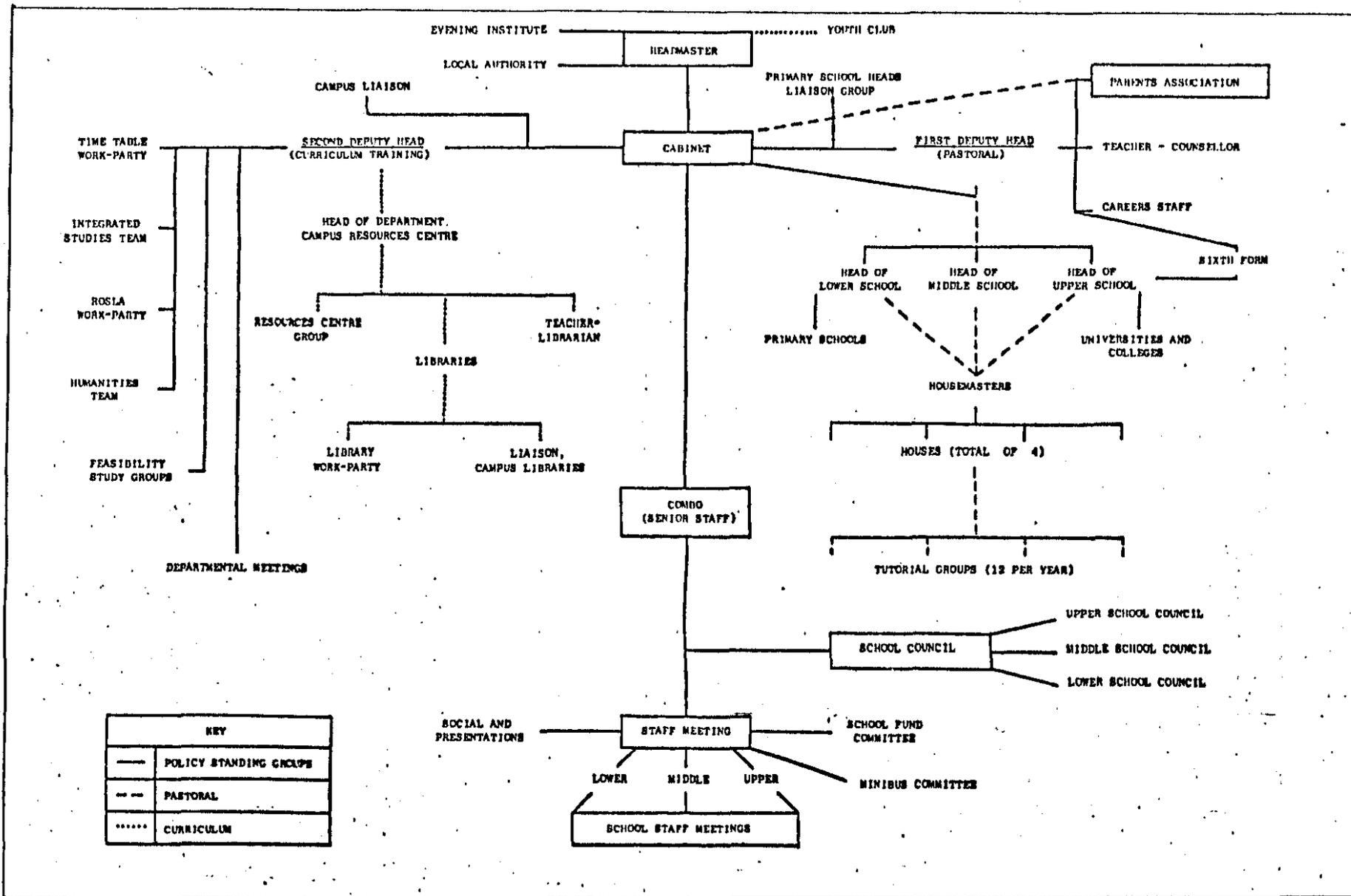
We now turn our attention to an in loco scrutiny of an actual comprehensive school to see how it functions. Our choice is a school in Birmingham as it was in August, 1972 (Anderton, 1972).

#### 3.2.2.2. A comprehensive school in action

We focus our attention on the Hodge Hill Comprehensive School in Birmingham as shown in Figure 3 (cf. Anderton, 1972: 6). The organization and characteristics of such a school may illustrate the points mentioned in the foregoing, particularly the factors which determine the success of a comprehensive school.

The Hodge Hill Comprehensive School is an 11 - 18 all-through school, admitting not less than ten classes of thirty pupils annually in the approximate proportion of two classes of able children, six of average ability, and two of slow-learning children. It serves a neighbourhood of mostly working-class or lower middle-class homes, of which over half are in two municipal housing estates. The school has reached three-quarters of its estimated final size, with 1 350 pupils and 82 full-time or part-time teachers from a staff-pupil ratio of 1: 18. About 5% of pupils are Black. It shares a campus with a small Girls' Grammar School, a Primary and an Infants' School. An Evening Institute for some 2 000 adult students uses the premises every evening.

FIG. 3: HODGE HILL COMPREHENSIVE SCHOOL, BIRMINGHAM



The school is in every way a shared experience with staff, pupils and parents involved in decision-making, in the provision of resources and in the acquisition of new skills. In this way:

- a. The Headmaster recognizes and uses everyone's ability and expertise.
- b. Decisions, especially innovatory decisions, are readily acceptable. (How often does hostility arise from ignorance?)
- c. Everyone has a valuable check on his own judgment and more clearly sees "the art of the possible".
- d. Staff and pupils are encouraged to adopt mature and professional attitudes in areas of contention, the outcome of which may need their co-operation.
- e. Consultation confers insight into management problems and some training for further responsibility.

Hodge Hill has a "horizontal" organization and "vertical" consultation. Year Groups are joined as follows: First Two Years in Lower School, Third Year Middle School, Fourth and Fifth Years in Upper School. Each School has a Head and Deputy and is self-governing within the agreed policy framework. The Sixth and Seventh Years (Sixth Form) are semi-autonomous under the First Deputy Head. School policy is determined through:

- i. "Cabinet", uniting the Headmaster, his Deputies, Senior Master and Heads of Schools, and meeting weekly to discuss major issues, settle minor policy, arrange administration, exchange information, and co-ordinate future action.
- ii. "Combo" (Combined Bodies), which draws together every fortnight the Cabinet, Deputy Heads of Schools, Heads of Departments, Chairmen of Committees, Teacher-Librarian and Teacher-Counsellor. Non-members participate by invitation. Major policy is reviewed, or referred for investigation to Departments, work-parties, Cabinet or Houses with a time-limit for reporting back. Information is called for, and no issues are barred. Members are expected to repre-

sent their junior colleagues and keep them informed of non-confidential matters. Indexed minutes are circulated in staffrooms.

- iii. School Staff-meeting, which ratifies or rejects propositions by Combo or Cabinet, receives information and instructions, resolves points of administration, discusses pupils' progress, etc. All teachers in the school attend, meeting monthly on a different weekday each time, on dates fixed a year in advance. Attendance is compulsory. One man, one vote is the rule, with Chairman's casting vote. Minutes are published and available to the Parents' Committee. Each school has its own more frequent staff meeting where domestic issues are resolved and common policy decided.
- iv. Standing Committees and work-parties responsible to Combo include the School Fund, by which representatives from each school control the common purse. This can influence policy indirectly by helping Departments, teachers or pupils. A Cabinet representative puts the Headmaster's views, which are by no means always followed. Combo keeps a critical eye on all payments and the reasons for them, and an annual summary of accounts is published for parents and pupils.
- v. The Parents' Association Committee, meeting monthly under its own officers. Staff members are the Headmaster and Heads of Schools ex officio, and one teacher representative from each school. Twenty families constitute a quorum. No offices may be held by teachers. Heads report news of interest and seek opinions on current issues; all major policy must get parental support, also all projects involving money, and the School Diary. Parent-Teacher dialogue is genuine but perhaps curiously neither Parents nor Teachers want a combined Association. The only committees where pupils sit with teachers and parents are feasibility committees investigating particular projects.
- vi. Pupil-participation, working through Councils. Each school has one: no subjects are banned from discussion. Each Council sends delegates to the School Council Meeting

as required: two Lower School, four Middle, four Upper, four Sixth form. "One man, one vote" operates, with majority decision and quorum of 75% possible attendance. Two teachers are nominated as advisers and must both be present before business can proceed, thus a walkout by either safeguards teachers and pupils against unacceptable personal criticisms. Recommendations are given equal consideration to Staff proposals, individual pupils can be praised or censured, and R60 per annum may be spent from School Fund without restriction.

The basis of Pastoral Care is the Tutorial Group. Virtually every teacher below Deputy Head of School rank has charge of all-ability, same-age group of about twenty-three pupils. Groups are linked vertically in Houses under Housemaster/Housemistresses, and the First Deputy Head co-ordinates their work and that of the Teacher-Counsellor. Groups move up the school with their tutors as far as possible, and meet weekly in a Tutorial period. Houses additionally meet in weekly Assemblies and are the basis for Sport, Social Activities, the Arts Festival and a Merit Competition. Tutors and Parents meet in Consultation evenings or social gatherings, but most parents prefer to work through Heads of Schools or the First Deputy (who has special responsibility for the girls' welfare). The Teacher-Counsellor assists in difficult areas of pastoral care, makes regular routine visits to families in need of reassurance and support, offers personal counselling to pupils, and links up with the Social Services.

Curriculum and Staff Training are responsibilities of the Second Deputy Head. Several groups work on the curriculum throughout the year, such as the timetable, work-party which considers topics of general significance like meaningful subject options, length of working day, pattern of lessons, etc.; the Integrated Studies Team (part of the curriculum is based on Tutorial groups and is unstreamed, some parts are team-taught, in the first year some specialist subjects are integrated), and the Humanities team which explores new departures in teaching

older pupils. Departmental meetings of an average frequency of less than a month co-ordinate and examine work within each department. Every teacher's views about the curriculum and his personal contribution are obtained before next year's timetable and teacher-deployment are attempted. Great emphasis is put on training: the school accepts very large numbers of student-teachers, whilst serving teachers are encouraged to take long or short training courses. In 1972, twenty teachers including all the Cabinet were studying for a Diploma in Programmed Learning, in connection with the Resources Centre.

Pupils for most subjects are initially divided into three broad bands of ability, with setting in some subjects. The first year has a common timetable and movement is easy in order to obtain the appropriate level for each pupil. Differences begin in year two (e.g. a second foreign language for some pupils) but movement is still common. The third year sees many differences between bands, but in the fourth year every pupil returns to a common basis, comprising a compulsory "core" study for 40% of his time, and free choice between (in 1972) twenty-nine optional subjects for 60%. Virtually all subjects may be taken for external examinations, many on syllabuses devised by the school and accepted by the Examining Boards, marked by the school but moderated by independent assessors. Setting and grouping allow pupils' wishes to be honoured as far as rooms and teacher-availability allow.

The school shares some courses and facilities with the adjacent Grammar School to mutual enrichment. A Links-with-Industry scheme provides support from local firms in certain materials, works-experience for older pupils, and training for teachers in industrial and management techniques. Feeder Primary Schools are linked to the campus in several ways: Head Teachers meet at regular intervals to exchange ideas, an annual one-day Conference for teachers explores topics of common concern, the school has established resources banks for associated schools in Science and Mathematics; the school premises are made available to Junior Schools for subjects like Swimming, Drama and Language teaching. A campus orchestra contains Infant,

Primary and Secondary pupils and teachers.

The school fulfils its responsibility to the neighbourhood in a variety of activities. A Play Group (the only school-based one in the city) is organized by Fourth Year girls for pre-school infants. Teams of pupils care for old people, dig gardens, visit hospitals, help with the mentally-handicapped children, repair and make equipment for groups and schools in difficulty, provide ancillary help in Infant Schools, the Church Day-Centre, the Youth Club. Lower School every year collects and distributes quantities of packaged goods to needy homes. Many more individual initiatives go unremarked. The overall result is that the neighbourhood for good or ill identifies itself with the school, which can give a lead to educative thinking in the widest sense.

Finally, an extensive programme of out-of-class activities reaching into most week-ends and every holiday develops pupils' character and enriches their lives. Staff and parental help is all voluntary and unpaid. Between them, parents, teachers and pupils raise very large sums of money every year to supplement grants from the Local Authority, and to provide extra resources for the school.

The opportunities open to a school like Hodge Hill are obvious, but there is another side to the coin. Efficient organization is essential to a big school and this implies management skills and perhaps special aptitudes in the directing team. A Tutorial System is only as good as the individual teacher wishes to make it. Government by discussion is time-consuming, sometimes tedious. Lack of vision can be at best stultifying and at worst counter-productive. It seems that a comprehensive school is either good or bad - there is no comfortable shelter of mediocrity between (Anderton, 1972).

A peep into the inner working of a school which has attempted to go the whole hog along comprehensive lines should give us an insight into the effectiveness of comprehensive education as an answer to the problem of individual differences among

pupils. This brings us to a brief review of the characteristics and problems of the English system of secondary schooling, with special reference to selection and grouping procedures as well as important agents of innovation.

### 3.2.3. Characteristics and problems of secondary schooling

#### 3.2.3.1. Agents of innovation

Innovation and change in Britain are not haphazard but have a scientific basis, particularly in the sphere of curriculum development and examinations. Various bodies are involved in educational innovation.

There are three points to note in this regard, namely: (1) that, historically, change has been rooted in the schools or at any rate the L.E.A., (2) that attempts at centralised initiative have not been successful and tendencies to centralisation have been resisted, (3) that the new strategy is a central servicing operation to assist local initiative. Therefore, first in this connection is the local roots level: the teaching profession and the L.E.A.'s. Then the national level follows: the Department of Education and Her Majesty's Inspectors of Schools (the H.M.I.'s) and then the National Council for Educational Technology, and the strategies they use: in-service-training and the teachers' centres. Last come those who have had a long standing role in the promotion of ideas: the research bodies, the teacher training institutions (universities and colleges of education) and government advisory committees.

A brief reference must be made to the new style innovators, namely, the Nuffield Foundation, the Schools Council and the National Council for Educational Technology which have an aim in common. Nuffield and the Schools Council, both primarily concerned with curriculum development, also share a method. Though the Schools Council's functions range wider than Nuffield's, they have both concentrated their support on curriculum development teams working to an elaborate and seemingly efficient procedure.

English curriculum development owes the Nuffield Foundation a great debt, for it pioneered the idea of curriculum development on a national scale while at the same time maintaining the principle that teachers should play a large, if not dominant, role in development. It started by taking up some of the ideas of the teachers' specialist associations and offered to finance and organize full-time development work. The strategy of development is essentially co-operative, with teachers playing a dominant role. The range of Nuffield-supported activities and the fact that these share so many characteristics with the Schools Council's approach shows how much groundwork had been done before the School's Council was set up in 1964.

The Schools Council epitomises the most systematic of the English approaches to school innovation. Its novelty lies in an organized approach which is still consistent with the decentralized structure of the English educational system. Having been set up to solve two problems (one professional, one political), the Council has evolved in its solutions to those problems as an important institutional device. It is a force for variety and for greater professionalism in education (Corbett, 1971). The responsibilities of the Schools Council in the field of public examinations derive from those of the former Secondary School Examinations Council which it replaced in 1964.

The Schools Council interest in innovation has broadened from a primary concern with curriculum development to a related concern with research and the training of teachers. But the Schools Council has not concerned itself with the management of innovation - with suggesting how changes in content need to be integrated into a teaching method.

These are, however, the concern of a newcomer to the educational scene, the National Council for Educational Technology. The Council was set up in 1967, a modified Government response to a recommendation for a National Centre for Educational Technology. The centre was intended by those who put forward the suggestion to be a focal point for future research and

development. The N.C.E.T.'s remit is to act as a central agency for promoting research, co-ordinating training and disseminating information on educational technology. The N.C.E.T. has also to advise bodies, including government departments concerned with education and training in industry and the service, on audio-visual media and on the most appropriate and economical ways of using them.

All in all, therefore, the various agents of innovation are geared towards meeting the needs of individual children in a pattern of differentiated education. In this regard there are three other factors which are likely to make the child-centred schools the rule rather than the exception. Firstly, there is the Government decision that secondary education should no longer be selective as set out in the latest Circular 4/74; this is freeing the junior schools from the thrall of the "eleven plus" in areas which had not already gone comprehensive. Secondly, there is a much greater awareness of the importance of the early years of schooling. Thirdly, Schools Council projects provide stimulus on a national scale.

### 3.2.3.2. From tripartite to comprehensive

There are several salient features of the English educational scene which are relevant to the present study. These are enumerated below (cf. also Prozesky, 1968; Conway, 1970).

- (1) The traditional types of secondary schools were founded with limited and specific academic objectives which necessitated a procedure of selection at the primary stage of education to discover those pupils who would best fit into the academic pattern of each of the different types of schools. Thus as a consequence of the 1944 Education Act the dominant pattern of differentiated secondary education which emerged was the tripartite system. The variations within this system are bilateral, multilateral and the fast growing comprehensive schools. The Labour government declared a national policy along comprehensive lines in 1965, and the comprehensive movement has grown from strength to strength ever since.

- (2) There has been increasing criticism of the selection device employed in the allocation of pupils to the different schools in the tripartite system. The comprehensive school seems to offer the answer to the problems attendant upon early and clear-cut selection, which made it almost impossible for a pupil to transfer from one "stream" to another.
- (3) The curriculum at the comprehensive school is geared towards meeting the needs of the individual pupil, and to suit his ability, aptitude and interests a general course of subjects is offered at the initial stages of his schooling. As he moves upwards he is exposed to a basic core of subjects coupled with several electives.
- (4) A properly organized system of guidance in the comprehensive schools assists the child to discover his study direction and prevents the development of "square pegs in round holes". Emphasis is laid on identification and allocation rather than on selection and rejection as is the case with the tripartite system.
- (5) Thus emphasis is given to the provision of adequate information about the progress of each pupil during his journey through the school, but comprehensive schools will be judged ultimately by the degree of their success in discharging their obligations to each pupil in accordance with his specific needs. In order to ensure that each pupil receives an appropriate education, a headmaster requires, in an acceptable form which can be easily interpreted by all who need it, readily available essential information about each pupil from the time he is accepted until the time he leaves and beyond (Conway, 1970).

#### 4. OVERVIEW

A historical development of the whole spectrum of the English education system was given with a view to exposing developmental patterns which might be relevant to the present

study. Certain trends may be discerned:

There is a concerted effort to make the education of children an organic unit from the nursery to the secondary. However, entry into the secondary phase is fraught with problems in schools where the "iniquitous" 11+ examination applies, i.e. in the tripartite system. The advent of the comprehensive school on the scene is an attempt to remedy this anomaly in the British set up. The comprehensive movement is definitely gaining ground. The 48.4% of all secondary school pupils being housed in comprehensives in 1974 is conclusive evidence of this trend, which should be accelerated now that the Labour government is firmly back on the saddle.

Various agents of innovation have made significant contributions towards educational reorganization especially at secondary school level. The system can be more accurately described as a net rather than a chain, a net traditionally kept at tension point by powerful pressure groups, the teachers and the L.E.A.'s especially. Recently the Schools Council and the National Council for Educational Technology have been superimposed as development bodies. Their success depends on how far they can work through the various key groups.

Care must be taken not to regard the comprehensive school as a panacea for all secondary school ills. Moreover, emphasis must not be placed on the comprehensive school buildings but on comprehensive education and the principles it stands for, namely, a wholesale provision of opportunities to cater for individual differences among pupils. Indeed, it should be noted that whatever the system of grouping decided upon, grouping as such does not solve educational problems. Teaching methods and content need to be adapted to suit the pupils concerned, in a truly differentiated system.

The selection procedures at eleven plus are important for the present study. The results of such selection determine what type of secondary schooling the English child should follow. In this selection some of the following techniques, methods or procedures are used in various combinations (cf. Shiels, 1963):

- (i) An assessment of the pupil's ability as shown in the primary school.
- (ii) Objective standardized tests of intelligence and attainment.
- (iii) Primary school results.
- (iv) Teachers' and headmasters' estimates.
- (v) Measures of personality.
- (vi) Interviews.
- (vii) Parents' wishes.

One notes in this regard that progressively less value is being attached to the I.Q. as the sole criterion in the placement of pupils in fields of study. Aptitude, interest, personality structure, characteristics, scholastic tests, school record, the judgment of teachers and parental choice are criteria which are collectively used to place pupils in fields of study.

The guidance programme is an integral part of the comprehensive secondary school system (cf. situation at Hodge Hill Comprehensive School). The guidance given to parents, teachers and children is to place pupils in a field of study in accordance with their potential.

With this background in view we now proceed to examine the situation in the South African secondary education system.

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5. REFERENCES

1. Anderton, N.G. (August, 1972) : "The Comprehensive School (Hodge Hill)" in Schools Council: Feature Article Service: Education/63, London.
2. British Information Services (December, 1971): Survey of Current Affairs, Vol. 1, No. 12, London.
3. Burgess, T. (1972) : A Guide to English Schools, Harmondsworth: Penguin Books Ltd.
4. Burt, C. (November, 1943) : "The Education of the Young Adolescent: The Psychological Implications of the Norwood Report" in The British Journal of Educational Psychology, Vol. XIII, Part 3.
5. Conway, E.S. (1970) : Going Comprehensive: a Study of the Administration of Comprehensive Schools, London: Harrap & Co. Ltd.
6. Corbett, A. (1971) : Innovation in Education: England, Paris: Organisation for Economic Co-operation and Development.
7. Cupido, A.J.J. (1969) : The Implementation of a System of Differentiated Education in High Schools for Coloureds, M.Ed. thesis, University of S.A.
8. Davies, J.E. (1958) : Recent Trends Concerning Examinations, Promotion and Differentiation in Secondary Education in European Countries, Canada and the U.S.A., and the Significance of these trends for Secondary Education in the Transvaal, D.Ed. thesis, University of Pretoria.
9. Dept. of Education and Science (1972) : The Educational System of England and Wales, London.
10. Dobie, B.A. (1969) : An Analysis of the Role of Examinations in a Differentiated System of Education, with particular Reference to Natal, M.Ed. thesis, University of Natal.
11. Duggan, S. (1948) : A Student's Textbook in the History of Education, New York: Appleton-Century-Crofts, Inc.

12. Griffiths, A. (1971) : Secondary School Reorganization in England and Wales, London: Routledge & K. Paul.
13. Lynch, J.R. (1952) : Differentiated Education in the Transvaal Secondary School 1900 - 1950, D.Ed. thesis, University of Potchefstroom.
14. Mackay, D.D. (1972) : "Teaching English as the Mother Tongue" in Howson, G.(ed.): Children at School: Primary Education in Britain Today, London: Heinemann.
15. Prozesky, M.N. (1968) : The Comprehensive High School Concept with particular Reference to a Selected Group of Private and Government-aided Boys' Schools in Natal and Suggestions for its Developing Implementation, M.Ed. thesis, University of Natal.
16. Shiels, F.H. (1963) : A Critical Analysis of Methods of Selecting and Streaming Secondary School Pupils and Some Suggestions towards solving the Problem in Natal Schools, Ph.D. thesis, University of Natal.
17. Solomon, A. (1967) : A Comparative Study of the Systems of Technical Education and Training of Craft Apprentices, Technicians and Engineers for the Electrical Engineering Industries in Certain European Countries, the United Kingdom and the Republic of South Africa, D.Ed. thesis, University of S.A.
18. Wheeler, O.A.  
(November, 1939) : "Modern Psychology and the Spens Report" in The British Journal of Educational Psychology, Vol. IX, Part I.
19. White, D.R. (1971) : The Extent to which the Education offered to the lower half of Form III children in Rhodesia is adapted to their abilities, needs and interests, D.Ed. thesis, University of S.A.

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**CHAPTER V**

**A CRITICAL REVIEW OF THE  
DEVELOPMENT OF DIFFERENTIATED  
SECONDARY EDUCATION IN  
SOUTH AFRICA WITH SPECIAL  
REFERENCE TO THE  
TRANSVAAL AND NATAL**

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CHAPTER V

A CRITICAL REVIEW OF THE DEVELOPMENT OF DIFFERENTIATED WHITE  
SECONDARY EDUCATION IN SOUTH AFRICA WITH SPECIAL REFERENCE TO  
THE TRANSVAAL AND NATAL

"--- various commissions in the different provinces carried out thorough investigations over the period of more than thirty years and made recommendations which eventually culminated in the present system".

(Transvaal Education Dept., 1974: 27)

1. PREAMBLE

The South Africa Act of 1909 stipulates that the central government and the provincial councils should exercise control over certain aspects or levels of education. Thus five different departments (one central and four provincial) are responsible for the education of Whites in contrast to the one department responsible for the whole spectrum of education in respect of Africans, Coloureds and Indians. In this way was born an educational administration which became untenable and was commonly known as "the problem of divided control in education", a problem which plagued the White educational scene for many decades.

The problem really lay in the manner in which the division in education occurred - not the division between the provincial departments, but the division between the provinces and the then Department of Education, Arts and Science (now the Department of National Education). Instead of a division on horizontal lines, i.e. a boundary between secondary and higher education, so that the types on the horizontal boundary line (i.e. primary and secondary) are managed by the provinces and education above the boundary (higher, i.e. post-matriculation education) by the central government, an untenable, illogical vertical dispersion has crept in over the years so that one now finds two bases or administrative bodies on the same level.

Thus under this vertical segmentation of White education, vocational and technical education of a secondary type, training of specialist teachers, including nursery teachers, and special education, which includes both primary and secondary work, were progressively removed from the provinces and placed under the central department (Behr & Macmillan, 1971).

Obviously this type of administration militated against the introduction of a properly organized system of differentiated secondary education. However, far more detrimental to the welfare of the population group concerned was the phenomenon whereby the unity of the child and the unity of education was completely separated from academic education (the ordinary high school) not only by the existence of different types of schools, but also and particularly by the fact that the different types of schools were controlled by different departments - the vocational high schools by the central department and the ordinary academic high schools by the provincial education departments. It was not until 1967 that the transfer of secondary level vocational education to the provinces was effected and the door opened for the introduction of a fully fledged system of differentiated secondary education.

Needless to say, the problem of differentiated secondary education needed careful study and planning. Consequently, in the last three decades several commissions were set up in the various provinces to investigate this problem. Their terms of reference included recommendations for educational reform at secondary level.

For purposes of the present study, we shall briefly review developments in two provinces which have long accepted and implemented the principle of educational differentiation, namely, the Transvaal and Natal. Finally, reference will be made to recent trends in this regard emanating from the Report of the Committee for Differentiated Education and Guidance for the R.S.A. and S.W.A. (H.S.R.C., 1972).

## 2. DEVELOPMENTS IN THE TRANSVAAL AND NATAL

### 2.1. Transvaal

The Transvaal can be rightly called the leading province in educational reform and innovation. This view is confirmed by a number of reports of education commissions which indicate an uninterrupted line of development, particularly since the second world war. These reports are briefly discussed below, each report being named after the chairman of the commission. The reports appear in their chronological order.

#### 2.1.1. The Nicol Report, 1939

The Nicol Commission was set up in March, 1937, and its task was to investigate the education system of the Transvaal "in order to make recommendations which might lead to an improvement in the efficacy of the system, to cause it to be adapted to the most modern developments in the field of education and to enable it to comply satisfactorily with the requirements of all classes of the population" (Transvaal Education Dept., 1939: 5). The Commission's report was issued in August, 1939. This report was a small step by the Transvaal Province in particular but a giant leap in the cause of differentiated education in South Africa in general.

In its importance the Nicol Report could be equated to the Hadow Report of 1926 in England. It appears that the former was not uninfluenced by the latter, directly or indirectly. The Hadow Report inaugurated a new era in English education. Primary education was restricted to the period of 11 years of age. Secondary education meant education of two types, namely, the grammar school with a leaving age of over 16 and the modern school with a leaving age of 14 plus. Hitherto secondary education was exclusively academically orientated to the total neglect of the less intelligent pupil. The Report recommended a transfer at 11+ years of age, promotion on age in the primary school and a separate secondary school. Promotion and classification of pupils should depend on physical, psychological and emotional factors and not

exclusively on intellectual attainment. This view had a tremendous impact and continuing influence on educational thought of many countries, including South Africa (Behr & Macmillan, 1971).

The Nicol Commission reported that many children were being admitted to academic courses although they were not suited to these courses. There was one-track uniformity about the said courses and this anomaly was coupled with an exaggerated reverence for the matriculation certificate. By implication this meant that all pupils attended high schools with the sole aim of obtaining matriculation exemption. Consequently these pupils were taught in the same way. The truth is that some pupils were interested in trades, some in general education, some in clerical work and some in university training. The high number of failures led the Commission to the conclusion that many less able children were admitted who should never have attempted the course in the first place. In this regard the Commission recommended that the solution should be sought "in a comprehensive differentiation for the secondary school course" (Transvaal Education Dept., 1939: 83).

In order to achieve the said differentiation it was recommended that the Province should institute alternative secondary courses: a shorter and more practical course of three years and a longer, more academic course of five years. These two separate and parallel types of schools were to be named the "Modern School", which had a practical bias, and the "High School", which was academically orientated. Here we note the influence of the Hadow Report mentioned earlier on. The Modern Schools became known as the Junior High Schools of the Transvaal. The aim of these schools was to offer pupils who would leave school at 16 a choice of differentiated courses which would partly equip them economically for entry into the adult community. This type of school was designed to cater for pupils in standards 6 to 8, and purported to provide vocational training in the technical, commercial, domestic and agricultural lines on the foundation of a broad cultural education (Behr & Macmillan, 1971). Thus the Junior

High School was not the lower half of the High School but a different parallel type of school with a distinctive character of its own, neither inferior nor superior to the High School but different from it. There should be no thought or possibility of a Modern School ever developing into a High School. Incidentally, this was also the motivation behind the establishment of the British Modern Schools in relation to the Grammar Schools.

The Commission's recommendations were accepted and nine junior high schools were initially established on the Reef, in Johannesburg and Pretoria. Entrance to these schools was based on an admission examination at the end of standard 5. However, this condition was later amended and admission was determined by the inspector, in consultation with the principal, based on the pupil's achievement, intelligence quotient, opinions of teachers and the wishes of the parents (Transvaal Education Dept., 1939).

The Junior High School was far from being a success story. The experiment itself ran for some 14 years. These schools subsequently became increasingly unpopular, began to wane and gradually reverted to being ordinary secondary schools again. Nevertheless, the experiment provided invaluable experience in the field of secondary education during a difficult period in the Transvaal's educational growth, the post-depression period followed by the Second World War (Behr & Macmillan, 1971).

#### 2.1.2. The Lynch Report, 1950

The Lynch Commission was appointed in 1949 to inquire into the recommendations of the De Villiers Report (1948), with a view to making recommendations on the matter. The Lynch Report was released on the 31st July, 1950. As a result of these recommendations the Junior High Schools were abolished, and this step heralded the introduction of a new era in post-primary education in the Transvaal.

The Lynch Commission recommended that every European child should receive secondary education for at least three

years; that the school leaving age should be 16; that wherever possible the secondary school should be superseded by a type of comprehensive high school in which there would be room for all normal post-primary pupils, making provision for more than one course (i.e. differentiated education must be provided for); and that a committee should be sent overseas to make a careful examination of adequate differentiation. This report, together with the Steyn Report discussed below, helped to lay the foundation for major developments in the field of differentiation (Behr & Macmillan, 1971).

#### 2.1.3. The Steyn Report, 1953

The Steyn Committee was appointed on the 7th August, 1951, to submit a report on differentiated education in the Transvaal. The Committee reported on the 5th March, 1953, after it had made a thorough and extensive study of all available educational literature and had visited various parts of South Africa and Rhodesia. This was described by the Committee as an interim report because it was considered that a visit overseas would be necessary for its completion. This was done in the Van Wyk Report outlined below.

#### 2.1.4. The Interdenominational Committee, 1954

A statement by the Interdenominational Committee in 1954 is very relevant to our study of the development of differentiated education. It was stated, inter alia, that a stop should be put to the practice of compiling a secondary school syllabus for the small percentage of pupils who proceed to the university and then applying it to the large percentage who have no intention of going to the university. That is, it stressed the fact that secondary education should be fully differentiated (Transvaal Education Dept., 1973).

#### 2.1.5. The Van Wyk Report, 1955

Largely as a result of the Steyn Report a mission was sent overseas in March, 1955, to investigate and report on differentiated secondary education in a number of countries

abroad. The Report of the Oversea Mission in connection with Differentiated Secondary Education or the Van Wyk Report, as it is commonly known, is one of the most important educational documents in South Africa. This report was released on the 20th October, 1955, and proposed several changes in the existing system of education. The most drastic were the following:

- (a) That the final examination of the Transvaal high schools should be revised with the aim of extending the period in which it can be written over two years and to give credit for each subject which is successfully completed.
- (b) That certificates be issued to pupils who passed in a course culminating in
  - (i) matriculation (university exemption);
  - (ii) standard 10 (no university exemption).
- (c) That the teacher-guidance service be extended.
- (d) That all secondary education be transferred to the provinces.
- (e) That, with a view to effective differentiation, the educable school population of school age be classified on the strength of level of intelligence, achievement and aptitude, into four ability groups and that provision be made for the transfer of individual pupils from one ability group to another.
- (f) That a high school should have an enrolment of approximately 750 pupils in order to make provision for effective differentiation (Transvaal Education Dept., 1955).

Unlike the Nicol and De Villiers Commissions which advocated differentiation in separate schools, on the other hand, the Van Wyk Report insists on differentiation in which various ability groups all receive their education under one roof, according to a homogeneous classification, i.e. in the comprehensive high school, which was explained in detail in the previous chapter. The Transvaal had already accepted the comprehensive school as the most suitable vehicle for its educational policy. This meant that differentiation in separate schools, either of the specialized academic, technical, etc., types or

of the selective senior secondary and the non-selective junior secondary types were not acceptable (Behr & Macmillan, 1971).

The recommendations of the Van Wyk Mission were accepted and implemented, as from 1958. According to these recommendations, in practice the principle of differentiation must be effected in grouping, curricula, content, methods, measurement and testing, and certification. Regarding grouping, the Van Wyk Report states that the best way to provide for the needs of all is through homogeneous ability grouping based upon intelligence, scholastic achievement, aptitude, interests, principals' and teachers' opinions as well as parents' wishes. This ability grouping or streaming, as it became known in the Transvaal, assumed the pattern illustrated in the table below.

TABLE 2: ABILITY GROUPS AS PROPOSED IN THE VAN WYK REPORT

Ability Group	I.Q.	% of Pupil Population
Group A	110 +	20%
Group B	100 - 110	30%
Group C	80 - 100	43%
Group D	80 and less	7%

The Group D pupils are catered for in special schools, a field in which the Transvaal has taken the lead in South Africa. The rest attend ordinary schools.

The curricula for the various groups was prescribed. Each group was to have its own curriculum designed to offer a broad, general training which would serve as the foundation for vocational or specialized education at a later stage. This was an important recommendation because in the modern era the need for general education up to the junior secondary level is being increasingly recognized. At this stage the school programme should broaden and not narrow. For this reason educationists felt that the handing over of secondary technical and

commercial education by the Central Government to the provinces would be an important step towards a fully comprehensive school in the Transvaal.

Furthermore, the Van Wyk Report recognized the importance of a "core curriculum" consisting of compulsory subjects which give the essential basic knowledge, the skills, religious training and social adjustment; or, in other words, the "learnings" expected of all in a democratic society. Then there are "optional subjects" which give the individual full reign for his special aptitudes, interests and aims (Behr & Macmillan, 1971).

Standard 6 was regarded as an exploratory year when class teaching is more important than specialist subject teaching. After standard 5 the grouping or classification of pupils was based on the pupil's "total" attainment or aggregate. No provision was made for different levels of ability in different subjects (i.e. there was no setting or cross-grouping), for instance, a pupil in Group A or A Stream might be on A level in mathematics and science but B or even C level in one or more of the other subjects. The problem of transfer from one stream to another was also a difficult matter (Behr & Macmillan, 1971). The three streams have become known as the University Entrance Course (the U-Stream), the Standard Ten Course (the T-Stream) and Standard Eight Course (the E-Stream). More scope was offered for inter-stream transfer. A "C-streamer" at the end of standard 8 might, for example, fail outright or pass in the C stream and leave or satisfy the requirements for promotion in the B stream and proceed to standard 9 in that stream (Behr & Macmillan, 1971).

Guidance plays a crucial role in a properly differentiated system of education. Conscious of this requirement, the Van Wyk Report recommended in this regard as follows:

- (a) That guidance services in Transvaal high schools should be considerably extended so that they are not only the means of giving information regarding trades and occupations, but will also assist the pupil in planning and choosing his courses and subjects while at school, and will

be of assistance to parents when they are considering the future of their children.

- (b) That further training by means of holiday week-end courses be given to teacher-counsellors.
- (c) That specific periods be set aside on the timetable during which the teacher-counsellor may deal with individual pupils.
- (d) That since this scheme will demand that more of the teacher-counsellor's time be used for guidance to be given to both individuals and classes and less time for ordinary teaching, suitable provision should be made in the staffing scales by granting an additional post in each high school of 500 pupils and more.
- (e) That the work of guidance in such a school be entrusted to at least two teachers.

Once more we note that the Transvaal is the leading province in the field of guidance as well, a factor which will receive further attention in this chapter. This year (1975) the Transvaal is the first province to introduce a three-term school system.

#### 2.1.6. Further developments

The abovementioned era of differentiated education in the Transvaal has, however, already come to an end. On the basis of the H.S.R.C. Report of 1969 a new differentiated system was introduced at the beginning of 1973 in Stds 5 to 8. At the end of 1975 pupils in the Transvaal secondary schools will, for the first time, sit for their final examinations under this new differentiated system. This system of differentiation will receive due attention when we discuss recent developments in the overall educational set up. In the meantime we shall review the situation in Natal.

#### 2.2. Natal

The educational development in Natal should be of particular interest to KwaZulu which, at present, is an integral part of the Province. Moreover, before the advent of Bantu

Education African education was under provincial control. For purposes of planning the future development of its educational system Natal needed as early as possible a blueprint for educational reform on which to base the structure of a system that would meet the increasing demands of a rapidly approaching technological era (Mans, 1970).

#### 2.2.1. The Consolidated Education Ordinance, 1942

From 1877 to 1942 the Natal education system was based on the education laws of 1877. It became imperative to review the educational situation in order to keep pace with the latest trends in the educational world. The first progressive step was taken when the existing education ordinances were consolidated by means of the Consolidated Education Ordinance of 1942. This Ordinance marked the beginning of differentiated education in Natal. It brought about the first modernisation of the 1877 education laws.

#### 2.2.2. The Wilks Report, 1946

A further significant step in the direction of educational reform in Natal was the appointment of the Wilks Committee on the 10th February, 1944. The Committee's terms of reference were extensive and included, inter alia, an examination of the school system, the curriculum and syllabuses, promotions and examinations, teacher training, and supervision and staffing of schools. Its report was presented in July, 1946.

The Committee strongly recommended that standard 5 should be the terminal class of the primary school and that the compulsory school age should be raised to 16. It noted the presence of a large group of pupils who, by inclination and aptitude, were unsuited for the high, academic standard demanded by matriculation, preparation for which was the main purpose of the schools.

In order to provide for the needs of all children the Committee recommended that four distinct and separate courses

be provided. All these courses should be offered to pupils in one school with multilateral "sides". In this way the education of children could be viewed as a whole and the intellectual snobbery of academic courses be counteracted (Behr & Macmillan, 1971). In fact, this is the major motivation for the comprehensive school. The recommended courses were as follows:

- (a) A practical course useful to a large number of pupils who would leave school at the completion of the compulsory age minimum, which should be offered in all secondary or high schools.
- (b) A commercial course for girls, and, while specially designed to give a good secondary education to those going into the business world, will prove extremely valuable to those who cannot complete the full four years.
- (c) A pre-vocational course mainly for boys who have technical and professional careers in view.
- (d) An academic course leading to university admission.

After standard 7, where differentiation was to begin, the subject offerings would be such as to constitute a broad foundation of the curriculum which must not be uniform but suit the needs of the different groups of pupils. All the courses would be run through to standards 9 and 10, an unusual development because most such courses elsewhere ran for three years only. Thus in the curricula proposed by the Committee attempts were made to bring them into line with educational reforms in countries overseas and in the other provinces.

Making recommendations is one thing and having them implemented by the relevant authority is a different matter. Such was the fate of some of the important proposals of the Wilks Committee. At the time the circumstances were such that the multilateral school as proposed by the Committee never materialized. This is regrettable because such a step would have placed the Province of Natal in the forefront of developments in secondary education in Southern Africa. However, where it lay within the Province's powers to do so some of the recommen-

dations were implemented, as indicated below.

### 2.2.3. The Practical Course, 1959

The proposals of the Van Wyk Commission in the Transvaal regarding differentiation had a stimulating influence on Natal in its efforts to diversify education at secondary level (Mans, 1970). The first real step in this direction came when the Director of Education in his 1958 annual Report announced the introduction of a Practical Course as from January, 1959, for the less gifted secondary pupils who wished to proceed to the Junior Certificate only (Natal Education Dept., 1958). The Report stipulated that in future standard 6 passes would be classified into two categories, viz. a P1 or P2 pass. P2 passes were assigned to the Practical Course where they might proceed only as far as standard 8. If one of such pupils wished to proceed to standard 10, he was obliged to repeat standard 6 and attempt again a P1 pass.

From the foregoing it is clear that up to 1959, thirteen years after submission of the Wilks Committee's recommendations, Natal had made no real progress in providing the type of differentiation proposed by the Committee. Hitherto differentiation consisted mainly of the following:

- (a) The Practical Course which was designed for the less gifted pupil in the secondary school. This course was of a terminal nature and took pupils only as far as standard 8 and had a number of weaknesses which eventually caused its demise. It had been intended to serve the needs of below-average pupils, but because by its nature it subscribed to the unfounded "compensation theory" (i.e. that those not academically proficient are "good with their hands") and partly because of the general lack of prestige accorded it by parents, the course was a flop (Dobie, 1969). It went the way of the ill-fated Junior High School of the Transvaal described earlier in this chapter.
- (b) An academic course for the rest of the pupils who wished to continue their education to standard 10. This course

served a dual purpose, namely, pupils who satisfied the groupings of the J.M.B. at a sufficiently high standard could proceed to the university, while others would have a wider choice of subjects and could gain a school leaving certificate. Both these academic type courses were offered at the same level and no provision was made for those pupils who could only benefit minimally from the depth of the study required, if at all.

In order to cater for all secondary school pupils in a properly differentiated school system adequately diversified programmes were essential. Regrettably the existing courses served only as a partial solution to the problem of the day.

Needless to say, the introduction of the Practical Course was motivated by a desire to provide a suitable course for those pupils who could not benefit from an academic course. The latter was designed for the rest of the secondary school pupils. While it provided some differentiation in the choice of subjects, levels of ability were completely disregarded as all pupils had to study their subjects at the same grade, which was geared towards university admission (Mans, 1970).

#### 2.2.4. Committee of Inquiry into Differentiation in Secondary Classes, 1960

The inadequacy of the existing secondary school system prompted the Director of Education to appoint a committee in 1960 to investigate the position and report on differentiation in secondary classes. In due course the Committee submitted its report (Natal Education Dept., 1960).

The Committee recommended, inter alia, that differentiation should take place in bilateral secondary or high schools by way of a two-stream system which would accept all pupils who wished to proceed to the Senior Certificate in whichever stream it was decided they should continue after passing standard 6. The general nature of the two streams would be:

- (a) That the Advanced Stream would be much the same as the existing course for pupils in standard 7 to 10 and that

it would cater for the more intelligent section of the pupils.

- (b) That the Ordinary Stream would be in its curriculum broadly the same but would differentiate in syllabus content and in its examination. Pupils in this stream would cover the main essentials but in the least involved manner.

The motivation for the introduction of a twin-stream system was that, unlike in the more densely populated countries where three streams are provided, more than two streams would be impractical in Natal because of the relatively small number of pupils. The Committee's standpoint in this regard has been criticized as being "shortsighted and hedonistic" (Mans, 1970: 97). It should have been clear by 1960 that Natal would experience considerable development resulting in a substantial demographic growth. The Committee's recommendations received a favourable consideration by the Director of Education, who subsequently implemented them.

#### 2.2.5. The implementation of the two-stream system

The directive for the implementation of the two-stream system in all secondary schools in the Province was contained in the Director's memorandum published in October, 1961. This was effected at the beginning of 1962.

The new system generated an early general satisfaction (Natal Education Dept., 1962). The thorny question of cross-stream transfer was ironed out because the facilities offered for the transfer of a pupil from one stream to another had been used to real advantage. Moreover, the Director's annual report for 1963 reveals that a larger proportion of pupils had proceeded to standard 8 than in the past (Natal Education Dept., 1963). Of particular significance also was a marked drop in the failure rate in standard 7 from 29,2% in 1961 to 16,4% in 1962 (Mans, 1970).

It was estimated that 63% of pupils would be in the Advanced Stream and 37% in the Ordinary Stream. However, the

first Junior Certificate Examination completed by the 1963 two-stream group showed 67,7% in the "A" group and 32,4% in the "O" group, and the total number of candidates had increased nearly 25% (Behr & Macmillan, 1971).

No educational innovation or reform can serve as a panacea for all current problems in the school system. The newly introduced two-stream system was no exception. It had its weaknesses, the chief of which was the introduction of two streams instead of three as pupils' differing capacities warranted. Thus feed-back evidence revealed that the easier course created by the introduction of the ordinary grade for the below-average pupils had succeeded, but the position of the average and above-average pupils had not improved since they had been lumped together in the advanced grade. Therefore, the two-stream system did not adequately cater for the different needs of these two sections of the secondary school population (Mans, 1970).

Mindful of the said weaknesses in the existing system, the Provincial Administration appointed a new committee which is discussed below.

#### 2.2.6. The Lighton Report, 1963

The Lighton Committee was appointed in 1962 to investigate the effectiveness or otherwise of the newly introduced system of differentiation. It submitted its report in July, 1963.

The Committee made a number of recommendations (Natal Education Dept., 1963). The recommendations which were implemented are those dealing with the following:

- (a) The incorporation of all standard 6 classes into high schools as soon as possible and practical.
- (b) The provision for pupils who narrowly failed the Junior and Senior Certificate examinations at "A"-level to be granted an "O"-level pass.
- (c) The external control of the selection for streaming after standard 6. Control subjects existed until the end of

1965, when the system was abolished (Natal Education Dept., 1965).

The Committee's major recommendation was that of providing three streams, but it was not implemented. The Province could not see its way clear to adopting this recommendation in view of the fact that the central government still retained commercial/technical secondary education under its wing. It was not until 1968 that this was relinquished and transferred to the Provinces, thereby setting the stage for the provision of a greater measure of differentiation along the lines of comprehensive secondary schools as envisaged in the National Education Act of 1967. In the meantime, despite the recommendations of both the Wilks and the Lighton Committees for greater differentiation in secondary schools, the twin-stream system in Natal continued to exist as recommended by the 1960 Committee.

Having sketched attempts at differentiation in the secondary school systems of the Transvaal and Natal, we now turn our attention to recent developments in the wake of the National Education Policy Act of 1967.

### 3. RECENT TRENDS IN DIFFERENTIATED WHITE SECONDARY EDUCATION IN SOUTH AFRICA

#### 3.1. Moves towards greater differentiation

In each of the four Provinces distinct attempts to provide differentiated education occurred from about 1940, by which time the distinction between primary and secondary education was clear, and the provision of secondary education became increasingly adequate. The changing educational needs have resulted in the setting up of various commissions to examine the existing provincial systems and to make recommendations for improvement. As already indicated earlier on in this chapter, the reports of these commissions stressed the need for more adequate provision of differentiation, and several developments resulted, three of which are mentioned below.

- (a) The Nicol Commission (1939) in the Transvaal resulted in the establishment of "Junior High Schools", where practically orientated three-year secondary courses in technical, commercial or domestic subjects were offered, and "High Schools", which offered five-year academic courses.
- (b) In Natal the Wilks Committee, in its Report (1946), proposed four distinct secondary courses, namely, a practical course designed for the majority of pupils who would leave school at the age of 15; a preparatory course for boys prior to their enrolment in vocational schools; an academic course leading to university entrance; and a commercial course for girls.
- (c) The De Villiers Commission (1948) recommended a new programme of education whereby all pupils, after primary school, would proceed through senior high school until the minimum school leaving age. Thereafter they would attend either an academic or a Vocational High School. Another recommendation was that pupils should be grouped in terms of their ability and achievement in each subject (i.e. setting) rather than in set "standards". In fact, this Commission acted as "an enzyme in the bringing about of adequate differentiation in the secondary schools of South Africa" (Behr & Macmillan, 1971: 153).

Thus the recommendations of these commissions brought about certain changes in the various provincial education systems, particularly in the provision of greater differentiation at secondary level. However, there still existed the position that not all the education departments had made the same progress in the field of differentiated education and that the methods they employed differed from each other in many respects. There was also the anomaly of the policy of divided control whereby the central government controlled all commercial/technical secondary education.

A decision in 1964 by the then National Advisory Education Council (now the National Education Council) that research should be undertaken into differentiated education and guidance resulted

in the establishment of the Committee for Differentiated Education and Guidance under the chairmanship of the President of the Human Sciences Research Council, Dr. P.M. Robbertse. Its terms of reference were to investigate and report on a national system of differentiated education at primary and secondary level with school guidance as an integrated service.

After an investigation which took five years to complete and which was undertaken by the Institute for Educational Research of the H.S.R.C., the Committee presented its report on the 26th August, 1969. The recommendations contained in this report have resulted in the introduction of the new system of differentiated education in South Africa. For the first time the vexed question of differentiation has been tackled on a national scale and not on a parochial, ad hoc basis as in the past. The said report is sketched briefly below.

### 3.2. The Report of the Committee for Differentiated Education and Guidance, 1969

#### 3.2.1. Introductory

It falls beyond the scope of this chapter to go into all the changes and reforms proposed by the Committee. Brief reference will be made to the legislation setting up the machinery for the new national education system and the gist of the Committee's recommendations. It should be borne in mind that these recommendations form the basis or guidelines for the new system. They are not a prescription for rigid uniformity to the smallest detail. The Provinces will implement them in the light of their experiences and circumstances. After a brief review of the Report, more attention will be given to the situation in Natal, examining how the Province implements the new system.

#### 3.2.2 Enabling legislation

The new system of differentiated education for Whites is provided for in the National Education Policy Act

No. 39 of 1967. This Act provides, inter alia, for a school system structured on the comprehensive school concept, with differentiation and streaming being important ingredients. Section 2.(1)(f) of the Act states that "education shall be provided in accordance with the ability and aptitude of and interest shown by the pupil, and the needs of the country, and that appropriate guidance shall, with due regard thereto, be furnished to pupils" (Emphasis by present writer).

Seen fundamentally, the new system of differentiated education has still to do primarily with the education of a unique child - a particular boy or girl. The aim of the present system, namely, the provision of help and support by an adult (the teacher) to the one who has yet to become an adult (the child) with his differentiated human potentialities, is in agreement with the aim of education in general and with the criteria for adulthood such as being conscious of the meaningfulness of his existence, his responsibility, his human dignity, self-judgment and self-understanding, ethical independent decision-making and action, norm-directed identification, etc.

Following upon the Robbertse Report, regulations for the implementation of the provisions of this Act with effect from the 1st January, 1972, were promulgated in the Government Gazette of the 12th November, 1971. Natal commenced with the new system in 1972 and the other three provinces on the following year.

National Education Act No. 41 of 1967 deals with the transfer of vocational and technical education in schools (i.e. up to and including standard 10) to the Provinces. This measure took effect from the beginning of 1968. Thus the last hurdle to a fully fledged differentiated system of secondary education was removed and all the "systems were go" for the Provinces to move ahead with the restructured system.

### 3.2.3. Structure of the 12-year differentiated school system

In the new system, the 12-year period of compulsory

schooling is divided into four phases, each of three years duration as shown in the diagram below. Further details of the new system are given in the ensuing paragraph 3.2.4.

FIGURE 4 : STRUCTURE OF THE NEW DIFFERENTIATED SCHOOL SYSTEM

Type of School	3			3			3			3		
	Jun. Prim.			Sen. Prim.			Jun. Sec.			Sen. Sec.		
Sch. Year	1	2	3	4	5	6	7	8	9	10	11	12
Grade/Std.	SSA Cl.i	SSB Cl.ii	1	2	3	4	5	6	7	8	9	10
Age	6	7	8	9	10	11	12	13	14	15	16	17

3.2.4. Synopsis of some important aspects of the report

In accordance with the physical, social and intellectual level of development, as well as with the interests and needs of pupils, a 3-3-3-3 education system has been suggested, which is divided as follows at primary and secondary level:

- (a) A primary education system as an organizational unit which is divided into a junior primary school period (sub-standard A or Class i to Standard 1) and a senior primary school period (Stds 2 to 4) as educational units; and
- (b) A secondary education system as an organizational unit which is divided into a junior secondary school period (Stds 5 to 7) and a senior secondary school period (Stds 8 to 10).

Although Std. 5 constitutes an educational period in conjunction with Stds 6 and 7, for the time being Std. 5 remains attached to the primary school.

In consideration of the fact that the years of study at the primary school constitute that period of development in

the life of the child during which basic knowledge and skills are presented and meaningful formative education is provided, the curricula and syllabuses in the system of differentiated primary education were planned accordingly. This planning provides for a compulsory curriculum for all primary school pupils while the gradual introduction of subject teaching in certain key subjects is recommended. Provision is also made for compulsory examination subjects, namely, Afrikaans, English, General Mathematics, History, Geography and Elementary Physical Science, as well as compulsory non-examination subjects, viz. Religious Instruction, Physical Education, Aesthetic Education and School Guidance as a service. With regard to the syllabus content of the primary school, provision is made for the individual learning requirements of pupils from the various levels of giftedness in that an indication is given of the core subject-matter, as well as of possibilities of extension and enrichment. Presentation of the factual content will be of such a nature that, while the core subject-matter in every subject is offered to all the pupils in the various classes, consideration will nevertheless be given, in the manner of presentation, to the divergent capacities of the distinguishable ability groups. As a result of the differences in the intellectual capacities of pupils, differentiation will also be applied with regard to the demands imposed in respect of the assimilation and mastery of the core subject-matter.

As regards the curriculum and syllabus of the secondary school, provision is made for general (formative) education as well as specific vocationally directed education. However, a characteristic feature of this educational programme is that there will be a shifting of stress from general education to specific vocationally directed education, with the emphasis on the latter in the senior secondary school period (i.e. Stds 8 to 10). The curriculum of the secondary school will comprise compulsory and optional subjects, on the understanding that the compulsory subjects, consisting of examination and non-examination subjects which form a core curriculum, will be taken by all the pupils. The junior secondary school

period (i.e. Stds 5 to 7) includes a compulsory formative programme similar to that of the primary school, as well as compulsory examination subjects. In both programmes, provision is made for the undifferentiated presentation of subject-matter. The curriculum of the senior secondary school period, on the other hand, makes provision for fully differentiated fields of study, namely, technical, commercial, agricultural, natural sciences, human sciences and art. In these fields of study, provision is made for a common, compulsory core curriculum comprising a formative programme which is not subject to examining, with Religious Instruction and Physical Education as subjects and School Guidance as a service, as well as Afrikaans and English as compulsory examination subjects. Each field of study offers a choice of subjects in respect of which a pupil may choose between at least 4 and, at most, 5 subjects in addition to the compulsory core curriculum.

The curriculum for those pupils who are less gifted, that is, the dull-normal pupils, makes provision for a core curriculum, comprising a formative programme and compulsory examination subjects on the one hand, while, on the other, it also entails a specific vocationally directed programme which includes a practical-technical course (for boys and girls) and a practical commercial course.

The suggested differentiated syllabus for the senior secondary school period will offer pupils the opportunity of taking subjects at an advanced level and/or standard level in accordance with their capacities, while the subjects for pupils who are less gifted (dull-normals) will be offered at a practically directed level. This system, known as cross-grouping or setting, has the particular advantage that it is not the child, but the subject which is placed in a stream.

In order to support this system of differentiated education, an integrated, national school guidance service was designed, which will function at all schools at primary as well as secondary level. The nature of this service can be described as an educational service which will be rendered by

specialized persons whose activities will be directed towards informing all young people on their person-structures as well as on educational and vocational opportunities. A characteristic feature of this service is that it will be an auxiliary service in the interests of pupils, teachers and parents. Some important facets of the task of the school guidance service are, inter alia, that pupils who are ready to commence their education and pupils who are not ready for eventual elementary education should be identified and placed timeously. Pupils in the senior classes of the primary school, as well as their teachers and parents, will also receive advice and assistance in order to ensure their successful entry to the secondary school. In accordance with the programme of the secondary school, the school guidance service at this level has the task of acting as an auxiliary service, through which pupils receive guidance in respect of educational and vocational matters in the light of their person-structure, so that they can receive differentiated education in accordance with their abilities, aptitudes and interests and the manpower requirements of the country (H.S.R.C., July, 1972).

Having outlined the salient features of the Robbertse Committee's Report, we now focus our attention on the situation in Natal, which has already embarked on the implementation of the recommendations of this Report, with a view to discovering how the new system works in practice.

### 3.3. The new blueprint for Natal schools

#### 3.3.1. The range of ability in the school population

Levinsohn (1972), the then Chief Education Planner, states that the range of ability among pupils for whom the Province caters is approximately as follows: 5% of the pupil population with I.Q. below 80, 10% with I.Q. between 80 and 90, 70% with I.Q. between 90 and 120, and 15% with I.Q. above 120. The latter are the gifted pupils and those with I.Q. above 130 are the highly gifted. In the new system of differentiation provision can be made for the above categories of pupils on the following basis:

- (a) The 5% of the pupils who are in the below 80 I.Q. range constitute the sub-normals and can be transferred to special classes during the first two phases and to pre-vocational high schools at the appropriate stage.
- (b) The 10% of the pupils who are in the 80 to 90 I.Q. range constitute the dull-normals and can proceed to the practical course in standards 6, 7 and 8.
- (c) The remaining 85% of the pupils constitute the normal to superior ability range and effective differentiation can be provided by means of subject choices and the grade (higher or standard) at which individual subjects are taken in the fourth phase.

Until December, 1971, the distribution of pupils in Stds 7 to 10 was as follows: 2% of these pupils were in pre-vocational high schools; 39% in the ordinary stream; and 59% in the advanced stream.

### 3.3.2. Restructuring of the old system

The new system of differentiated education, which was recently introduced into the schools of Natal, covers the same period of formal education as was the case previously i.e. 12 years. However, instead of a 2-5-5- division into infant, primary and secondary phases, a 3-3-3-3 system has been devised which will cater for pupils at primary and secondary level as follows:

- (a) A primary education period of six years, divided into a three-year junior primary phase and a three-year senior primary phase; and
- (b) A secondary education period of six years, divided into a three-year junior secondary phase and a three-year senior secondary phase.

This means that where previously standard 1 was the first year of the primary phase, pupils at this stage of development will now form part of the infant or junior primary phase. Standard 5, which previously was the last year of the primary phase, now becomes the first year of the junior secondary phase. But although Std. 5 is now part of the junior secondary

phase, this does not necessarily imply that it should be immediately transferred to the secondary school, and in most schools in Natal this standard will remain in the primary schools indefinitely (Natal Provincial Administration, 1973).

### 3.3.3. The aims of the new system

The aims of the new system, as set out in a recent provincial publication (N.P.A., 1973) on which views expressed in section 3 of this chapter are largely based, are to: provide all pupils with a sound general education; provide an education which, in addition to being formative, will recognize individual differences with regard to ability, aptitude and interest and will differentiate accordingly; provide an education which will form a sound basis for the post-school vocational needs of pupils; and provide educational and vocational guidance to pupils at the appropriate stages of their development. Thus these aims clearly indicate that education in Natal has taken a new direction along the lines of comprehensive differentiation.

### 3.3.4. Subject-matter

During the period of primary education pupils are given the opportunity of developing essential basic skills and are, in addition, provided with a meaningful formative education. During the senior primary phase the subjects English, Afrikaans, mathematics, general science, history and geography will be taken as compulsory examination subjects. Apart from these subjects, all pupils receive religious instruction, physical education and aesthetic education with school guidance as a service.

With regard to syllabus content, provision is made for the individual learning requirements of pupils with special attention to their various levels of giftedness. Presentation of the factual content is such that, while core subject-matter in every subject is offered to all pupils, the manner of presentation takes into account consideration of the divergent

capacities of the different ability groups. During this phase, too, provision is made for pupils whose individual needs are such that special education has to be provided for them. These pupils will nevertheless remain in the normal educational environment in the schools and will be exposed to the same extra-curricular experiences as all other children.

### 3.3.5. Exploration of aptitudes and interests

The junior secondary phase is normally the period during which transition takes place from the child phase to puberty, and it is during this time that aptitudes and interests begin to emerge more clearly and become more readily distinguishable. Thus provision is made for the exploration of aptitudes and interests in order that children may receive the correct educational guidance. At the same time the formative educational process continues.

Therefore, the education provided during this phase is of both formative and exploratory nature, and in addition to the subjects which are regarded as essential ingredients of a general formative educational programme, pupils will have the option of selecting two subjects from a third language, technical drawing, music, art, typing and a commercial subject. Pupils will be given the opportunity to make contact with as many of these subjects as possible during this phase for the purpose of establishing an ability-aptitude-interest profile for each pupil at the end of the standard 7 year.

Apart from the compulsory non-examination subjects (i.e. religious education, physical education and class music), all pupils will take the two official languages, mathematics, general science, history, geography and industrial arts for boys and housecraft for girls. Syllabus content for all pupils in all subjects is the same in core subject-matter but recognition is given to ability levels in the presentation of the subject.

### 3.3.6. Guidance

Effective implementation of the new system of differentiated education requires that a new dimension be given to counselling and guidance at all levels. The aim must be early identification in order to facilitate education suited to the ability, aptitude and interest of the individual and groups of pupils. Such requirement calls for an expansion of the services at present available in this field. Careful planning will, however, be necessary in order to ensure that this service is carefully integrated into the educational pattern and that it does not become an end in itself, isolated from the general school situation (Levinsohn, 1972).

During the junior secondary phase considerable attention is given to group and individual educational guidance and the work of the teacher-counsellor is invaluable as it is essential that pupils receive effective guidance to enable them to select their correct field of study at the appropriate level in the fourth phase. The performance of pupils in standardized intelligence, aptitude and interest tests coupled with their performance and interest in their various subjects and the knowledge teachers and teacher-counsellors will have of each individual pupil will form the ingredients of a profile for each pupil.

At the end of the Std. 5 year schools are required to identify pupils whose aptitudes are such that they will not cope with the required level of the educational programme during the third and fourth phases. For these pupils a practical course of three-year duration extending over Stds 6, 7 and 8 has been designed.

### 3.3.7. The practical course

This course is designed to cater for the dull-normals' educational needs and is in keeping with their abilities, aptitudes and interests (Levinsohn, 1972). It has a sounder pedagogical foundation than the ill-fated one introduced in 1959. It embraces Stds 6, 7 and 8.

In this course the formative curriculum is virtually the same as that of other pupils in the third phase, but the approach to each subject is of a less academic nature and less demanding with regard to core subject-matter and level of achievement. In addition to the formative curriculum, each pupil also takes three "practical" subjects which may be selected from industrial arts, business methods, accounting, art and music, typing, housecraft and technical sketches and drawing.

Provision is made for pupils to transfer to the educational programme leading to the fourth phase at any time during the course if their performance indicates that such a step would be to their advantage. If, on completion of the course, some pupils wish to remain at school and attempt some of the subjects offered in the fourth phase, the necessary provision is made.

Practical courses for dull-normal pupils, while catering for the educational needs of these pupils, should not only be challenging but every attempt should be made to ensure that pupils who are placed in such courses are identified with the normal school situation. Incentives, motivation, recognition and rewards are as necessary for these as for other pupils (Levinsohn, 1972).

While in the new system of differentiated education it is the subjects that are being streamed, not the pupils, in the practical course it is the pupils who are being streamed and kraaled together. Invariably there is a stigma attached to those involved in a segregated course of this nature, and the psychological ill-effects of such a situation are real. In a truly comprehensive system, for instance, as it obtains in England, subject offerings are streamed in such a way that all normal pupils (i.e. except the mental retardates) are provided for. In a setting or cross-grouping situation it would be unrealistic and pedagogically naïve to imagine that all dull-normals cannot rise above E in an A-B-C-D-E subject-setting situation. Yet this is what the practical course

implies. Experience belies this type of thinking. There are outstanding talents among some dull-normals in certain directions. Perhaps this arrangement is the best the Natal Administration could manage for the dull-normals at this stage. Moreover, it is one of the recommendations of the Robbertse Commission.

### 3.3.8. Pre-vocational schools

These schools are provided for those pupils who, during the early stages of the primary phase, are identified as requiring special education so that they will be able to continue with an educational programme suited to their special needs in a secondary school environment. While they will continue to receive a broad general education at a level commensurate with their capacities, special attention will be given to a vocational subject of their choice in which they wish to receive further post-school training. The courses provided at these schools should not be confused with the practical course of study at other high schools.

The number of pre-vocational high schools is to be increased so that the Province can cater for approximately three times the present 2% of high school pupils. This will mean that it will be catering for 6% of the high school population as against a theoretical 5% of the pupil population requiring these facilities. In providing these facilities the need for a high degree of justification on educational and other grounds, before placing pupils in pre-vocational high schools and thereby removing them from the normal school situation, must be borne in mind. In order to avoid undue emphasis on the special nature of pre-vocational high schools, they will be referred to by name in the same manner as are other high schools, e.g. Uplands Junior High School, South Hills Junior High School, etc.

Pupils will normally remain in pre-vocational high schools until the end of the year in which they turn 16. Those pupils who have satisfactorily completed the full course offered at

the pre-vocational high school but are still required to remain at school, will be provided with a specialist course at the pre-vocational high school (Levinsohn, 1972).

### 3.3.9. Differentiated curricula

During the fourth phase pupils are provided with a fully differentiated curriculum. This means that the vast majority of subjects may be taken at one of two levels, i.e. higher grade or standard grade, and that pupils will have the opportunity to include in their courses subjects from the field of study of their choice. Natal has opted for the comprehensive high school in which a variety of courses will be offered under one roof instead of in separate schools. Opponents of comprehensive schools usually assert that these schools are too big both in pupil enrolment and curricular offerings, with consequent possible loss of individual personal relationships between staff and pupils as well as timetable problems. However, it should be pointed out that the future of school education lies in this direction whether people acknowledge this fact or not. The problem is to work out the kind of organization which, by suitable and effective decentralization and delegation, makes the school function in the best interests of the individual child (Behr & Macmillan, 1971).

Provision is made for eight different fields of study, namely, general, social sciences, natural sciences, commercial, technical, art, home economics, and agriculture. The full agricultural field of study will be offered only at agricultural high schools. The following is a complete list of subject offerings:

- (a) General : all subjects
- (b) Humanities : History, Economics, Art, Music, Third Language, Biblical Studies (S).
- (c) Natural Sciences : Physical Science, Biology, Mathematics, Functional Science.
- (d) Technical : Technical Drawing, Trade Theory and Practice (S), Woodwork (S), Metalwork (S).

- (e) Commercial : Accounting, Typing (S), Shorthand (S),  
Snelskrif (S), Business Economics (S).
  - (f) Agricultural : Agricultural Science, Biology, Animal  
Husbandry (S), Field Husbandry (S),  
Practical Agriculture (S).
  - (g) Home Economics : Home economics, Housecraft (S),  
Needlework and Clothing (S).
  - (h) Art : Art, Music, Design (S), Sculpture (S), Painting (S).
- The letter S in brackets means that the subject concerned is offered on the standard grade only. Functional Mathematics and Functional Science will be Group F subjects in the Joint Matriculation Board subject groupings (Levinsohn, 1972). Groups A to E are mentioned towards the end of paragraph 3.7.10.

These fields of study or "subject packages" are designed for the purpose of satisfying the various aptitudes and interests of pupils at this stage of their development and will not provide specific vocational training. The principle of a sound general education will remain the basis of education during this phase.

As regards the level at which subjects are taken, it needs to be stressed that pupils will not be streamed into higher grade or standard grade, but a course may include subjects on either the higher or the standard grade, i.e. only subjects will be streamed, not pupils, as mentioned previously. The standard of the higher grade will be somewhat more demanding than that of the previous Natal Advanced Grade in the former twin-stream system, and the standard grade slightly lower.

### 3.3.10. Compulsory subjects

The two official languages are compulsory examination subjects while the formative subjects religious instruction, physical education, aesthetic education and civic responsibility are compulsory non-examination subjects. In order to obtain the Natal Senior Certificate, pupils have to take a minimum of six subjects which must include the two official languages, and they are required to pass in five. The five subjects passed must include the two official languages. In subjects other than the

official languages pupils have a fairly wide choice within the subject groupings approved for schools. The Provincial Education Department will advise each school of the courses offered at every other school in Natal so that when parents are transferred to another area they can be advised of the nearest school where the courses on which their children have embarked will be available.

Pupils who are successful in the Natal Senior Certificate will be granted Matriculation Exemption under certain conditions laid down by the Joint Matriculation Board. The main requirements for exemption are that a candidate must have:

- (a) offered six or seven subjects at one session of the examination;
- (b) passed five subjects;
- (c) gained a minimum aggregate of 45%;
- (d) passed in both official languages, one on the higher grade and the other on the higher or standard grade;
- (e) included in the five subjects passed at least one subject from each of four of the Joint Matriculation Board subject groupings;
- (f) obtained a minimum of 40% in each of at least three subjects on the higher grade, one of these selected from group A (official languages) and the other two from group B (mathematics), C (natural sciences), D (third languages), and E (social sciences); and
- (g) obtained a minimum of 33 $\frac{1}{3}$ % in subjects taken on the standard grade.

In addition to the above, there are some further requirements. Details of these are supplied to all high schools.

During the fourth phase pupils will continue to receive guidance from teacher-counsellors as regards their educational needs and, in addition to this, advice and guidance will be given on their future vocational needs.

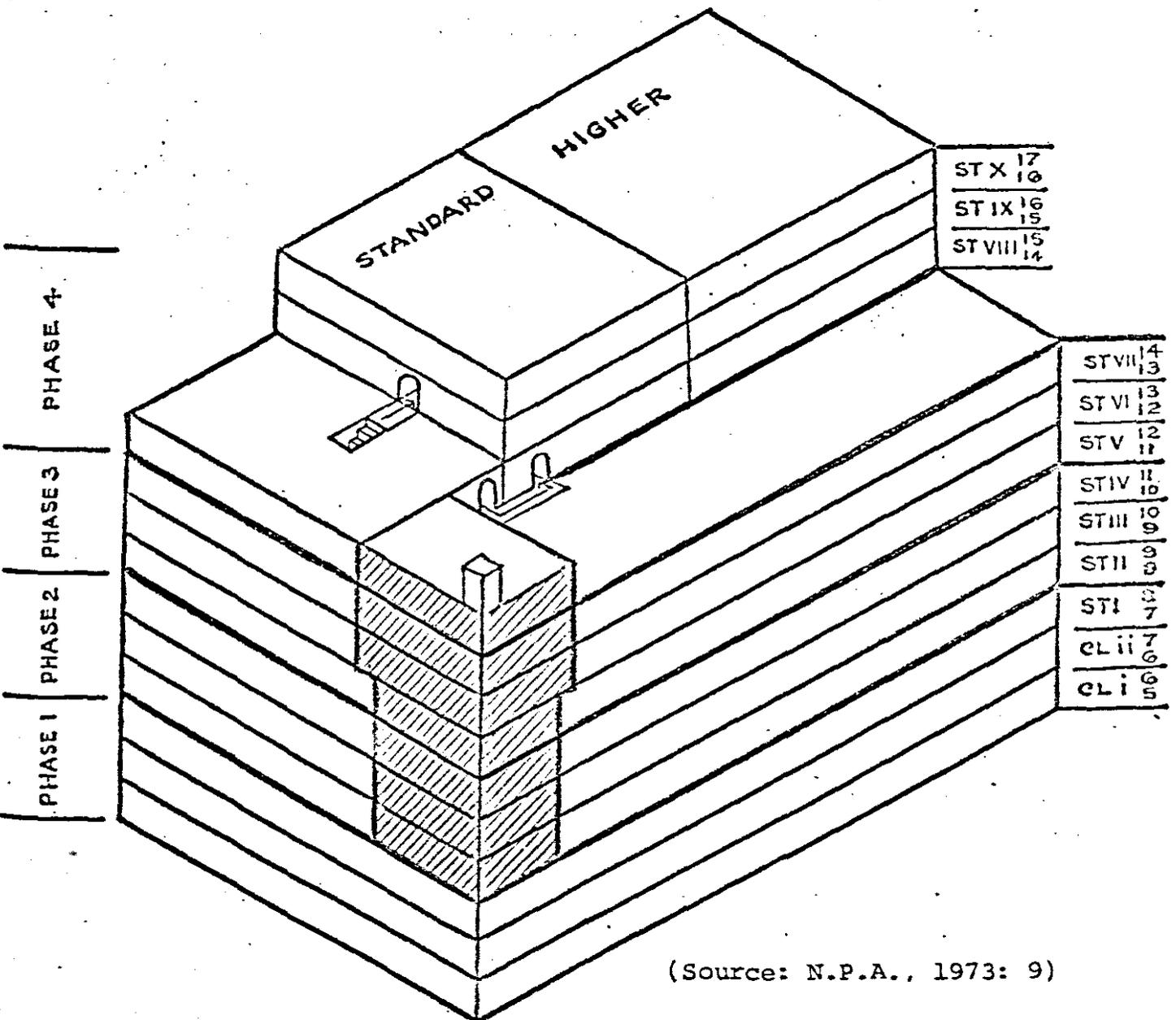
3.3.11. A diagrammatical representation of the new school system in Natal

Figure 5 below portrays the new school system which was

introduced in Natal in January, 1972. The heavy lines indicate the division of the 12-year school period into four phases, each of three years. The shaded block represents special education which is provided from the beginning of the second phase and which continues into the third phase and the first year of the fourth phase as pre-vocational education.

Provision is also made during the third phase and the first year of the fourth phase for those pupils who cannot cope with the academic demands of the courses offered during the fourth phase, by offering them a four-year practical course. During the fourth phase a large variety of courses will be available with the majority of subjects provided at two levels, viz. standard and higher grades.

FIGURE 5 : THE NEW DIFFERENTIATED SCHOOL SYSTEM IN NATAL



(Source: N.P.A., 1973: 9)

#### 4. RESUME

A brief review of educational reform and innovation in the Transvaal and Natal was given. Various commissions investigated and reported on the existing provincial systems and made recommendations for improvement thereof, with a view to bringing about greater differentiation in order to cater for the varied abilities, aptitudes and interests of different pupils. Thus the Transvaal evolved a three-stream system and Natal's proposed solution to the problem was a twin-stream system.

A stumbling block to a fully fledged differentiated system in the provinces was the anomaly of the "divided control" whereby vocational and technical secondary education was controlled by the central government and the rest by the provinces. The situation was rectified when this section of secondary education was handed over to the provinces in 1968, thereby setting the stage for greater differentiation in the provinces.

The Robbertse Commission submitted its report in 1969, making far-reaching recommendations on the ways and means of effecting greater differentiation involving guidance as a service on a national scale. The recommendations were accepted by the central government and enabling legislation was passed accordingly. The provinces have already commenced implementing these recommendations.

Natal was chosen as a case in point and discussed in detail. The discussion reveals that the new education system does not attempt to be revolutionary but retains what in the past has been found to be sound educational practice, yet at the same time introducing innovation and change in those areas of the old system where it was considered to have weaknesses.

Natal has decided to apply differentiation through the comprehensive school and not through separate schools, except in the case of agricultural high schools only, but there will be no purely technical or commercial high schools as in the past. In support of the system of differentiated education guidance

is being introduced into the schools as a service in the interests of pupils. This guidance will be developed into a sophisticated service by specialized staff as fast as circumstances permit. We now direct our focus on to the educational situation in KwaZulu.

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5. REFERENCES

1. Behr, A.L. & Macmillan, R.G. (1971) : Education in South Africa, Pretoria: Van Schaik Ltd.
2. Dobie, B.A. (1969) : An Analysis of the Role of Examinations in a Differentiated System of Education, with particular Reference to Natal, unpublished M.Ed. thesis, University of Natal.
3. Human Sciences Research Council (1972) : Report of the Committee for Differentiated Education and Guidance in connection with a National System of Education at Primary and Secondary School Level with Reference to School Guidance as an Integrated Service of the System of Education for the Republic of South Africa and South-West Africa - Part I, Reprint, Report No. O - 1, Pretoria.
4. Human Sciences Research Council (July, 1972) : "Differentiated Education and School Guidance: Summary of Certain Aspects of Part 1 of the Report of the Committee for Differentiated Education and Guidance in connection with Differentiated Education at Primary and Secondary School Level with School Guidance as an Integrated Service" in Newsletter, Nos 35/36, Pretoria.
5. Mans, P.W. (1970) : A Comparative and Critical Study of Developments in Differentiation and Examinations in European Secondary Education in Natal and Rhodesia with Special Reference to Existing Practice in Selected Groups of Schools in Pietermaritzburg and Bulawayo, unpublished, M.Ed. thesis, University of Natal.
6. Natal Education Dept. : Annual Reports of the Director of Education for the years 1958, 1962 and 1963, Pietermaritzburg.
7. Natal Education Dept. (1960) : Differentiation in Secondary Classes: Report of the 1960 Committee, Pietermaritzburg.
8. Natal Education Dept. (1963) : Report of the Committee of Enquiry on Education in Natal, Pietermaritzburg.
9. Natal Education Dept. (1965) : Circular Minutes No. 195/1965 of 18.8.65 and 215/1965 of 8.9.65.

10. Natal Education Dept. (1972) : Levinsohn, S.: "The New System of Education and its Implication" in Bulletin 5, Pietermaritzburg.
11. Natal Provincial Administration (1973) : "Education" in Witness Supplement of 14.5.73, Pietermaritzburg.
12. Transvaal Education Dept. (1939) : Provincial Education Commission: The Nicol Report, Pretoria: Government Printer.
13. Transvaal Education Dept. (1955) : Report of Oversea Mission in connection with Differentiated Secondary Education: The Van Wyk Report, Pretoria: Government Printer.
14. Transvaal Education Dept. (1973) : Education Bulletin, Vol. XVII, No. 1.
15. Transvaal Education Dept. (1974) : Education Bulletin, Vol. XVIII, No. 1.

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**CHAPTER VI**  
**THE EDUCATIONAL SITUATION**  
**IN KWAZULU**

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CHAPTER VI

THE EDUCATIONAL SITUATION IN KWAZULU

"We would like to have our children educated in such a way that they are what God has wished all human beings to be: we will have them developed in any heights or depths their capabilities can allow them".

(J.A.W. Nxumalo, 1973: 2)

1. PREAMBLE

This chapter is devoted to a description of certain aspects of the educational system in KwaZulu as they were when this investigation was conducted. At the time KwaZulu education was merely a microcosm of Bantu Education and as such its aim, content and evaluation were still determined by the Central Government in Pretoria as stated later in the chapter. The situation was fluid both politically and educationally.

The facts and figures enumerated below refer to the situation as it obtained in 1974 (cf. Bantu Education Journal, March, 1975; Appendix B). However, a "peep" into the actual classroom situation was done in the first half of 1975 by means of questionnaires to chief inspectors and principals of secondary/high schools (cf. Appendices A and C). The responses to the questionnaires constitute an actuality report based on first hand information submitted by those intimately involved in the operation of the educational system.

In order to put the matter in its correct perspective brief reference is made to KwaZulu territory and its people. Although an educational system is not necessarily dependent upon a specific territory, a background knowledge of KwaZulu will contribute towards a better understanding of educational possibilities and limitations. The map appearing in Chapter I (Section 2.5) illustrates the final proposals for the consolidation of KwaZulu, whereby the former numerous pieces of land, which were dotted all over the Natal Province like a chessboard, were reduced to ten.

## 2. FACTS AND FIGURES

### 2.1. Basic considerations

At this juncture it is pertinent to refer briefly to KwaZulu territory and its people with a view to examining the territorial base and the composition of the current population. KwaZulu entered Phase I of the partial self-governing programme in May, 1970, when it attained the territorial authority status. It entered Phase II in March, 1972, with the introduction of an executive council and a White directorate. At this stage of her constitutional development KwaZulu has limited jurisdiction over her educational system. This limited control is prescribed by the Bantu Homelands Constitution Act No. 21 of 1971, which was published in the Government Gazette of the 31st March, 1971. Stage III, which entails a fully fledged cabinet status and a White secretariat is preceded by a general election. KwaZulu will probably enter Phase III before the end of next year (1976) if the issuing of the citizenship certificates proceeds on schedule. It will be recalled that a special session of the KwaZulu Legislative Assembly held on the 17th January, 1973, unanimously passed a motion to the effect that "elections in KwaZulu will only be held after citizenship certificates have been issued" (KwaZulu "Hansard", Vol. 2, p. 47). The implication of all this is that KwaZulu will only be able to enact its own laws and repeal undesirable ones when it has attained the Transkei-type status, i.e. Phase III. In the light of this information it is clear that at this stage KwaZulu is hamstrung by constitutional restrictions and therefore cannot bring about drastic educational reforms, however desirable these may be.

Apart from constitutional matters affecting KwaZulu, reference must also be made to the territorial prerequisites of a nation-state. There is no doubt that, in the final analysis, human resources are the critical determinants of a country's well-being. In fact, this is the essence of the present writer's thesis that the fact of the human resources as critical (vital) determinants of a country's progress and well-being is the concern of the educationist. Hence this research involves:

- (i) a survey of present realities,
- (ii) a study of differentiation as principle, and
- (iii) suggestions for improvement of the present system, especially the present "human resources".

However, there are a number of other circumstances and factors which singly and collectively tend to promote economic, social and political well-being. According to Best and Young (1972), these factors include a consolidated territorial base, a section of coastline with a natural harbour, a wide natural resource base, a favourable man-land ratio, and strategically located growth points and transport routes. There is no doubt that for real progress and genuine independence some of these prerequisites are indispensable (cf. De Clercq, 1973).

Turning to the demographic situation, as revealed by the 1970 Census, we note that the present possible population of KwaZulu is 4,6 million souls. This figure refers to all Zulu-speaking persons inside and outside the territory who regard themselves as KwaZulu citizens. 2,4 million are in the territory itself whereas 1,4 million are in the rest of Natal in the so-called White areas and a further 800 000 live outside Natal, mainly in the Southern Transvaal. The percentage of the age group 15 years and under is 44% and the 6-year-olds number 18%. Thus the school-going age-group (6 to 15 years) is 26% of the population. In terms of figures this group numbers 1 196 000 pupils, many of whom are out of school as there is no compulsory education for Africans. It should also be noted that a big section of the school population and their teachers is out of the territory and lives in the White areas which, for administrative purposes, constitute the Natal Region where their education is prescribed by the Central Government. The Natal Region includes areas inside and outside the Province like those in the Southern Transvaal and East Griqualand. This is a term adopted for those inspectorial circuits which cater for Zulu-speaking pupils outside KwaZulu. The local administrative head of this division of Bantu Education is the Regional director in Pietermaritzburg. In many cases KwaZulu and Bantu Education

schools exist side by side in the same urban area as is the case, for instance, in Pietermaritzburg and Durban.

In 1974 the position was that out of a total enrolment of 765 861 primary and post-primary pupils there were 568 352 pupils in KwaZulu and 197 509 in the Natal Region or 25,8%. Similarly, out of a total of 13 432 teachers there were 9 588 in KwaZulu and 3 844 or 28,6% in the Natal Region.

One mentions these factors in the foregoing paragraphs not in a carping spirit but in order to indicate that there are constitutional, demographic and administrative problems beyond the control of KwaZulu Blacks which must be taken into consideration whenever any reformative educational programme or innovation is launched. It would indeed be naive of anybody to ignore these limiting factors which are inherent in the KwaZulu situation.

## 2.2. Detailed analysis

From a breakdown of the abovementioned figures in the case of KwaZulu, coupled with personal particulars of teachers, a definite picture emerges (cf. Appendices A and B). The following analysis is based on the 1974 figures in the KwaZulu secondary school situation.

### 2.2.1. Types of schools and phases of schooling in KwaZulu

Table III: Different types of secondary schools in KwaZulu in 1974

School	State	Community	Boarding	Day	Boys' Schs	Girls' Schs
Number	20	101	24	97	NIL	1

School	Rural	Urban	Private
Number	102	19	5

Table IV: Phases of schooling in KwaZulu

Phase	Junior Secondary	Senior Secondary	Total
Number	87	34	121

2.2.2. Pupils and teachers in KwaZulu in 1974

Table V: Total number of pupils attending KwaZulu secondary schools

Pupils	Boys	Girls	Total
Number	15193	17825	33018

Table VI: Breakdown of pupil enrolment in KwaZulu secondary schools

Forms	Boys	Girls	Total
I	6669	7941	14610
II	4400	5397	9797
III	2772	3207	5979
IV	897	902	1799
V	455	378	833
			Total:33018

Table VII: Male and female teachers in KwaZulu in 1974

Teachers	Male	Female	Total
Number	733	286	1019

Table VIII: Summary of teachers' qualifications in KwaZulu secondary schools

Qualif.	Qualified Teachers						
	Std. 8+ Prof. Qualif.	Std.10+ JSTC PTC etc.	Degree Courses+ STD etc.	B.A.	B.Sc.	B.Com.	Hons.
Teachers	100	450	236	127	12	2	16

Qualif.	Qualified Teachers				Unqual. Ts.		
	B.Ed.	M.A.	M.Ed.	Doc.	Std. 8	Std.10	Degree
Teachers	9	1	1	NIL	11	47	7

Table IX: Principals' qualifications

Qualif.	Std.10+ JSTC PTC, etc.	Degree Courses+ STD, etc.	B.A.	B.Sc.	B.A.(S.S.)	Hons.
Principals	27	33	32	5	1	8

Qualif.	B.Ed.	M.A.	M.Ed.	M.Sc.	M.Com.
Principals	3	1	1	1	1

### 2.2.3. Commentary

The above figures reveal that in 1974 there were 87 junior and 34 senior secondary schools. 26 of the latter had junior and senior classes in the same establishment, so that in all there were 113 schools offering secondary education in KwaZulu, excluding schools for technical, trade and vocational training.

The total pupil enrolment was 33018 of which 5979 or 18% were in Form III and 833 or 2,6% were in Form V. The teaching personnel numbered 1019, giving a teacher-pupil ratio of 1: 32. However, in secondary education a teacher's load is calculated in terms of the number of lessons or periods he teaches a week

as well as the content of his load i.e. the number of subjects he teaches. Moreover, urban schools are more crowded than rural schools and this also holds true in the case of boarding and day schools. Thus the matter is not as simple as merely dividing the total pupil enrolment with the number of teachers. The picture may be different in the actual classroom situation.

We note that of the 1019 secondary school teachers only 175 or 17,17% were graduates. Only 12 of these were B.Sc. graduates. Of the 113 principals only 53 or 46,9% were graduates. Of the non-graduate headmasters 27 or 23,9% had standard 10 as their highest academic qualification. Of the 77 unsubsidized posts i.e. those of privately paid teachers, 18 were in community schools and 59 were in private schools. Regarding higher post-graduate qualifications, it should be pointed out that the Department of Bantu Education does not give any additional remuneration for possession of a master's degree.

Later on in the chapter reference will be made again to the above statistical information regarding whether it promotes or limits the implementation of a properly differentiated system of education. Having given this background to the problem in hand, we can now proceed to examine the empirical investigation of the current educational situation in KwaZulu.

### 3. A SURVEY OF KWAZULU EDUCATORS' VIEWS ON THE CURRENT SITUATION

#### 3.1. Introduction

Before his university appointment, the present writer was involved in the Bantu Education system as a teacher. In other words, he was not unaware of what actually went on in the system. However, his views needed a firm confirmation by those who were still at the helm as administrators, field officers or teachers. A survey of their views on the current situation was a sine qua non before any recommendations could be formulated on the subject of this research project.

In the circumstances, the most effective method of eliciting the said views from the people concerned seemed to be the questionnaire. The fact that the use of questionnaires is not wholly satisfactory cannot be denied. Whether the questionnaire is the closed type or the open type some people will find it an arduous exercise. There is also the problem of the falsification or misinterpretation of some items on the questionnaire. The problem of the dislike of the author of the questionnaire cannot be ruled out.

An attempt was made to iron out possible problems attendant on the questionnaire. For instance, a draft or trial questionnaire for principals was administered by the researcher personally to a few schools selected at random. As a result of these interviews, ambiguous questions were improved and additional items suggested by the said headmasters were incorporated in the questionnaire. The final product seemed to be understandable even to the headmaster with modest qualifications. In any event, the questionnaire was concerned with the headmaster's daily experiences in his school.

The survey was not restricted but it was open to all junior and senior secondary schools which were not less than three years old. These schools appeared in the 1973 Departmental list of all schools in KwaZulu. In other words, each school had already presented a Form III or a Form V class, so that these were established schools whose headmasters knew what they were talking about when they responded to the questionnaire. A further description of the questionnaire appears below.

### 3.2. Aim and method of the survey

As stated in the first chapter of this work, the aim of this survey was to get first hand information regarding the actual conditions in the KwaZulu secondary schools, i.e. the actual operation of the Bantu Education system in the period 1974/1975, with a view to determining how far differentiation had been implemented, what problems were being experienced, and what suggestions could be made towards implementing a fully

fledged differentiated system of education in KwaZulu. The required information was obtained from three key sources, viz.:

- (i) Principals (cf. Appendix A).
- (ii) Chief Education Planner (cf. Appendix B).
- (iii) Chief Inspectors (cf. Appendix C).

Thus three questionnaires were sent out. The headmasters supplied detailed information regarding the operation of the educational system. The Chief Education Planner supplied statistical information for the year 1974, and the Chief Inspectors' role was to confirm or improve on the information supplied by the principals.

It was stated above that in 1974 there were 113 secondary/high schools in KwaZulu. 32 of these were new schools which were less than three years old, and as such they were still faced with "teething" problems. The sample would have included all 113 schools, but for the abovementioned reasons questionnaires were sent to only 81 established schools.

As mentioned earlier, the questionnaire is not the most satisfactory method of gathering information. In this regard Travers (1964) states that posted questionnaires rarely exceed 40%. However, for purposes of this research, this method proved to be very satisfactory. The overall return from the 81 secondary/high schools was approximately 77%. Moreover, the quality of the responses was good, and they revealed that the respondents were interested in the subject and had taken care and pains over completing the questions. In the event of a poor response from the headmasters, a further safeguard was provided by the responses from the Chief Inspectors who are, as it were, overseers over the principals. That the responses from the two sources coincided is a telling proof of the effectiveness of the questionnaire method in this particular investigation.

Before the final form of the questionnaire was drafted and sent out to principals, ten schools were selected at random and given trial questionnaires personally by the investigator in February, 1975. As a result of these initial interviews, modi-

fications of certain items and additional information were included in the final questionnaire which is reproduced in Appendix A of this work. The final questionnaires were sent out at the beginning of March and the closing date was 10th April, 1975. The researcher remained anonymous in the sense that the responses were to be returned to "The Educational Researcher" whose name was not revealed. The purpose of this step was to make the whole affair as impersonal as possible. By the closing date 39,5% of the responses had been received, and no other responses were received until a reminder was sent out 10 days later. In the reminder the investigator revealed his identity. The response was surprising. Within no time several replies poured in, some with apologies for the delay. Some even asked for new copies of the questionnaire as the original ones were misplaced! This startling development indicates that the author of the questionnaire as a person is an important factor in the questionnaire method. Further particulars on the survey are given below.

### 3.3. Construction and analysis of the questionnaire

Copies of the questionnaires to the principals, the chief education planner and the chief inspectors appear in this work in Appendices A, B and C respectively. The questionnaire for principals was divided into two parts, with questions concerning:

- (a) General information pertaining to type of school in the administrative sense (e.g. rural, urban, junior, senior, boarding, etc.), enrolment, staffing, subject offerings and facilities;
- (b) Inquiry regarding the teaching-learning situation with special reference to:
  - (1) Type of school in the pedagogic-didactic sense (e.g. "ordinary", bilateral, multilateral, agricultural, etc.); the term "ordinary", in this context, refers to the commonest type of school which offers the usual academic curriculum;
  - (2) Selection procedures for the Form I and Form IV groups;

- (3) Criteria for grouping pupils within the school;
- (4) The use or otherwise of cumulative record cards;
- (5) Subject specialization by competent teachers;
- (6) Whether or not contents of prescribed textbooks are graded to meet the varied needs of mixed-ability groups;
- (7) Provision to meet individual differences;
- (8) Teaching methods used;
- (9) The function of the Departmental School Counsellors;
- (10) The role of guidance in the school.

The questionnaire for the chief education planner sought statistical information concerning schools, pupils, teachers, principals and school counsellors. The questionnaire for chief inspectors was also divided into two parts like that for principals, viz.:

- (a) General information in respect of their function and area of operation, number of secondary/high schools and facilities, availability of graduate, science and specialist teachers;
- (b) Questions concerning:
  - (1) The role of psychological tests regarding the identification and placement of pupils;
  - (2) The extent of choice of subjects;
  - (3) Setting;
  - (4) Guidance services;
  - (5) Educational planning;
  - (6) The desirability or otherwise of a sound philosophical basis of education in KwaZulu.

Except for the education planner's questionnaire, in the other two questionnaires the questions restricted the respondents to definite choices, although they were given a latitude to add their own answers and comments where desirable. These multiple-choice questions proved valuable in the present study because the majority of the respondents lacked pedagogical training. In this connection, Gordon (1951: 407 - 412) instituted an investigation into the validity of the "forced-choice"

and "open" questionnaire forms of investigation. He comes to the conclusion that the former method gives more valid results than the latter method. It is also Brogden's (1954: 141 - 42) considered opinion that forced-choice items constitute the most successful method of combating distorted answers. He states that "forced-choice procedures appear to offer the most promising lead to the control of distortion or faking in questionnaire responses".

The foregoing are general comments which will attain more meaning and direction in the next section where the results of the survey are presented.

### 3.4. Results of the survey

#### 3.4.1. Important issues in differentiated education

From what has been said in previous chapters it would appear that the most important factors in differentiated education include:

- (1) The quality and competence of teachers.
- (2) The diversification of the curriculum to meet the needs and interests of a mixed-ability pupil population.
- (3) Adequate school equipment and facilities like laboratories and libraries.
- (4) Pedagogically grounded selection and classification procedures.
- (5) An effective guidance service.
- (6) Carefully planned adaptations of content and method.

In the investigation into the existing practices questions were designed in such a way as to produce information of a quantitative nature, i.e. the answers to these questions corroborated a statement of fact and provided information on an existing concrete situation. The answers obtained were those of knowledgeable and responsible personnel and could thus be regarded as responsible views. Such answers should reveal to what extent differentiation (if any) has been implemented in the current educational system and what problems are being ex-

perienced in this regard. A closer scrutiny of the factors investigated in the survey follows below.

3.4.2. A critical appraisal of existing practices in differentiation in KwaZulu secondary schools

At this juncture we focus our attention on what is actually happening in secondary/high schools in KwaZulu with regard to differentiation. A critical appraisal of existing practices in this regard appears in the ensuing paragraphs. This is done on the basis of the factors enumerated in the three questionnaires for principals, chief education planner and chief inspectors.

3.4.2.1. The quality of the teaching personnel

Needless to say, the aims and objectives of any educational system can only be realized through the appropriate performance of the teachers in the various classrooms. A patient can benefit from an efficacious medicine only through the efforts of a competent doctor. The availability of a good medicine as such cannot save the life of a sick patient. Similarly, it is only the "educational practitioners" who can implement desirable educational reforms and innovations. Grandiose educational schemes per se will remain empty dreams unless there are competent teachers to implement them.

As stated earlier in the chapter, the survey has revealed that in 1974 only 17,17% of the 1019 secondary school teachers were graduates (vide Table VIII), only 12 were graduates in the science direction, of the 113 principals only 46,9% had university degrees, and of the non-graduate headmasters 23,9% had standard 10 as their highest academic qualification (vide Table IX). Teachers with modest or poor qualifications (vide Table VIII) included 100 with standard 8 as their highest academic qualification, 450 with standard 10 as their highest academic qualification, 11 unqualified teachers with only standard 8, 47 with only standard 10 and 7 with degrees only. The rest were qualified teachers with some degree courses. In other words, 615 teachers or 60% of the teaching force in 1974 were not

properly qualified to teach in secondary schools. Several schools, including some senior secondary schools, had three or less graduates on the staff including the principal. This means that secondary education in KwaZulu is predominantly in the hands of non-graduate teachers with modest or poor qualifications.

The above picture vis-à-vis KwaZulu educators is not a rosy one. An ill-qualified teaching force can be a limiting factor in the implementation of a fully fledged system of differentiated education. However, this is one of many factors. We need to examine other factors with a view to determining how far they enhance or inhibit educational differentiation.

#### 3.4.2.2. Type of school in the pedagogic-didactic sense

In the questionnaire for principals it was explained that educational differentiation may take two forms, namely, inter-school or external differentiation and intra-school or internal differentiation. The former signifies the type of school used in this connection and the latter involves the internal organisation employed to achieve effective differentiation. Thus we may have one school designed to offer a variety of courses (academic, commercial, agricultural, domestic science, technical, etc.) for all pupils in a given area, and this type of school is called the comprehensive school. On the other hand, a school may offer two "streams" under one roof (e.g. academic and commercial, academic and domestic science, etc.) and such a school is referred to as a bilateral school, or it may offer three or more streams and be referred to as a multilateral school. Furthermore, a school may offer only one stream, e.g. vocational, agricultural, technical, domestic science, or "ordinary" school (which offers the usual academic curriculum: science, mathematics/arithmetic, languages, content subjects).

In the light of the above explanation, each principal was asked to state whether his school is ordinary, bilateral, multilateral or comprehensive. 55 of the 62 principals (i.e. 88,7%) described their schools as ordinary, that is, they offered the

traditional "book learning". Of the remaining 7, 4 were described as multilateral (i.e. they offered both domestic science and commercial subjects in addition to the academic curricular offerings).

In this connection we may mention that in KwaZulu there were 2 schools for technical secondary education, 1 for advanced technical education, 4 for trade training and 3 for vocational training with a total enrolment of 1332 pupils. In addition, there were 2 special schools for 284 physically handicapped children and none for mental retardates (cf. Bantu Education Journals of April, May and October 1975).

The foregoing exposition points to the fact that:

- (a) External differentiation by means of academic and non-academic schools is very limited; in fact, it is still in its infancy.
- (b) Internal differentiation is also minimal. More will be said in this regard in the next chapter.

#### 3.4.2.3. Selection procedures for the Form I and Form IV groups

Principals were asked to state the procedures which they use to select pupils for the Form I and Form IV groups. Such procedures normally involve one or more of the following:

- (a) Standard VI/Form I results.
- (b) Primary/junior secondary school reports.
- (c) Psychological tests.
- (d) Combination of (a) and (b)
- (e) Combination of (a), (b) and (c).

All respondents stated that admissions to initial classes of the junior and senior secondary school classes were based on the results of the previous class and previous school reports. These principals have to deal with thousands of applicants and are also faced with the problem of limited classroom accommodation. Inevitably, the headmasters' unenviable task is to select the best and reject the rest. In such a situation the less gifted child will suffer most.

3.4.2.4. Criteria for grouping pupils within the school

Having been selected, pupils are then grouped into parallel classes, especially in the case of big enrolments, namely, Form Ia, Ib, Ic, etc.; Form IVa, IVb, IVc, etc. Such grouping or classification is based on certain criteria. It may be done according to:

- (i) alphabetical order of names;
- (ii) sex of pupils;
- (iii) ability and attainment (i.e. bright, average and weak);
- (iv) arbitrary (i.e. grouping is not based on any criterion).

The principals' responses revealed that in 31 schools (i.e. 50%) grouping was done according to ability and attainment, in 22 schools (i.e. 35%) it was arbitrary, in 3 schools it was done according to subjects taken, in 1 according to the sex of pupils, and in 5 no grouping was done. The picture that emerges from these responses is that in most schools there is heterogeneous grouping of pupils. As mentioned elsewhere in this work, grouping as such is not a magic formula for effective educational differentiation. There are other crucial factors to be taken into consideration.

3.4.2.5. The use of cumulative record cards

Record cards are useful as a basis of selection, but are also of particular value in educational guidance of children throughout their career, in both the primary and secondary school. It was therefore distressing to learn from the principals' responses that the cards were rarely forwarded to the secondary schools by the primary school principals. Because of the ineffectiveness of the system of cumulative record cards, the Department of Bantu Education discontinued this system in 1974.

3.4.2.6. Subject specialization by competent teachers

Successful teaching and effective learning presuppose the

availability of personnel who are specialists in their fields. Of the principals that responded to the questionnaire, only 6 reported that they had a full complement of specialist teachers in the various subjects. These were fortunate schools which had a high percentage of graduate teachers. Less than 1% of the remaining schools had one or two specialists on the staff.

This gloomy situation was confirmed by the chief inspectors who described the position of specialist teachers and graduates in general in their respective regions as "serious". Regarding the availability of science graduates the said inspectors described the situation as "critical".

#### 3.4.2.7. The grading of the contents of prescribed textbooks

It was deemed pertinent to inquire whether the textbooks in use were designed to cater for individual differences among pupils. For this reason, the principals were asked to state whether the contents of the prescribed books were graded in such a way that the bright, the average and the weak pupils could benefit from them. They had to indicate whether this was the case with:

- (a) all books,
- (b) quite a number of books,
- (c) very few books,
- (d) none of the books.

The results are revealing. 44 of the 62 principals (i.e. 71%) who responded stated that very few books have differential contents and some quoted those dealing with subjects like mathematics and arithmetic. The remaining 18 principals replied none. It would appear therefore that most textbooks are designed to cater for the mythical "average child" at the expense of the gifted and less gifted children.

#### 3.4.2.8. Provision to meet individual differences

Mention has already been made of the modest, in some cases,

poor qualifications of teachers in secondary/high schools, a factor which militates against effective differentiation. At this juncture, attention will be focused on other factors which are vital in differentiated education. These are enumerated below.

(1) Teaching loads for principals

The nature of the teaching load of the staff of any post-primary school can be judged by the amount of teaching duties which the principal shoulders. The maximum number of teaching periods in secondary/high schools is 45 per week.

Needless to say, one of the most important duties of the principal is to teach so that he can remain in contact with the pupils, in order that he should always know how they are progressing, what study problems they are experiencing and what methods and approach will give the best results for his school. The pupils derive benefit from the principal's professional ability and the headmaster gains first hand knowledge of the views of his scholars. His colleagues also benefit from his competent teaching performance. However, a headmaster who is heavily weighed down by teaching duties is rendered ineffective. His supervisory and guidance duties are bound to suffer. The success of the teaching exercise in any school depends largely on the principal. For this reason, in the current Guide for Principals of Schools the Department of Bantu Education has laid down the minimum number of teaching periods which the principal of a post-primary school must take. With a pupil enrolment of up to 99 he may teach a minimum of 14 periods, for 100 to 199 the minimum is 12, for 200 to 299 it is 10 and for 300+ it is 8.

With the current pupil enrolment explosion, most principals are compelled to overload themselves in the interests of the education of the African child. The questionnaire survey has revealed that:

- (a) only 2 principals out of 62 (i.e. 3%) had no teaching duties;
- (b) 8 (or 13%) taught from 5 to 10 periods a week;
- (c) 18 (or 30%) taught from 11 to 20 periods a week;

- (d) 17 (or 27%) taught from 21 to 30 periods a week;
- (e) 14 (or 22%) taught from 31 to 40 periods a week;
- (f) 3 (or 5%) taught from 41 to 45 periods per week.

These figures indicate clearly that 54% of the principals who participated in the survey are extremely overloaded. In fact, they are suffocated with work. The next 30% are also overloaded, particularly so because they have to deal with abnormally big classes. To aggravate the situation, most of these principals have no clerical assistants. In fact, only 12 (or 19%) reported that they had clerical staff. Moreover, only 19 schools (i.e. 31%) had departmentally approved vice-principalships (i.e. paid due allowance). There were no approved deputy-principalships or senior assistantships in any of the schools in the survey. 31 of these schools (i.e. 50%) had enrolments ranging from 515 to 841 pupils each.

## (2) Teacher-pupil ratio

Earlier in this chapter it was stated that the question of the teacher-pupil ratio is not as simple as merely dividing the total pupil enrolment with the number of teachers in a sector of education for a territory or nation. The concrete classroom situation may present a different picture. Overall figures for KwaZulu put the teacher-pupil ratio at 1: 32. But the questionnaire survey presents a different picture in so far as the 62 "affected" schools are concerned. The total pupil enrolment for these schools in the first half of 1975 stood at 44027 with 750 teachers. These figures give a teacher-pupil ratio of 1: 59. A situation like this is bound to affect adversely a teacher's effectiveness.

## (3) Classroom accommodation

Principals were asked to indicate whether classroom accommodation in their schools was satisfactory, inadequate or serious. 27 (or 44%) described accommodation as satisfactory, 23 (or 37%) described it as inadequate, and 12 (or 19%) said it was serious. Although "satisfactory accommodation" is a relative term (what is satisfactory for one principal may not necessarily

be satisfactory for another), the investigation at least points out that (37% + 19% = 56%) in more than half of the schools consulted the situation is inadequate and gives cause for concern. The chief inspectors' comment in this connection confirms this observation, since they declared that classroom accommodation in their respective regions was on the whole "inadequate."

(4) Laboratory and library facilities

From the principals' responses it was discovered that in 3 schools (or 5%) laboratory facilities were good, in 14 (or 23%) they were inadequate, in 19 (or 31%) they were poor, and in the remaining 26 (or 42%) there were no laboratory facilities at all in spite of the fact that these schools offered some science subjects. In fact, general science is compulsory in all junior secondary schools. With regard to library facilities the position was like this: In 3 schools (or 5%) facilities were described as good, in 16 (or 26%) they were inadequate, in 26 (or 42%) they were poor, and in the remaining 17 (or 27%) there were none. This gloomy picture was confirmed by the chief inspectors' observation that, by and large, the laboratory and library facilities in their respective regions left much to be desired.

(5) Summation

In the light of the foregoing, it would appear that provision to meet individual differences among pupils is inadequate. From the investigation undertaken it appeared that more than 54% of all school principals were extremely overloaded with teaching responsibilities; that the teacher-pupil ratio in the schools contacted was 1: 59; that the classroom accommodation in more than half of these schools was inadequate; while laboratory and library facilities were either very poor or non-existent in more than 70% of the schools under investigation. As mentioned earlier, various factors are responsible for this. More will be said in this regard in the next chapter.

#### 3.4.2.9. Teaching methods used

An inquiry was made regarding teaching methods used in the various schools. The purpose was to find out which method(s) was (were) predominantly employed in each school. The given methods, from which to select one or more, were (a) the lecture method in which the teacher is the only one who "speaks", with very little discussion, (b) the discussion method, i.e. a discourse between teacher and child, (c) the textbook method in which the teacher is solely guided by, and follows the textbook very closely, (d) the inductive and deductive method, (e) individualization method, or any other method not mentioned here. 48 (or 77%) of the principals indicated that the most predominant method used in their schools was the lecture method, with one or two of the other methods being employed occasionally. For 6 (or 10%) of them the predominant method was the textbook method; 5 (or 8%) said it was the discussion method; and for the remaining 3 (or 5%) it was the inductive and deductive method. Regarding individualized teaching, several principals commented that heavy teaching loads made this impossible. A significant comment by some headmasters was that they could not use the textbook method because textbooks were either not available or they came very late in the year.

A notable feature of the responses in this connection was the honesty of the principals. In the questionnaire each method was explained briefly. The principals were not tempted to falsify their responses and opt for the apparently "acceptable" methods like the discussion, inductive and deductive, and individualization methods. This revelation regarding the most predominant teaching method used in secondary schools indicates one of the main problems that should be faced when considering introducing a fully fledged system of differentiated education.

#### 3.4.2.10. The function of the departmental school counsellors

The survey has revealed that up to 1974 there were four school counsellors who visited KwaZulu schools. These counsellors

were employed by the Department of Bantu Education. The principals were asked to state what the function of these counsellors was in their schools. The unanimous reply was that these officers came once in a while to give psychological tests to some classes like Form III and Form V. The answer to the question "Are the results of the psychological tests of any benefit to your pupils?" was "Not at all". In this connection, one principal commented:

"I have never come across a situation where these tests were of benefit to my pupils. The position in some of the schools I know is that the results of these tests remain exclusively in the hands of the principal and they are used when filling in the application forms of students who are leaving that school".

Another commented: "The results of the tests come too late for use". It was further stated by all the principals that they had no teacher-counsellors on their staff. These views tie up with guidance in the school which appears below.

#### 3.4.2.11. The role of guidance in the school

In their replies all the principals expressed the view that there is a "very urgent need" for guidance services in their schools. They further stated that their pupils need guidance in both the educational and the vocational fields. Thus the principals are fully conscious of the vital role guidance should play in the secondary school situation.

#### 3.4.2.12. Educational planning

In a sound system of differentiated education planning plays an important role in the educational structure. The investigator wanted to find out from the chief inspectors (vide Appendix C) what the position was regarding educational planning in the KwaZulu educational set up. Their reply was that at this stage the educational planning section did not play any significant

role. This background information from senior officers is essential in view of further comments in this connection in the next chapter.

### 3.4.2.13. Philosophy of education for KwaZulu

There is a widespread feeling among intellectuals that there is a burning need for a clear articulation of the dormant philosophy that lies in the heart of KwaZulu (cf. Ndlovu, 1974; Ndaba, 1975). It is there. There needs must be articulated what the people desire or aspire to, what they expect of education and what its aim should be, their value priorities, what type of knowledge, skills and attitudes should be inculcated in the young, desirable qualities in adulthood, and manhood nurtured in a sound philosophy of life. The aim of KwaZulu education and how manpower should be equipped were mentioned in Chapter I, and the new image of KwaZulu man and the emergence of a new philosophy of life were discussed at length in Chapter II. It could be mentioned in passing here that the KwaZulu citizens' insistence on English as a medium of instruction at school is in reality not a wish for English as a medium per se but a burning desire that children (persons) when they leave school should have English (as skill) at their disposal in order to compete effectively in the labour market for better jobs in the Western oriented economy. In view of these considerations, it was deemed pertinent to sound the views of the chief inspectors in this connection. Their reply was that the burning need was there. In the next chapter this point will be developed further.

## 4. OVERVIEW AND INTEGRATION

In this chapter the educational situation in KwaZulu was scrutinized in depth. The aim was to get first hand information from those who are intimately involved in the operation of the educational system. Thus questionnaires were sent to:

- (a) the principals of 81 junior and senior secondary schools which were already in existence in 1972,

- (b) the chief education planner, and
- (c) the chief inspectors.

62 of these schools responded to the inquiry. That is, there was a highly significant return of completed questionnaires of approximately 77%.

The inquiry touched on all factors which are relevant to the operation of a differentiated system of education. These included types of schools, the quantity and quality of teachers, the curriculum, teaching methods, selection and grouping practices, guidance services, etc.

Analysis of the results revealed certain problems which militate against the implementation of a fully fledged system of differentiated education. These include acute shortage of properly qualified teachers, limited accommodation, lack of proper classroom facilities, explosion of numbers, very heavy teaching loads for principals and assistants, lack of guidance services, etc. In spite of these problems, the teachers appeared to be doing their best under difficult circumstances.

In the next chapter the investigation is brought to a close. A summary and evaluation of conclusions and recommendations will be presented.

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5. REFERENCES

1. Best, A.C.G. & Young, B.S. (September, 1972) : "Homeland Consolidation: The Case of KwaZulu" in S.A. Geographer, Vol. IV, No. 1.
2. Brogden, H.E. (June, 1954): "A Rationale for minimizing questionnaire keys" in Psychometrika, Vol. 19, No. 2.
3. De Clercq, J.L.W. (1973): KwaZulu en Konsolidasie, University of Zululand Press.
4. Dept. of Bantu Education (1975) : Bantu Education Journal, March, 1975.
5. Dept. of Bantu Education: (1975) Bantu Education Journal, April, 1975.
6. Dept. of Bantu Education: (1975) Bantu Education Journal, May, 1975.
7. Dept. of Bantu Education: (1975) Bantu Education Journal, October, 1975.
8. Dept. of Bantu Education: (No date) Guide for Principals of Schools, Pretoria: Government Printer.
9. Gordon, L.V. (1951) : "Validities of the Forced-Choice and Questionnaire Methods of Personality Measurement" in Journal of Applied Psychology, Vol. 335, No. 6.
10. Ndaba, E.P. (1975) : The Desirability of Articulating a Sound Philosophical Basis of Education in KwaZulu, a paper delivered at a public symposium on "The Educational Priorities of KwaZulu" held on the 5th April, 1975, at the University of Zululand.
11. Ndlovu, J.E. (1974) : The Education of Teachers, a presidential address delivered at the Natal Inspectors' Association annual meeting held on the 7th January, 1974, in Pietermaritzburg.
12. Nxumalo, J.A.W. (1973) : Address at the Official Opening of the Menzi High School, 13th October, 1973.
13. Travers, R.M.W. (1964) : An Introduction to Educational Research, New York: Macmillan.

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**CHAPTER VII**

**A REVIEW OF THIS STUDY,**

**CONCLUSIONS, RECOMMENDATIONS**

**AND**

**EDUCATIONAL IMPLICATIONS**

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CHAPTER VII

A REVIEW OF THIS STUDY, CONCLUSIONS, RECOMMENDATIONS AND  
EDUCATIONAL IMPLICATIONS

"We have decided that the basic need is for development of an adequate education system for KwaZulu".

(UMntwana M.G. Buthelezi, 1975: 8)

"A much more far-reaching revolution in education can be implemented by us in our South African situation once we have come to realize that our system needs overhauling".

(Dr. S.M.E. Bengu, 1975: 5)

1. GENERAL

The above weighty pronouncements are made by prominent leaders of KwaZulu. Their views reflect the present mood of the nascent KwaZulu nation. UMntwana M.G. Buthelezi is the first president of the newly reconstituted KwaZulu Cultural Movement (Inkatha) and Dr. Bengu is its first Secretary-General. The former is also UMntwankulu wakwaZulu (leader of the KwaZulu Government) and the latter is one of the leading educationists in KwaZulu. These leaders have expressed the dormant "philosophy" for education - the belief that education through schools must be given top priority. They have articulated the needs and aspirations of the community. It remains the task of those actually involved in educational practice to bring about the desired reforms on the basis of pedagogical principles.

In this concluding chapter a synthesis of theoretical issues on the problem at hand and certain practical findings and considerations are presented. To put this concluding section in proper perspective it is, however, essential to state in short once again the background to this study as well as the aim and methods of investigation.

## 2. STATEMENT OF THE PROBLEM

It was pointed out in Chapter I that the phenomenon of individual differences is a universal fact of life, a primordial datum, which has been recognized down the ages. However, this fact has been blurred or ignored until recent times in so far as school education was concerned. The dogma of "all men are born equal" tended to cloud the issue with the result that pupils were subjected to the same classroom practice and were expected to perform uniformly. Those who were unable to measure up to this uniformity were "chastised" in various ways.

During this century the persistent cry for equal educational opportunity for all resulted in the extension of secondary education to all members of society and the provision of a type of education designed to develop each child to his fullest capacity. This new move had far-reaching implications. The unprecedented influx of multitudes of pupils of varying abilities into the schools created new problems of a pedagogic and administrative nature, and a revolutionary approach to the new situation was called for.

In the pedagogic sphere, the burning problem requiring instant attention was that of providing differentiated courses of study to cater for the great diversity among the new secondary school population in contrast to the traditional academically oriented courses designed to lead to scholarly pursuits. The latter had to be restructured and broadened to incorporate courses suited to the full spectrum of innate ability. This resulted in major changes in the form and organization of secondary education systems as well as the streamlining of the curriculum and teaching methods. This type of education is today called differentiated secondary education. In the administrative sphere, the various schools either had to be re-designed to provide different types of courses (i.e. intra-school or internal differentiation) or different types of schools had to be established for the various types of secondary education now demanded (i.e. inter-school or external differentiation).

South Africa, as an industrial power, was also engulfed by the winds of change. Both the Central Government and the Provincial Administrations got into grips with this problem. Thus various commissions were appointed to study differentiated secondary education abroad or locally and make recommendations for its implementation. Today the differentiated education phenomenon is an integral part of White education as well as Coloured and Indian education. In the circumstances, the present writer felt that KwaZulu should not be left behind in this regard, particularly so that she was on the verge of self-determination.

### 3. PURPOSE OF THE STUDY

The new approach to secondary education and the provision of systems of education designed to provide opportunity for boys and girls according to their ability, aptitude and interest as outlined in the foregoing have been the primary motivation for the present study. The study seeks to come to a fuller understanding of the child in the teaching-learning situation so as to teach and educate him more effectively. For this reason this thesis is considered under the field of psycho-pedagogy.

The initial step towards solving the problem under discussion seems to lie in first undertaking a fact-finding study into the working of the Bantu Education machinery, particularly at secondary school level, with special reference to the KwaZulu area. It should be pointed out that up to the time this work was completed (1975) KwaZulu education and Bantu Education were identical at secondary level.

The present investigator was interested in three aspects: firstly, to what extent did Bantu Education provide for individual differences; secondly, what developments were envisaged in this connection within the next few years; and thirdly, what recommendations could be suggested towards further diversification in KwaZulu? Consequently the study is both diagnostic and prognostic.

Furthermore, this study has a dual purpose: firstly to conduct a survey of developments and existing practices in non-Black

and KwaZulu education systems in respect of differentiation to determine the measure of success (if any) achieved by these systems in the provision of secondary education, and, secondly, to make suggestions based on conclusions drawn from the study for a differentiated secondary education system which would be feasible and viable for KwaZulu.

#### 4. METHODS AND PROCEDURE FOLLOWED IN THIS STUDY

As mentioned in the previous chapter, methods employed in this study are the interview and the questionnaire (see Appendices A, B and C). In 1974 there were 113 secondary schools. 32 of these were newly established schools which were three years old or less. These were left out and the rest (i.e. 81) constituted the sample. Questionnaires (cf. Appendix A) were sent out to the principals of these schools and their responses were checked against those of the chief inspectors (cf. Appendix C).

Having outlined the scope, objectives, methods and procedure of this study, we now proceed to give a general review of theoretical and practical findings of this study as well as relevant conclusions derived from these.

#### 5. GENERAL REVIEW OF FINDINGS AND RELEVANT CONCLUSIONS

##### 5.1. Different perspectives on the individual as a becoming being who needs education

In the light of the nature and scope of this thesis, the theoretical framework of this study involves reflection on three part-perspectives of the basic science pedagogics, viz. philosophical pedagogics, psycho-pedagogics and didactics in relation to educational planning. It was anticipated that a close study of each of these perspectives would contribute valuable information and understanding towards our task of examining and assessing the individual as a becoming person who needs education that will

cater for his unique individuality, i.e. differentiated education. It was reasoned that a reflection on the philosophical and psychological bases of individuality would throw light on the role educational planning should play in a sound differentiated system of education.

5.1.1. As far as the philosophical-pedagogical perspective is concerned, it was argued (see Chapter II section 3) that philosophy of education has to fathom theoretical questions and relate its findings to the practical pedagogical situation. Its task is to design pedagogical categories, to discern the universally true categories, but also to describe how these categories can be given practical meaning. This signifies that various possibilities exist in accordance with various philosophies of life.

It is universally agreed that human nature is unique, that man is a somatic-psychic-noëtic being which has the longest period of dependency of all God's creatures, and that he is capable of acquiring culture and education. Hence education aims at protecting, sustaining, and directing the becoming of the child-in-learning. The truth of what education is and how the child should be educated are questions which require philosophic-pedagogic reflection. One overriding, fundamental, crucial fact that once again emerged from our discussions is that a child is a being who wants to become someone himself and that man, as a being who educates, pledges himself to education.

Although man is committed to education, men's goals of education cannot be identical. Thus there can be no unanimity regarding the subjects to be taught to the young. The differences in the educational goals are fundamentally the result of the different outlooks on life of the various peoples.

There are three vital conclusions which flow from the foregoing, namely:

- (a) Every society has its own philosophy of life on which its education is based - an outlook on life which cannot be duplicated;

- (b) Every child is a unique being whose individuality cannot be duplicated - hence mention of an "average child" is an idle talk;
- (c) The articulation of the dormant philosophy of life of the KwaZulu community is a burning necessity.

These conclusions have a direct bearing on the present study. Differentiated education aims at meeting individual differences among pupils in a particular society - hence the necessity for a specific philosophy of education as a point of departure in any discussion involving formulating proposals for educational reform in KwaZulu. Therefore, education in practice attempts to offer the help that every child particularly needs in order to acquire the personal qualities demanded by adulthood. The concern of education is with the child as a present existing reality viewed in the light of his own adulthood, that is, in the light of what eventually he ought to become.

5.1.2. Having examined the philosophical-pedagogical background to differentiated education, attention is now turned to the psycho-pedagogical perspective.

The task of psycho-pedagogics (as outlined in Chapter II section 4) is to fathom the child-in-his-situatedness as a being in need of the help and support of the adult-in-his-situatedness. The authentic pedagogical situation is constituted when the adult's life-world coincides with that of the child in such a way that the former takes liability and considers himself responsible for the child's becoming adult in terms of his own adulthood.

In our reflection on this perspective the notion of regarding psycho-pedagogics as "applied psychology" was rejected. Modern pedagogics is not an application of psychology to education; it should not attempt to reduce human beings to measurable objects by an overemphasis of psychological testing and thereby expressing human beings in terms of figures alone; but modern pedagogics emphasizes that the point of departure in the study of the child should always be the pedagogical situation. This point of view brought about a new approach in the investigation of the individual child, for instance, in regard to learning or behaviour

problems. With the aid of the phenomenological method as the primary mode of approach an accountable pedodiagnostic method has been developed in contrast to a naturalistically oriented method of psycho-diagnostication.

It was found that as soon as man is studied in his situation, it becomes clear that this concerns a person-who-is-becoming, thus a person who started as a human child. Psychology and pedagogics thus meet each other in genetic anthropology, that is, from the viewpoint of "development" of the human child, thus in the psychology of becoming or "developmental psychology", as it is traditionally referred to. When an adult and a child meet each other in a situation, we immediately have the adult-child-situation which we find as a primordial phenomenon in the family situation as parent (educator) - child (educand) - situation, which inevitably and necessarily constitutes itself into a pedagogical situation and which then forms our point of departure for all psychological reflection on the child. From this it appears that the pedagogical situation is the primary and primordial situation from which all psychology results.

Furthermore, the learning that educators hope to facilitate includes all those things that are considered the objectives of education. Education is not only the acquisition of knowledge and skills, but also involves the inculcation of desirable attitudes, ideals, values, principles, etc., so as to develop a complete psycho-physical-spiritual being. In fact, this is the task of differentiated education.

From the psycho-pedagogical reflection on the child, the following conclusions, which have a direct bearing on differentiated education, can be drawn:

- (a) The educator's point of departure in the study of the child should always be the pedagogical situation;
- (b) Every child (likewise the KwaZulu child) is in need of the help, aid and support of responsible, well educated teachers to guide him on his way to adulthood;

- (c) Differentiated education does not only imply the conveying of knowledge and facts to the young but also the inculcation of acceptable attitudes, ideals, values, etc., placing a great responsibility on teachers (and parents) in KwaZulu.

Having attempted to elucidate the nature and essence of psycho-pedagogics and its bearing on the unique individuality of each child, our attention is now focused on the didactical-educational-planning perspective.

5.1.3. When we reflect upon how best the education of the non-adult could be planned in order to facilitate his learning, then we are in the sphere of educational planning. In the teaching-learning situation, the child receives guidance on his way to adulthood. The educator is expected to know the destination which the educand is expected to reach. The route towards this destination needs planning and calls for purposeful teaching by the educators.

In Chapter II (section 5) it was pointed out that in the pedagogical situation the nature of the child is such as to require authoritative guidance and the child desires it, while the educator represents the authority of adulthood. In this situation the seeker and giver of authority come together. The child needs education en route to adulthood. He requires information as to where he is, who he is and the goal to which he is proceeding.

Therefore, the guidance of the child from non-adulthood to adulthood is largely entrusted to the schools by parents - hence the teacher is said to be in loco parentis. The home is the primary pedagogical situation and the school the secondary pedagogical situation. It becomes the teacher-educator's task, inter alia, to educate the pupils and to allow their potentialities to develop to the full for their own sake, so that they can be of service to the country and to society. To be able to take one's place in post-school life as a fully moulded adult demands both formative education by the school within the

framework of elements pertaining to the philosophy of life and formal education which enables the child to find a place in the national economy on the grounds of his acquired knowledge and skills as well as his moral and spiritual edification as a mature psycho-physical-noëtic being.

Our reflections lead us to conclude that education must cater for the requirements of the child as well as of the national economy and that educational planning is the foundation upon which the future of the child and the national economy must rest. Therefore, it appeared to be essential to suggest an integration of an educational programme with a national economy development programme, since the latter is dependent on the educational programme, and this is only possible when planning regarding education and the national economy occur concurrently. Whilst the personality of the child must not be sacrificed on the altar of economic expediency, nevertheless the needs of the pupil and those of the country usually coincide.

From our reflections on the educational planning perspective, the following conclusions emerge:

- (a) Educational planning implies planning for education as teaching (i.e. onderwys) - hence in the pedagogical framework it falls under the part-discipline didactics;
- (b) In a fully fledged system of differentiated education educational planning plays a vital role;
- (c) In developing countries (including KwaZulu) a sound strategy of educational planning would mean direct confrontation with the thorniest aspects of educational change, involving, inter alia, the total problem of articulation between primary, secondary and tertiary education, with basic attention to curriculum revision at all levels.
- (d) Defining the qualitative dimensions and objectives of educational change must be the first priority of the developing country concerned: one has to know what one has in mind and whither one is going.

Having indicated some theoretical perspectives against which this thesis should be viewed, the study now proceeds to review the grouping concept in the context of differentiated education as set out in Chapter III.

## 5.2. The grouping concept in the context of differentiated education

One of the most outstanding problems in education is to work out methods of dealing with large numbers of pupils in such a way that each pupil will receive the direction, guidance, and special work which he requires in order to improve himself to the maximum of his capacities. Thus the aim of ability grouping is to bring together pupils who will be able to work together and to progress together under conditions which will permit the fullest possible development of the individuals involved.

In Chapter III (section 2) it was pointed out that well known grouping procedures include, inter alia, homogeneous and heterogeneous grouping. The dominating aim of homogeneous ability grouping has been to improve the learning situation by bringing together pupils who will be alike in achievement at the end of a period of learning. Heterogeneous grouping refers to the classification of pupils with divergent abilities and capacities in the same class.

It was found that the results of ability grouping appear to depend less upon the fact of grouping itself than upon the theory behind the grouping, the accuracy with which grouping is made for the purposes intended, the differentiation in content, method, and speed, and the technique of the teacher, as well as upon more general environmental influences. Ability grouping must then be defined in such a way as to exclude a rigidly standardized procedure on any group level. It must enhance the effective educational growth of pupils by providing social settings which are significant for both group and individual. There must be provision for temporary or supplementary groupings for specific purposes within the several ability groups or cross grouping may be introduced.

Thus the fundamental aim of sectioning pupils into classes is to group them in such a way that their requirements can be met in the most efficient manner. Flexibility in grouping is a sine qua non. The future progress and welfare of the individual pupil should be the main consideration in grouping procedures. One of the most decisive factors in respect of grouping is intelligence which is discussed at length in Chapter III. However, it is not only the intellectual side of the child which is important, but provision must also be made for his physical, emotional, social and future occupational needs as well as scholastic achievement, interest and effort.

Within the broad concept of ability grouping there are various techniques or methods which are designed to achieve effective differentiation. These include streaming which has tended to be inflexible, setting or cross grouping in each separate subject, sectioning pupils into separate schools as in the English tripartite system, enrichment programme, the parallel syllabus plan, advanced placement programme, the semester plan, comprehensive schools and non-graded schools where pupils work at a tempo which suits their specific capacities.

It was further emphasized (Chapter III, section 3.4.) that in order that a differentiated system of education may function properly a guidance service is absolutely essential. The value of the guidance function consists in the enhancement of individual growth and development. In this broad sense guidance implies the "humanization" of education both in theory and in practice. The guidance service must give all young people the benefit of the full guidance programme, that is, it must serve all non-adults who are in need of aid or support from primary to secondary school age. This means that the service must not only be available to young people who experience problems, but that the full guidance programme will be of positive benefit to every child from his primary to his secondary school career, irrespective of whether or not he experiences difficulties. Ability grouping procedures can only be successful if they are based on an effective guidance service.

The following conclusions are derived from this section:

- (a) The psychology underlying ability grouping is to bring together those pupils that are able to work and to progress together;
- (b) The main consideration in the grouping procedure must always be the future progress and welfare of the individual pupil;
- (c) Guidance services are absolutely essential in any fully fledged differentiated system and thus imperative to the proper implementation of differentiated education;
- (d) Exploratory media (psychological tests) must be employed to determine the person-structure of each pupil.

At this stage we proceed to review innovatory patterns in the English system of education, which have a bearing on the present study.

### 5.3. Innovatory patterns in the English system of education vis-à-vis differentiation

In Chapter IV a historical development of the whole spectrum of the English education system was given with a view to exposing developmental patterns which are relevant to the present study. Certain trends and innovations were discerned. It was found that in Britain today there is a concerted effort to make the education of children an organic unity from the nursery to the secondary school phase.

Various reports were mentioned which sought to implement the principle of educational differentiation. The 1926 Hadow Report marked a significant milestone in this regard and the principles outlined in it have since guided educational policy in Britain. The 1938 Spens Report envisaged three types of secondary education varied to meet the different needs of the pupils concerned, that is, the tripartite system, and its stance was child-centred throughout. In these and other reports the need for post-primary differentiation was recognized in the proposals that education beyond the primary level should be

provided in three distinct types of schools. However, the rigorous selection examination meant that children at the early age of 11+ had to be typed as academic, technical or modern. This procedure has been severely criticized by educational psychologists who could find no justifiable grounds for such selection at this early stage.

The abovementioned reports culminated in the passing of the 1944 Education Act which has formed the basis for reforms in future years. This Act aimed at providing equality of educational opportunity in accordance with the age, ability and aptitude of each pupil. It is the cornerstone of differentiation in secondary schooling by means of separate schools, namely, the grammar school, the secondary modern school, and the secondary technical school.

Today Britain is changing its pattern of secondary schooling by abolishing the much criticized selection tests by which the bright go to the grammar schools (in some areas to technical also) and the rest are dismissed to the secondary modern schools. The traditional schools are being replaced by comprehensive schools which are essentially non-selective in respect of intake.

There are various ways in which comprehensive education is being developed in England and Wales. It is accepted that a local authority may adopt more than one form of organization in the area for which it is responsible. The common factor is that each school contains secondary pupils of every ability except the educationally subnormal. The comprehensive school movement has been growing from strength to strength in recent years. Given the present momentum, by 1980 comprehensive schools will be the standard pattern of secondary education throughout Britain.

The Hodge Hill Comprehensive School in Birmingham was given as a concrete illustration of how a fully fledged comprehensive school operates. The mixed-ability intake, the diversified curricular offerings, the low teacher-pupil ratio, the elaborate guidance system, pupil-participation in didactical and administrative matters, etc. are significant features of the establishment. The school is in every way a shared experience with staff,

pupils and parents involved in decision-making, in the provision of resources and in the acquisition of new skills.

Needless to say, it would be naive for anybody to regard the comprehensive school as a panacea for all secondary school ills. Moreover, emphasis must not be placed on the comprehensive school buildings but on comprehensive education and the principles it stands for, namely, a wholesale provision of opportunities to cater for individual differences among pupils. Indeed, it should be noted that, whatever the system of grouping decided upon, grouping as such does not solve educational problems. Teaching methods and subject-matter need to be adapted to suit the pupils concerned, in a truly differentiated system.

Various agents of innovation have made significant contributions towards pedagogical renewal especially at secondary school level. The system can be more accurately described as a net rather than a chain, a net traditionally kept at tension point by powerful pressure groups, the teachers and the local education authorities especially. In recent times the Schools Council and the National Council for Educational Technology have been superimposed as development bodies. Their success depends on how far they can work through the various key groups. The key motivating factor for all these innovators is the concern for a type of education which takes into consideration the individuality and unique nature of each child. Gone are the days when pupils were classified as "types" to be channelled into a tripartite organization.

A study of differentiated education in Britain has led us to conclude that:

- (a) Implementation of a fully fledged differentiated system of education in Britain has a long history, backed by various educational reports, emphasizing once again the importance of a study like the present one;
- (b) Traditional schools in England are lately being replaced by comprehensive schools which are purported to offer a solution to the problem of individual differences among pupils in a given establishment without streaming them into different types of schools;

- (c) KwaZulu is desperately in need of an educational system that takes into consideration the individuality and unique nature of each child;
- (d) The school must be a shared experience with staff, pupils and parents: a collective enterprise which warrants the support of everyone concerned in KwaZulu.

With this background in view the study now proceeds to review and pinpoint some vital issues in the South African system of differentiated education as discussed in Chapter V.

#### 5.4. Vital issues in the South African system of differentiated education

The South African education authorities felt that the problem of differentiated secondary education needed careful study and planning. Consequently, in the last three decades several commissions were set up in the various provinces to investigate and report on this problem. Their terms of reference included recommendations for educational reform at secondary school level. This development culminated in the appointment in 1964 of a national committee for differentiated education and guidance under the chairmanship of the Director of the National Bureau of Educational and Social Research (now the President of the Human Sciences Research Council) Dr. P.M. Robbertse, which submitted its report on the 26th August, 1969.

Developments in the Transvaal and Natal, the two provinces which have long accepted and implemented the principle of educational differentiation, were reviewed. At the end reference was made to recent trends in this regard emanating from the Robbertse Committee's recommendations.

##### 5.4.1. Transvaal

Over the years the Transvaal has been the leading province in educational reform and innovation. This view is confirmed by a number of reports of education commissions which indicate an uninterrupted line of development, particularly since the second world war. This year (1975) the Transvaal is the first province to introduce a three-term school system.

The Nicol Report of 1939 was a significant step in the cause of differentiated education in the Transvaal in particular and in South Africa in general. In order to achieve differentiation the Nicol Commission recommended that the Province should institute two separate and parallel types of schools, namely, the "Modern School", which had a practical bias, and the "High School", which was academically orientated. The Modern Schools became known as the Junior High Schools, and the experiment ran for some 14 years after which it petered out. In the Lynch Report of 1950 it was recommended, inter alia, that the existing secondary schools should be superseded by a type of comprehensive high school in which there would be room for all normal post-primary school pupils, making provision for more than one course. This Report, together with the Steyn Report of 1953, helped to lay the foundations for major developments in the field of differentiation, and they gave rise to the momentous Van Wyk Report of 1955.

The Van Wyk Report insisted on differentiation in which various ability groups would all receive their education under one roof, according to a homogeneous classification, i.e. in the comprehensive high school. The Transvaal had already accepted the comprehensive school as the most suitable establishment for its educational policy. The recommendations were accepted and implemented as from 1958. On the basis of these recommendations the Transvaal evolved a three-stream system, namely, the University Entrance Course (the U-Stream), the Standard Ten Course (the T-Stream) and Standard Eight Course (the E-Stream). The fourth group pupils, the mental retardates, are catered for in special schools, another field in which the Transvaal has taken the lead in South Africa.

The foregoing era of differentiated education in the Transvaal has, however, come to an end. On the basis of the H.S.R.C. Report of 1969 a new differentiated system was introduced at the beginning of 1973 in Stds 5 to 8.

#### 5.4.2. Natal

With regard to Natal, the Consolidated Education Ordinance of 1942 could be regarded as the beginning of differentiated education in Natal. It effected the first modernization of the 1877 educational acts.

Another significant step in the direction of educational reform in Natal was the Wilks Report of 1946. The Wilks Committee recommended that four distinct and separate courses should be provided, namely, (a) a practical course for a large number of early school leavers, (b) a commercial course for girls, (c) a pre-vocational course mainly for boys and (d) an academic course leading to university admission. At the time the circumstances were such that the multilateral school as proposed by the Committee never materialized, except for the introduction of the Practical Course in January, 1959. Adequately diversified programmes in a properly differentiated school system in order to cater for all secondary school pupils were sadly lacking.

The Committee of Inquiry into Differentiation in Secondary Classes of 1960 recommended, *inter alia*, that differentiation should take place in bilateral secondary or high schools by way of a two-stream system which would accept all pupils who wished to proceed to the Senior Certificate in whichever stream it was decided they should continue after passing standard 6. The twin-stream comprised the Advanced Stream for the more intelligent section of the pupils and the Ordinary Stream for the less gifted pupils. The new system was effected at the beginning of 1962. The main weakness of the twin-stream programme was that the average and the above-average pupils were lumped together in the advanced grade to the detriment of the former, so that three streams instead of two should have been introduced to meet all the pupils' varied capacities.

The Lighton Report of 1963 made several recommendations designed to achieve greater differentiation in Natal, including the provision of three streams. However, the recommendations which were implemented were those dealing with (a) the transfer

of all standard 6 classes to high schools, (b) the conversion of borderline "A"-level failures to an "O"-level pass, and (c) the external control of the selection for streaming after standard 6. Despite the recommendations of both the Wilks and the Lighton Committees for greater differentiation in secondary schools, the twin-stream system in Natal continued to exist as recommended by the 1960 Committee.

Having sketched attempts at differentiation in the secondary school systems of the Transvaal and Natal, the study now proceeds to review recent trends in differentiated White secondary education in South Africa in the wake of the National Education Policy Act of 1967.

#### 5.4.3. Recent trends in White secondary education

In each of the four provinces distinct attempts to provide differentiated education occurred from about 1940, by which time a distinction between primary and secondary education was clear, and the provision of secondary education became increasingly adequate. The changing educational needs have resulted in the setting up of various commissions to examine the existing provincial systems and to make recommendations for improvement. The reports of these commissions stressed the need for more adequate provision of differentiation, and several developments resulted.

However, there still existed the position that not all the education departments had made the same progress in the field of differentiated education and that the methods they employed differed from each other in many respects. There was also the anomaly of the policy of divided control whereby the central government controlled all commercial/technical secondary education.

The recommendations contained in the H.S.R.C. Report of 1969 have resulted in the introduction of the new system of differentiated education with school guidance as an integrated service. For the first time the vexed question of differentiation has been tackled on a national scale and not on a parochial, ad hoc basis as in the past. The said recommendations form the basis or guide-

lines for the new system. The Provinces will implement them in the light of their experiences and circumstances. The last hurdle to a fully fledged differentiated system of secondary education was removed by the promulgation of the National Education Act No. 41 of 1967 which deals with the transfer of vocational and technical education in schools (i.e. up to and including standard 10) to the Provinces.

The new system of differentiated education for Whites is provided for in the National Education Policy Act No. 39 of 1967. Natal commenced with the new system in 1972 and the other three provinces in 1973.

In the new system, the 12-year period of compulsory schooling is divided into four phases, each of three years duration, namely, junior and senior primary as well as junior and senior secondary phases. The educational units are Class 1 to Std. 1, Stds 2 to 4, Stds 5 to 7, and Stds 8 to 10 respectively.

With regard to the curriculum and syllabuses of the secondary school, provision is made for general (formative) education as well as specific vocationally directed education. However, a notable characteristic feature of this educational programme is that there will be a shifting of stress from general education to specific vocationally directed education, with emphasis on the latter in the senior secondary school period (i.e. Stds 8 to 10). The curriculum of the secondary school will comprise compulsory and optional subjects, on the understanding that the compulsory subjects, consisting of examination and non-examination subjects which form a core curriculum, will be taken by all the pupils. The junior secondary school period (i.e. Stds 5 to 7) includes a compulsory formative programme similar to that of the primary school, as well as compulsory examination subjects. In both programmes, provision is made for the undifferentiated presentation of subject-matter. On the other hand, the curriculum of the senior secondary school period makes provision for fully differentiated fields of study, namely, technical, commercial, agricultural, natural sciences, human

sciences and art. In these fields of study, provision is made for a common, compulsory core curriculum comprising a formative programme which is not subject to examining, with Religious Instruction and Physical Education as subjects and School Guidance as a service, as well as Afrikaans and English as compulsory examination subjects. Each field of study offers a choice of subjects in respect of which a pupil may choose between at least 4 and, at most, 5 subjects in addition to the compulsory core curriculum.

The dull-normal pupils are also catered for in this system. Their curriculum makes provision for a core curriculum, comprising a formative programme and compulsory examination subjects on the one hand, while, on the other, it also entails a specific vocationally directed programme which includes a practical-technical course and a practical-commercial course.

The suggested differentiated syllabuses for the senior secondary school period will offer pupils the opportunity of taking subjects at an advanced level and/or standard level in accordance with their capacities, while the subjects for the dull-normals will be offered at a practically directed level. This system, known as cross-grouping or setting, has the particular advantage that it is not the child, but the subject which is placed in a stream.

Having outlined the salient features of the H.S.R.C. Report, the study then proceeded to review the situation in Natal, which has already embarked on the implementation of the recommendations of this Report, with a view to discovering how the new system works in practice.

Natal was selected as a case in point and discussed in detail. The discussion reveals that the new system does not attempt to be revolutionary but retains what in the past has been found to be sound educational practice, yet at the same time introducing innovation and change in those areas of the old system where it was considered to have weaknesses.

Natal has decided to apply differentiation through the comprehensive school and not through separate schools, except in the case of agricultural high schools only, but there will be no purely technical or commercial high schools as in the past. In support of the system of differentiated education a guidance and counselling service is being introduced into the schools as a service in the interests of pupils. This guidance will be developed into a sophisticated service by specialised staff as fast as circumstances permit.

Conclusions flowing from the foregoing exposition may be stated as follows:

- (a) The Transvaal and Natal have made separate attempts over the years to arrive at a viable system of differentiated education;
- (b) The efforts of the various provinces at differentiation culminated in the appointment of the Robbertse Commission and the subsequent promulgation of legislation setting the stage for the introduction of a national system of differentiated education;
- (c) The new education policy in South Africa published in the Government Gazette of 12th November, 1971, serves as the basis for the design and implementation of a differentiated system of education (the 3-3-3-3 system) but the actual implementation will be decentralised to establish a number of growth points, affording opportunities for local initiative, thereby stressing the fact that this is no mere uniformity but a rich diversity in unity for the benefit of the pupil population;
- (d) Natal has embarked upon its own mode of implementation of the national system according to its experience and circumstances;
- (e) KwaZulu can take what is appropriate from these trends and developments and adapt them to suit its needs and circumstances.

At this juncture, we may now direct our focus on to the educational situation in KwaZulu to review the findings set out in Chapter VI.

### 5.5. The status quo in KwaZulu education: a review of present conditions

The study has revealed that at this stage of KwaZulu's constitutional development, KwaZulu education and Bantu Education are more or less identical, especially in so far as content, examinations and teacher training are concerned. KwaZulu has limited control over primary and secondary education but tertiary education falls directly under the control of the Central Government. Approximately 48% of the population of 4,6 million lives outside KwaZulu territory as well as 25,8% of the children and 28,6% of the teachers. According to the final consolidation proposals for Natal announced in the White Parliament in March, 1975, KwaZulu territory will comprise 10 pieces of land scattered all over the Province.

In Chapter VI of this work the educational situation in KwaZulu was scrutinized in depth. In order to get first hand information from those intimately involved in the operation of the educational system questionnaires were sent out to (a) the principals of secondary schools, (b) the chief education planner, and (c) the chief inspectors.

The inquiry touched on all factors which are relevant to the operation of a differentiated system of education. These included types of schools, the quantity and quality of teachers, selection and grouping practices, teaching methods, guidance services, pupil enrolment, school facilities, the curriculum, etc. The answers obtained could be regarded as responsible views as they emanated from knowledgeable and responsible personnel.

The survey revealed that 60% of the teaching force in 1974 were not properly qualified to give instruction in secondary schools. Of the 1019 teachers only 175 or 17,17% were graduates. There were only 12 B.Sc. graduates among these. 550 of these teachers or 54% had standard 10 or lower as their highest academic qualification and 65 of them or 6% had no teaching qualifications. This means that secondary education in KwaZulu is predominantly in the hands of non-graduate teachers with modest or poor qualifications.

With regard to the type of school in the pedagogic-didactic sense which was involved in the survey, it was revealed that 88,3% of the schools offered the traditional "book learning", that is, they concentrate on the "academic stream" only. 4 schools were described as bilateral (i.e. they offered either domestic science or commercial subjects in addition to book learning), and 3 were described as multilateral (i.e. they offered both domestic science and commercial subjects in addition to the academic curricular offerings). No school offered comprehensive education. Besides these academic schools, there were 2 schools for technical secondary education, 1 for advanced technical education, 4 for trade training and 3 for vocational training with a total enrolment of 1332 pupils. In addition, there were 2 special schools for 284 physically handicapped children and none for mental retardates.

Other factors which were investigated include (a) selection procedures, (b) criteria for pupil grouping, (c) the use of cumulative record cards, (d) subject specialization, (e) the grading of the contents of prescribed textbooks, (f) provision made to meet individual differences, (g) teaching methods, (h) the function of the Departmental School Counsellors, (i) school guidance, (j) educational planning and (k) philosophy of education for KwaZulu. Each of these factors was scrutinized thoroughly with a view to determining to what extent it contributes towards or detracts from the effective operation of a sound system of differentiated education. The study revealed that there are definite problems which militate against the implementation of a fully fledged system of educational differentiation.

Our investigation of the present situation in KwaZulu secondary schools has led us to conclude that:

- (a) There is an acute shortage of properly qualified teachers since 60% of the teaching force in 1974 was not suitably qualified to teach in secondary schools;
- (b) In more than half of the schools investigated (56%), proper classroom accomodation was inadequate;

- (c) There is an explosion of pupil numbers at school, since the teacher-pupil ratio in the schools investigated was 1:59, rendering individual attention practically impossible;
- (d) It appeared that more than 54% of all school principals were far too heavily loaded with teaching duties coupled with administrative responsibilities, making it impossible to fulfil their tasks properly;
- (e) It was revealed that laboratory and library facilities were either very poor or non-existent in more than 70% of the schools contacted;
- (f) In spite of all these shortcomings and burning problems a happy spirit and a sense of devotion were discerned among teachers who were doing their best under difficult and exacting circumstances.

## 6. SUMMARY OF CONCLUSIONS

A synopsis of the foregoing conclusions is given below:

### 6.1. On the philosophical-pedagogical perspective:

- (a) Every society has its own philosophy of life on which its education is based - an outlook on life which cannot be duplicated;
- (b) Every child is a unique being whose individuality cannot be duplicated - hence mention of an "average child" is an idle talk.
- (c) The articulation of the dormant philosophy of life of the KwaZulu community is a burning necessity.

### 6.2. On the psycho-pedagogical perspective:

- (a) The educator's point of departure in the study of the child should always be the pedagogical situation;
- (b) Every child (likewise the KwaZulu child) is in need of the help, aid and support of responsible, well educated teachers to guide him on his way to adulthood;

- (c) Differentiated education does not only imply the conveying of knowledge and facts to the young but also the inculcation of acceptable attitudes, ideals, values, etc., placing a great responsibility on teachers (and parents) in KwaZulu.

6.3. On the educational planning perspective:

- (a) Educational planning implies planning for education as teaching (i.e. onderwys) - hence in the pedagogical framework it falls under the part-discipline didactics;
- (b) In a fully fledged system of differentiated education educational planning plays a vital role;
- (c) In developing countries (including KwaZulu) a sound strategy of educational planning would mean direct confrontation with the thorniest aspects of educational change, involving, inter alia, the total problem of articulation between primary, secondary and tertiary education, with basic attention to curriculum revision at all levels.
- (d) Defining the qualitative dimension and objectives of educational change must be the first priority of the developing country concerned: one has to know what one has in mind and whither one is going.

6.4. On the grouping concept:

- (a) The psychology underlying ability grouping is to bring together those pupils that are able to work and to progress together;
- (b) The main consideration in the grouping procedure must always be the future progress and welfare of the individual pupil;
- (c) Guidance services are absolutely essential in any fully fledged differentiated system and thus imperative to the proper implementation of differentiated education.

- (d) Exploratory media (psychological tests) must be employed to determine the person-structure of each pupil.

6.5. On trends and developments in Britain:

- (a) Implementation of a fully fledged differentiation system of education in Britain has a long history, backed by various educational reports, emphasizing once again the importance of a study like the present one;
- (b) Traditional schools in England are lately being replaced by comprehensive schools which are purported to offer a solution to the problem of individual differences among pupils in a given establishment without streaming them into different types of schools;
- (c) KwaZulu is desperately in need of an educational system that takes into consideration the individuality and unique nature of each child;
- (d) The school must be a shared experience with staff, pupils and parents: a collective enterprise which warrants the support of everyone concerned in KwaZulu.

6.6. On vital issues in White secondary education in South Africa:

- (a) The Transvaal and Natal have made separate attempts over the years to arrive at a viable system of differentiated education;
- (b) The efforts of the various provinces at differentiation culminated in the appointment of the Robbertse Commission and the subsequent promulgation of legislation setting the stage for the introduction of a national system of differentiation;

- (c) The new education policy in South Africa published in the Government Gazette of 12th November, 1971, serves as the basis for the design and implementation of a differentiated system of education (the 3-3-3-3 system) but the actual implementation will be decentralised to establish a number of growth points, affording opportunities for local initiative, thereby stressing the fact that this is no mere uniformity but a rich diversity in unity for the benefit of the pupil population;
- (d) Natal has embarked upon its own mode of implementation of the national system according to its experience and circumstances;
- (e) KwaZulu can take what is appropriate from these trends and developments and adapt them to suit its needs and circumstances.

6.7. On the present situation in KwaZulu secondary schools:

- (a) There is an acute shortage of properly qualified teachers since 60% of the teaching force in 1974 was not suitably qualified to teach in secondary schools;
- (b) In more than half of the schools investigated (56%), proper classroom accommodation was inadequate;
- (c) There is an explosion of pupil numbers at school, since the teacher-pupil ratio in the schools investigated was 1:59, rendering individual attention practically impossible;
- (d) It appeared that more than 54% of all school principals were far too heavily loaded with teaching duties coupled with administrative responsibilities, making it virtually impossible to fulfil their tasks properly;
- (e) It was revealed that laboratory and library facilities were either very poor or non-existent in

more than 70% of the schools contacted;

- (f) In spite of all these shortcomings and burning problems a happy spirit and a sense of devotion were discerned among teachers who were doing their best under difficult and exacting circumstances.

Having tabulated the above conclusions, we now proceed to outline their educational implications and to postulate certain recommendations.

## 7. RECOMMENDATIONS AND EDUCATIONAL IMPLICATIONS

### 7.1. Introductory

In making the following recommendations for a system of differentiated secondary education for KwaZulu it is not the intention of the present writer to derogate from existing practices. It was mentioned earlier on that the writer's efforts in this work are not made in a carping spirit but are motivated by a desire to promote the cause of differentiated education for the benefit of the individual child with his unique needs and potentialities. Indeed, the existing system possesses many good features, some of which are incorporated in these recommendations. In fact, it was stated in Chapter I that this study aims at unravelling current practices regarding differentiation and plans envisaged for reform and then to make recommendations for further diversification in KwaZulu.

The decision to offer for consideration a complete system in preference to recommendations which apply to certain problem areas only stems from the conviction that a system needs to be presented as a logical entity and to be seen as such. Making recommendations for certain areas only may in practice not be possible or in some instances not desirable, particularly in the case of KwaZulu. KwaZulu aspires to an independent political existence in the near future, a fact that should not be ignored by educational researchers. Ignoring this reality would render

the study irrelevant and reduce it to an academic monument which embellishes university libraries. Developing communities expect a feedback from their academics' researches. This is as it should be.

## 7.2. Philosophy of education for KwaZulu: an urgent desideratum

The foremost recommendation which we would like to suggest in this connection is the desirability of articulating a sound philosophical basis of education for KwaZulu. It will be recalled that KwaZulu's existence as an independent Black Nation on the tip of Southern Africa was terminated at the Battle of Ulundi in 1879. This episode marked the beginning of an era of subjugation and the advent of a dominant foreign culture which tended to obliterate the indigenous culture, wittingly or unwittingly.

In Chapter II (Section 3) of this work it was observed that education, as a form of practice, has a theory and philosophy behind it. The latter is referred to as philosophy for education which derives from one's philosophy of life. Since education is the business of learning how to live, it stands to reason that people's philosophy of education must be in accord with their philosophy of life. Cilliers's (1975: 91) views in this connection are germane:

"Education has a specific purpose, the aim of which is to develop and to mould an individual to the acceptance of a certain philosophy of life which will be similar to that of the educator or of the educational authorities who determine the educational policy".

The implication of the foregoing is that the education system of KwaZulu must be reorganized to reflect the leaders' views, their ideas of what is good for the nation. This philosophy must first be articulated for it is there: it lies in the hearts, speeches and the writings of the persons involved. On the basis of this philosophy education will then take shape; planning will be done and educational institutions set up (or at least proposed).

A distinction must be drawn between felt (known) necessities (desires) and philosophy (views with reference to life as a whole - what ultimately matters most). School education has a philosophical basis, but it is mainly based on manpower needs which are not philosophical issues. Political, social, economic, etc. aspirations (i.e. national aspirations) must be distinguished from the more general philosophical considerations. Aspirations do not only have a philosophical basis but they are mostly practically oriented. In this connection a brief reference to the objectives of education as well as KwaZulu objectives for education is pertinent.

Human life and human personality are very complex phenomena, and in educational activity there is an endless number of social and cultural, psychological, mental and moral aspects of becoming adult to consider. Parents, educators, educational and curriculum planners, teachers, etc., may then be said to go about their educational tasks with a great number of objectives in view. These are all subservient to the ultimate aim, namely, adulthood, and they determine the selection, the suitability and the sequence of educational activities in accordance with the particular emphasis in mind. Objectives may be grouped in categories such as vocational competence, civic responsibility or citizenship, self-realization or personality development, physical and mental health, ethic character, etc. (Fischer, 1962).

It is interesting to note that KwaZulu objectives for education conform to the general objectives mentioned above. From a perusal of the Education Manifesto of KwaZulu and the Constitution of Inkatha these categories of objectives emerge: self-realization, healthy human relationships in the context of multi-racial South Africa, economic efficiency, civic responsibility, cultural assertiveness, and an informed and effectively literate populace.

In the light of these objectives education becomes an instrument for nation-building. In terms of national goals, KwaZulu's well-being depends upon the enlightenment of her people because the conditions of the scientific-technological era require of her entire population high levels of competence, greater breadth of

understanding and a strong sense of commitment to her basic values and norms. Education objectives must be related to national needs. The most challenging problem of the KwaZulu educationist is that he is called upon to have a clear understanding of the education objectives which are correlates of the national goals. There is a burning necessity to fix the goals which are relevant to national needs and aspirations and then to determine how they are to be achieved.

As mentioned above, the advent of the dominant Western culture has tended to obliterate the indigenous culture of the African, and in the process of acculturation the latter has tended to lose his identity as a Black indigene of this continent in general and of KwaZulu in particular. Acculturation as such is inevitable and even desirable in this scientific-technological era. But it is of vital importance for a society in transition to be certain of its core of values, for it is only in this way that it can stand the disintegrating power of change. Inkatha understands culture as "embracing the totality of values, institutions and forms of behaviour transmitted within a society as well as material goods produced by man" (Inkatha Constitution, p. 1). In this work culture is used in the sense of "the totality of values", which implies a group's philosophy of life. This connotation of culture has nothing to do with a plea to "return to primitive life" or with an overemphasis on primitive artefacts. On the contrary, culture in this context refers to the African personality or negritude, that is, ubuntu in Nguni languages or botho in Sotho languages.

The advent of the reconstituted and revitalized National Cultural Liberation Movement or Inkatha on the KwaZulu scene on the 21st March, 1975, is indeed auspicious and timely. The fact that His Majesty King Goodwill Zwelithini is Patron-in-Chief of this Movement indicates the stature of the Movement and what it hopes to achieve vis-à-vis the cultural emancipation of KwaZulu people. In the quest for African cultural identity this is a welcome development which has long been overdue.

The Constitution of the Movement was formally and unanimously

adopted by the KwaZulu Legislative Assembly in May, 1975, and its aims and ideals have to be inculcated in every sector of the KwaZulu community. At its 57th annual conference held in Pietermaritzburg from the 28th to 30th June, 1975, the Natal African Teachers' Union welcomed the advent of Inkatha and pledged themselves to further its aims and objectives in every classroom and relate their teaching to these aims and objectives. In this way education objectives and national goals shall be correlated, and the two shall constitute two sides of the same coin.

The foregoing reflection compels us to recommend that KwaZulu education must have a sound philosophical basis, clearly articulated objectives and the right climate to introduce "a properly organized differentiated education" as advocated by the Education Manifesto of KwaZulu. Inevitably, such a programme shall need a proper planning as suggested below.

### 7.3. Educational planning in the context of a differentiated system of education

The implications of the foregoing reflections suggest that those who are engaged in educational planning in accordance with the stated philosophical ideals and national aspirations are faced with a challenging task. They have to recognize the fact that whatever the ideal may be it is not necessarily the most practical solution to the problems encountered in the existing educational system, and they have to attempt to marry as far as possible idealism and realism. While the politician's head tends to move in the clouds, that of the educational planner is kept close to the ground. He must be sensitive and perceptive to the burning issues of the day.

In the case of KwaZulu education objectives must be relevant to national needs and challenges. The KwaZulu Government is keen to see educational reform consistent with the spirit of genuine self-determination and interrelated problems. Inevitably, this calls for a radical change in educational planning. The programmes of education have to be pedagogically related to national problems: Here must be emphasized the fact that

educational thought, effort, whatever, always have two roots - the individual and the social (national) - and that the one principle must never eclipse the other. Above all, the education planner must be guided by the needs of the child as a becoming human being needing assistance and support on his way to adulthood.

The implications of the foregoing are that a person's effectiveness as a planner, especially in KwaZulu as a developing community, will have to be determined largely by the following:

- (a) Knowledge of the existing and envisaged schemes;
- (b) A clear conception of the social factors which promote development;
- (c) Knowledge of the political needs of the community as articulated by people's acknowledged leaders;
- (d) Knowledge of educational needs and the determination of effective methods of instruction.

Moreover, it is essential that those responsible for educational planning must be sufficiently knowledgeable about the methods and techniques of planning in order to be able to achieve the objectives of overall educational planning. This implies proper training for the job. KwaZulu is fortunate in that since 1974 the Faculty of Education of the University of Zululand has instituted a course in educational planning at B.Ed. level, and some inspectors and teachers have since enrolled for the course on a part-time basis.

Therefore, seeing that the education planner occupies a key position in a department of education, he will be in a position to chart out the course of an educational system and to suggest priorities to be adopted in order to reach the desired goal. In the practical situation he will have to consider the following three main features of educational planning (Ndaba, 1975a):

- (i) Academic planning, which is concerned with curriculum development in the various phases of schooling, by competent persons with a clear conception of national needs and problems as well as pupils' needs and potentialities.

Moreover, curriculum planning must be a co-operative effort involving the administrative staff, educationists, teachers, the community and even the pupils (Malie, 1973).

- (ii) Physical planning, which involves predicting future enrolments and the provision of facilities to accommodate the rising demand. At the end of this year (1975) the standard 6 class will be discontinued and at the same time the standard 5 pupils will also write terminal examinations like the outgoing standard 6 group. These two groups will both qualify for entrance into Form I (i.e. Std. 6). This means there will be a "bulge" or double intake at the Form I level in 1976. As a rule, proper provision should have been made for this "bulge" so that no child should be turned away for lack of accommodation.
- (iii) Psychological services, which are designed to give a new dimension to counselling and guidance at all levels. The aim must be early identification in order to facilitate education suited to the ability, aptitude and interest of the individual and groups of pupils. Careful planning will be necessary in order to ensure that this service is carefully integrated into the educational pattern and that it does not become an end in itself, isolated from the general school situation. Regarding the media for identifying pupils, which are so essential in a differentiated system of education, it has been stated categorically that "appropriate psychological tests are available for our school population from Sub A to Form V to determine school readiness, retardation, aptitude and general ability or intelligence" (Ndaba, 1975b: 35). A detailed explanation of these tests appears in the Bantu Education Journal of May, 1975, in the pen of the present writer.

The above three wings of educational planning have some further implications since educational development is a complex matter and cannot be left in the hands of one or two people. On

the contrary, its planning must be the responsibility of a team of experts with various interests and specialized abilities. In this way only can a co-ordinated planning programme evolve.

Needless to say, educational planning must be dovetailed with a national planning programme. Therefore, it is gratifying to note that there is, in fact, a standing Planning Committee for KwaZulu consisting of all the six Directors of Departments as well as expert nominees from different fields of human endeavour. The Chairman of the Committee is UNDunankulu wakwa-Zulu (leader of KwaZulu Government).

In view of the fact that:

- (a) there is so much at stake regarding KwaZulu education,
- (b) there is no proper planning at present,
- (c) KwaZulu children are subjected to two types of education (i.e. KwaZulu education and Bantu education), and
- (d) there is an apparent lack of a spirit of devotion and commitment to what is their own on the part of teachers (there is, in fact, nothing of their own as yet),

it is strongly recommended that a commission of inquiry be appointed to investigate the whole structure of education in KwaZulu and then report upon what should be authentically called KwaZulu Education for which the community will be proud and regard as their own. This Commission must also point out the immediate and long-term needs of the territory. Experts from the community should serve in that Committee. In fact, there was a clarion call for the appointment of such a committee at the 57th annual conference of the powerful Natal African Teachers' Union held in Pietermaritzburg from June 28 to 30, 1975. The possibility of a close liaison with the Department of Education of the Natal Provincial Administration should receive serious consideration by the said committee. Already the KwaZulu Government is represented by two members of the cabinet in the recently established multi-racial Consultative Committee of the Natal Provincial Administration, whose task is to promote dialogue on matters of mutual interest between all races in the Province.

#### 7.4. Selection for secondary education

Before any recommendations are suggested in this regard, it is necessary to first outline the educational situation in KwaZulu. Up to the end of 1975 the position in KwaZulu (and in Bantu Education) was as follows (cf. Dept. of Bantu Education, 1972):

African pupils commenced schooling at the age of 7 and completed primary education, which terminated at the standard 6 class, at the age of 14. A terminal examination was written on the basis of which pupils could be admitted to the initial class of the secondary school, i.e. Form I. In other words, primary education spanned a period of 8 years and secondary education (Forms I to V) 5 years, giving a total of 13 years.

With the advent of the 12-year structure of differentiated education for Whites the position in Bantu Education will also change and conform more or less to the 3-3-3-3 system as from 1976. Standard 4 will mark the terminal class of the primary school period and standard 5 the initial class of the junior secondary school although it will remain attached to the primary school as is the case in White education. The significant difference is that pupils will still commence their schooling at the age of 7 and write an external examination at the end of the standard 5 year on the basis of which they will be admitted to Form I class on transfer to the secondary school establishment. The traditional internal classes (i.e. Forms I, II and IV will write semi-external examinations whereby the KwaZulu Department of Education will issue uniform examination question papers and memoranda for marking and determine promotions for all schools, but the schools will mark the examination scripts.

In the opinion of the writer the status quo contains some unsatisfactory features. Hence it is recommended as follows:

KwaZulu pupils must commence their schooling at the age of 6 years as there is no pedagogical justification for a later start.

This means that the child will go through standard 4 at the correct age of 11 years and commence secondary education at the age of 12 as is the case with most overseas countries including England as mentioned in Chapter IV. As indicated in that chapter, one of the most striking features of English education is the organic connection between the primary and the secondary stages of education, a situation which induces a smooth transition and facilitates the organization of a well articulated system of education.

Under the existing system in KwaZulu selection for secondary education constitutes a problem area in that only those pupils who have obtained a "good pass" at the end of the standard 4 year and the standard 5 year can be selected for secondary education. These examinations appear to be a "natural process of elimination" of the pupils who cannot make the stipulated grade. The snag is that the examination is the only criterion which is considered for selection purposes, and another shortcoming is that no provision is made for the less gifted pupil who cannot measure up to the standard demands. In this connection, it is recommended that besides examination performance other criteria like results of psychological tests and teachers' opinions must also be taken into consideration, and provision must be made to accommodate the less gifted pupils in the secondary schools. More will be said on this later in this section. This recommendation refers to all classes including Form III.

#### 7.5. Transitional period

The important lesson derived from the English system of education is that many incorrect decisions are made when streaming pupils at 11+. For this reason it is generally agreed that there should be a transitional period between primary education and differentiated secondary education. As mentioned in Chapter V, three years appears to be a suitable length of time to allow for a full exploration of abilities, aptitudes and interests among the pre-adolescents who do not all experience a uniform rate of physical and psychological development. This is the junior secondary period when provision should be made for the undiffe-

rentiated presentation of subject-matter. It is thus recommended that during the said period pupils must have a general curriculum, and use should be made of psychological tests, traditional examinations and teachers' observations for purposes of educational guidance and the compiling of an ability-aptitude-interest profile for each pupil. While in the existing system provision is made for a general formative education, there is no educational guidance as mentioned here. In this way KwaZulu schools do not wholly conform to the principle of a transitional period.

#### 7.6. Differentiation

From the theoretical reflection in Chapter II on the becoming individual, the discussion on the grouping concept in Chapter III, and the review of both the innovatory patterns in the English system in Chapter IV and recent trends in differentiated education in South Africa in Chapter V, it appears that an effective system of differentiation provides for:

- (a) a properly organized guidance service;
  - (b) the wide ability range among pupils;
  - (c) the aptitudes and interests of the individual pupil;
  - (d) a sound general education during the pre-adolescent period;
  - (e) the academically talented and the less gifted pupils; and
  - (f) sufficient flexibility to meet individual needs which are not specifically catered for in the organized school system.
- The personal investigation outlined in Chapter VI has revealed that inadequate provision is made for the spread of ability among pupils in KwaZulu. The general trend in the education systems reviewed in this study is to make provision for four ability levels among pupils, namely, the talented, the average, the dull-normal, and the mentally retarded. It was indeed disturbing to discover that no provision is made whatsoever for the mental retardates. Minimal provision is, however, made for a few physically handicapped children. It can therefore be concluded that KwaZulu conforms only minimally to the principle of adequate provision for the wide ability range of pupils.

According to recent research in South Africa, as mentioned in Chapter III (paragraph 2.3), the abovementioned ability groups represent about 9%, 66%, 16% and 9% of the White pupil population respectively. The picture in KwaZulu may not differ significantly from this.

7.6.1. In view of the above exposition, it is recommended that the educational planning section of the KwaZulu Department of Education must conduct a well organized talent survey to ascertain the present status of pupil talent in KwaZulu.

7.6.2. To further remedy the current situation and bring about effective differentiation it is recommended that provision must be made for the above categories of pupils on the following basis:

- (a) The sub-normals should be transferred to special classes attached to ordinary schools during the first two phases of schooling and to pre-vocational secondary schools at the appropriate stage.
- (b) The dull-normals should proceed to a practical course in standards 6, 7 and 8 (i.e. Forms I to III).
- (c) For the normal and talented groups, effective differentiation should be provided by means of subject-choices and the grade (advanced or standard) at which individual subjects are taken in the fourth phase.

#### 7.7. Size and organization of secondary schools

The size and organization of secondary schools in KwaZulu needs urgent attention. Basic considerations in this connection are:

- (a) The explosion of numbers, especially in urban areas.
- (b) The lamentable lack of motivation and interest for non-academic education.
- (c) Financial implications of classroom accommodation and facilities.

To cope with this problem, the following example is quoted: If two adjacent schools have a total enrolment of, say, 800 between them, this means a duplication of services, viz. two principals (and vice-principals), two or more laboratories, two libraries, two sports fields, etc. Apart from classroom facilities, there is also a duplication of the infrastructure (water, electricity, roads, etc.). One school with diversified curricular offerings would, however, be far more economical and more beneficial to the pupils and the community than two schools. It is more economical to add new classrooms to an existing school than to build a new school. There is also the added advantage of pooling teachers' resources and expertise. However, this does not mean that no new schools should be built since there will always be a demand for expansion and development. It is, however, strongly recommended that existing schools must be re-organized along comprehensive lines and new ones must be built with this view in mind.

The implications of this recommendation are that:

- (1) Secondary education is best provided for in a single institution designed to cater for the varied needs of the developing adolescent and not in separate institutions (cf. the tripartite system in England; the "ordinary" schools and the "non-academic" schools of KwaZulu).
- (2) Such a comprehensive school must have a general curriculum at the junior secondary level and differentiated curricula at senior secondary level. The latter should comprise these fields:
  - (a) Humanities: history, geography, economics, art, music, languages, biblical studies.
  - (b) Natural sciences: physical science, biology, mathematics, functional mathematics, functional science.
  - (c) Technical: technical drawing, trade theory and practice, woodwork, metalwork.
  - (d) Commercial: accounting, typing, shorthand, business economics.

- (e) Agricultural: agricultural science, biology, animal husbandry, field husbandry, practical agriculture.
- (f) Home economics: home economics, housecraft, needlework and clothing.
- (g) Art: Art, music, design, sculpture, painting.

Some of these subjects will be taken in the advanced grade and others in the standard grade according to the aptitude and interest of the pupil. A decided advantage is that the vocational/technical direction will enjoy the same status as the academic bias and in this way it will lose its traditional "undesirability" as a line of study by the able pupils. This also applies to the agricultural "subject package". KwaZulu, as a developing nation in dire need of trained personnel in many fields, would benefit tremendously from this comprehensive programme. The question of qualified staff to shoulder such a programme will receive attention later in this section.

#### 7.8. School guidance

The importance of guidance as an integrated service in a differentiated school system cannot be overemphasized. Throughout this study the crucial role of guidance has been stressed. Therefore, it is recommended as follows:

- (a) Since every teacher must be involved in guidance work among his pupils, serving teachers should get some training in practical guidance at the in-service training centre.
- (b) Primary and post-primary teacher-training courses which are offered at the teacher-training colleges and at the university of Zululand must include guidance. Prospective teachers must have proper training in guidance work to enable them to serve as teacher-counsellors in their schools. School counsellors, who are specialists in guidance, with a background of psychology, must do an intensive course at B. Ed. level.
- (c) There must also be introduced cultural guidance whereby civic responsibility and cultural assertiveness will be purposefully and consciously fostered among the pupils in

accordance with the aims and ideals of the Cultural Movement (Inkatha). Such guidance is imperative in view of (1) the present day conflicting ideologies and the erosion of norms and values and (2) the fact that individuals are taken on their way to adulthood in many (if not most) cases out of one civilization (traditional) into a Western way of life where individuality and personal involvement are emphasized in contrast to the traditional collective responsibility. Therefore, provision must be made in the curriculum of the proposed comprehensive school for a "youth preparedness programme" or "cultural studies".

## 7.9. Teachers

### 7.9.1. Their training

The study has revealed that the teaching force in KwaZulu is highly inadequate both in quantity and quality. In recent years KwaZulu has been producing teachers at a deficit of 300 to 400 a year (Buthelezi, 1975). Obviously with compulsory education in force that deficit would be doubled. At present (1975) teacher training facilities are as follows:

- (a) Primary teachers (with the Junior Certificate qualification) take the two-year Primary Teachers' Course (P.T.C.) offered at five training colleges.
- (b) Junior secondary teachers (with Senior Certificate or Matric qualification) take the Junior Secondary Teachers' Course (J.S.T.C.) offered at two training colleges.
- (c) Junior and senior secondary teachers (with Matric qualification) take respectively the Secondary Teachers' Diploma (S.T.D.) and the University Education Diploma (U.E.D.) offered at the University of Zululand. The output from this source is very inadequate; it is a mere drop in the ocean. The S.T.D. is being phased out gradually and will be replaced by the recently instituted four-year teaching degree course called the Baccalaureus Paedagogiae (B.Paed.) which has three study directions, viz. (i) the Arts Bias, (ii) the

Science Bias, and (iii) the Commercial Bias. The third year of this degree course is devoted entirely to professional work, and students who decide to leave at the third year level will be granted the Senior Secondary Teachers' Diploma (S.S.T.D.).

In order to improve this position, it is recommended that:

- (1) The building of new teacher training colleges should be speeded up in order to wipe out the current teacher deficit and the undesirable system of unsubsidized teachers and double sessions at the lower primary school level and also reduce the present teacher-pupil ratio. Commerce and industry and other interested parties could be asked to assist in this regard.
- (2) The serving uncertificated teachers should be granted a dispensation whereby after three years' service they could be given study leave to attend a training college for one year in order to acquire a teaching qualification.
- (3) The J.S.T.C. should be extended by one year for prospective senior secondary teachers. The present practice whereby S.T.D. and J.S.T.C. teachers teach Matric classes is undesirable as it is conducive to the lowering of standards.
- (4) A variety of incentives should be used to motivate prospective teachers to take up the teaching career. Such incentives could include outright bursaries, attractive and realistic salary scales, a concerted publicity campaign through the radio and the press and through Inkatha, etc.
- (5) A programme of teacher exchange should be instituted whereby KwaZulu teachers could "swop" positions for varying periods with teachers in, say, Zambia, Ghana, etc., in order to enrich themselves experientially for the benefit of their pupils and the community.

#### 7.9.2. A suggested code of ethics

Once the current phenomenon of the teacher supply falling far short of demand has been rectified, attempts should be made

to clean the profession and rid it of dead wood and "passengers" whose unprofessional actions and conduct detract from the good name of the noble profession and create an unpleasant image to the public and prospective teachers.

Regarding the personal growth of the teacher and the development of altruistic attitudes, it is imperative that the teacher should participate in research and in curricular activities as well as in social and public life. In this way he will live the philosophy of his society and thus apprehend the unity of education objectives and national needs. The crucial element in the future development and emergence of a KwaZulu education system will be the calibre of the professionals who will man the educational institutions.

In the light of the foregoing reflection on the teachers' personal growth and society's expectations of him, a code of ethics to which KwaZulu teachers should adhere is suggested below. Teachers must always aim at attaining the same status as, say, members of the Medical and Dental Council, the Nursing Council, and the Law Society. Such a status must be earned on merit, and if such merit is lacking, vociferous clamours at teachers' conferences for the granting of a statutory status to the teaching profession is so much hot air and idle talk which will impress nobody, let alone government authorities. Thembela (1975: 3) hits the nail on the head when he declares that "professional pride demands that the teachers render service of the highest order and that they adhere to a teachers' code of ethics."

As a first step towards improving their image and earning a higher status for themselves, it is recommended that the teachers must adopt a code of ethics along the following guidelines:

A KwaZulu teacher will:

- (1) accept as his primary professional responsibility the guidance of the pupils in his care in the pursuit of knowledge and skills and in the development of their full potential so that they become socially responsible and self-supporting citizens in a democratic state;

- (2) be loyal to his employers, public and private, by serving them to the best of his abilities, obeying all their lawful instructions and regulations, and by conducting professional business through the proper channels;
- (3) do his best to maintain friendly co-operation with parents of the pupils in his area, do everything possible to uphold the pupil's confidence in his own home, and keep the parents adequately informed about the progress of their children while they are pupils in his care;
- (4) accept his duties and responsibilities as a member of a profession that should give a lead to the community in respect of attitudes to study and the advancement of education, and also in respect of the acceptance of personal involvement in communal and civic affairs;
- (5) strive at all times to foster tolerance and mutual appreciation between all groups of human beings irrespective of social status, profession, language, religion, race or nationality;
- (6) contribute his due share to the dignity and public image of the teaching profession both by his personal conduct and by fair dealings with all other members of the profession;
- (7) continue to increase his knowledge and skill by further studies and research, wide reading, discussion and attending conferences and by being a member of a professional organization (cf. Bengu, 1972; Thembela, 1975).

Needless to say, adoption of a document per se signifies nothing in this regard unless the group concerned applies the principles and ideals contained in it in their day to day activities until these have become part and parcel of their fabric of life.

Finally, it is gratifying to note that the KwaZulu Government is fully conscious of the serious shortcomings in the teaching sector and that attempts are being made to remedy the situation (Buthelezi, 1975). For this reason they deserve the support and advice of teachers, educationists and educational researchers.

## 8. SUMMARY OF RECOMMENDATIONS

By way of summation the foregoing recommendations are presented below in a synoptic form.

### 8.1. Educational philosophy and objectives

KwaZulu education must have a sound philosophical basis, clearly articulated objectives and the right climate to introduce "a properly organized differentiated education" as advocated by the Education Manifesto of KwaZulu.

### 8.2. Educational planning

- (a) There must be a radical change in educational planning whereby the programmes of education are pedagogically related to national problems.
- (b) The three sections of planning, viz. academic projects, physical amenities and psychological services, must be developed, co-ordinated and directed by a chief education planner and a team of experts with a view to meeting the needs and demands of a differentiated system of education.

### 8.3. A commission of inquiry

A commission of inquiry must be appointed to investigate the whole structure of education in KwaZulu and then report upon what should be authentically called KwaZulu education for which the community will be proud and regard as their own.

### 8.4. Selection for secondary education

- (a) KwaZulu children must commence their schooling at the age of 6 as there is no pedagogical justification for a later start.
- (b) Besides examination performance other criteria like results of psychological tests and teachers' opinions must also be taken into consideration, and provision must be made to accommodate the less gifted pupils in the secondary schools.

#### 8.5. Transitional period

During the junior secondary school period pupils must have a general curriculum, and use must be made of psychological tests, traditional examinations and teachers' observations for purposes of educational guidance and the compiling of an ability-aptitude-interest profile for each pupil.

#### 8.6. Differentiation

- (a) The planning section of the KwaZulu Department of Education must conduct a well organized talent survey to ascertain the present status of pupil talent in KwaZulu.
- (b) Provision must be made for the different ability levels among pupils in the teaching-learning situation.

#### 8.7. Size and organization of secondary schools

Existing schools must be re-organized along comprehensive lines and new ones must be built with this view in mind.

#### 8.8. School guidance

- (a) Serving and prospective teachers must receive proper training in guidance.
- (b) Cultural guidance in the form of a youth preparedness programme or cultural studies must be introduced into the schools with a view to fostering civic responsibility and cultural assertiveness in accordance with the principles and ideals of Inkatha.

#### 8.9. Teachers

- (a) Teacher training facilities must be expanded and incentives provided in order to attract prospective teachers and to retain the services of practising teachers.
- (b) The teachers must adopt and adhere to a code of ethics in order to improve their public image and enhance their status.

## 9. THE NEED FOR MORE RESEARCH

The present study has its limitations. The chief shortcoming is that it seeks to grapple with a gigantic problem by adopting a global approach to it instead of a piecemeal one. Such an approach is bound to be general and peripheral. Perhaps merit in this particular investigation lies in the fact that the global peripheral survey has, while scratching the surface of the iceberg, unravelled a number of problem areas which need immediate attention. In the ensuing paragraphs some of these problem areas are isolated or pinpointed and possible lines of research suggested.

### 9.1. Aim of education

In view of the fact that a child's life is naturally an unrelenting progress towards adulthood the aim of education with reference to an individual is the particular image of adulthood towards which his educational experiences are taking him, the specific ideal personality at which his life and education are directed. This image of adulthood as the desired end for a child (pupil) is defined in terms of his society's culture and the philosophy of life that underlies the educational thought.

Research Proposal 1: Research in depth into the aim of education for the KwaZulu community should be undertaken as soon as possible.

### 9.2. Guidance

In a properly organized system of differentiated education guidance plays a crucial role. It should be an integrated service in the teaching-learning situation and should function at all schools at primary as well as secondary level. It is a service which is rendered by specialized persons whose activities should be directed towards informing all young persons on their person-structures as well as on educational and vocational opportunities. The training of such specialists in KwaZulu is imperative.

Research Proposal 2: A thorough survey of educational and vocational needs and opportunities for school leavers and matriculants should be made with a view to drawing up a programme of

counsellor training to meet individual, social and national goals.

### 9.3. Educational planning

The purpose of educational planning in the context of a differentiated system of education is to help every individual pupil to develop each of his abilities to the optimum as far as possible. This implies the need to offer curricular activities which are likely to reveal and enhance those abilities.

Research Proposal 3: An extensive research should be undertaken into psychic needs of the Black adolescent with a view to determining whether the present curricular offerings are in accordance with those needs and to suggest adaptations in this regard where desirable.

### 9.4. Textbooks

Textbooks play an important role in the teaching-learning situation. Subject-matter contained in the textbooks should be presented in such a way that all ability levels are catered for. Pupils should be liberated from the unhealthy situation whereby they are dependent on the teacher's word and notes for their learning. Learning is effective to the extent that the learner is enabled to proceed with his studies independently of the instructor. The overwhelming majority of the principals contacted in the present investigation revealed in their responses that the prescribed textbooks were not graded according to ability levels. This problem is compounded by the fact that all textbooks, except those relating to Zulu as a subject, are written by non-Blacks who obviously lack the inimitable African experience derived from his existential situatedness.

Research Proposal 4: An intensive research should be conducted into the requirements of the various secondary school syllabuses with a view to compiling graded textbooks which will take into consideration the pupils' abilities and be relevant to their situatedness.

## 10. EPILOGUE: THE WAY AHEAD

The core or central idea in this chapter, in fact, in the

whole thesis, is the notion of bringing out an individual's best potentials. The emphasis is on potentialities as a directive for school education. The goal to be reached by means of the development of a person's optimum potentials is the individual's self-realization and experience of fulfilment of life. The educator's endeavour should relate the educational goals to the pupil's own strivings. That is, teaching and curricular offerings must be geared towards enabling the pupil to actualize his potentialities. Differentiated education seems to be the answer to this desideratum. Innovation in education at this point in time in the context of KwaZulu is necessary for the good of both pupils and society.

Consideration of self-realization and individuality does not, in fact, should not imply neglect of sociality. Educational endeavour has two roots, namely, the individual and the social (national), and both roots must be equally nourished, otherwise a stunted and truncated personality will be the end product of the endeavour. Manhood and manpower are two sides of the same coin. Through education man is enabled to take his rightful place in society. This implies playing his expected vocational role in it. In this way the individual attains fulfilment in life. In the final analysis, all educational aims are governed by norms derived from values inherent in the life of people organized in culture.

Almost everything that is and everything that should be has been mentioned in this work. It now remains the task of every member of the community, old and young, schooled and un-schooled, authorities and subordinates, professionals and non-professionals, individually and collectively, to help towards the achievement of everything recommended above. An educational researcher's effort is successful to the extent that it is able to "switch on" a significant section of the community into some positive action. Conventional battles are lost and won in terms of the performance of those fighting in the front line. In the educational battle for innovation and nation-building, especially in a developing "nation" like KwaZulu, inevitably the teachers occupy the front line, so that, in the words of Fischer (1962): 210), "more than

any other group, the professional educators are in a position to hasten both the approach to excellence in education itself and the better use of education to reach all our other major goals".

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11. REFERENCES

1. Bengu, S.M.E. (1972) : N.A.T.U. News Sheet, May, 1972.
2. Bengu, S.M.E. (1975) : The Role of Teachers' Organisations in the Process of National Development, Address given at the 57th Annual Conference of the Natal African Teachers' Union held at Edendale Lay Ecumenical Centre, Pietermaritzburg, 28 - 30 June, 1975.
3. Buthelezi, M.G. (1975): Opening Address to the 57th Annual Conference of the Natal African Teachers' Union at Edendale Lay Ecumenical Centre, Pietermaritzburg, 28 - 30 June, 1975.
4. Cilliers, J.L. (1975) : Education and the Child, Durban: Butterworths.
5. Dept. of Bantu Education (1972) : "New Structure for Bantu Education" in Bantu Education Journal, December, 1972.
6. Fischer, J. (1962) : "The Role of Education in National Goals" in Hanna, P.R. (editor): Education: An Instrument of National Goals, New York: McGraw-Hill Book Co.
7. KwaZulu Legislative Assembly (1975) : The Constitution of The National Cultural Liberation Movement or Inkatha, Nongoma.
8. Malie, E. (1973) : The Relationship between Teaching and Objectives of Education in the Secondary/High Schools in Lesotho, unpublished D.Ed. thesis, University of South Africa.
9. Ndaba, E.P. (1975) : "Educational Planning: A Pedagogic-Didactic Appraisal" in Paidonomia, Vol. 3, No. 1.
10. Ndaba, E.P. (1975) : "The Value of Psychological Tests for the Teacher" in Bantu Education Journal, May, 1975.
11. Thembela, A.J. (1975) : "Our Teachers' Organisation", paper read at a special N.A.T.U. convention held at the Edendale Lay Ecumenical Centre, Pietermaritzburg, 18th October, 1975.

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## **BIBLIOGRAPHY**

BIBLIOGRAPHY

- Ahmann, J.S. & Glock, M.P. (1959) : Evaluating Pupil Growth, Boston: Allyn & Bacon, Inc.
- American Council on Education (1959) : College Testing.
- Anastasi, A. (1958) : Differential Psychology, New York : Macmillan Co.
- Anastasi, A. (1968) : Psychological Testing, London: Macmillan Co.
- Anderson, C.A. & Bowman, M.J. (1967) : "Theoretical Considerations in Educational Planning" in The World Year Book of Education, London : Evans Brothers.
- Anderton, N.G. (August, 1972) : "The Comprehensive School (Hodge (Hill))" in Schools Council: Feature Article Service: Education/63, London.
- Arbuckle, D.S. (1966) : Counselling: Philosophy, Theory and Practice, Boston: Allyn & Bacon, Inc.
- Badenhorst, H.J. (1972) : Die Leerwêreld van die Bantoe-kind as Belewenswêreld : 'n Psigopedagogiese Perspektief, unpublished M. Ed. thesis, University of Pretoria.
- Bain, A. (1855) : The Senses and the Intellect, London : Parker.
- Bantu Education Journal : Vol. VIII, No. 8 : October, 1972.  
Vol. VIII, No. 10 : December, 1972.  
Vol. XXI, No. 2 : March, 1975  
Vol. XXI, No. 4 : May, 1975.  
Vol. XXI, No. 8 : October, 1975.
- Behr, A.L. (1971) : A Textbook of Educational Method, Pretoria: Van Schaik Ltd.
- Behr, A.L. & Macmillan, R.G. (1971) : Education in South Africa, Pretoria: Van Schaik Ltd.
- Behr, A.L. (1973) : New Horizons in Special Education, Pretoria: Van Schaik.
- Behr, A.L. (1974) : "Guidance and Counselling in the Primary School" in Guidance and Counselling, Publication Series No. 8 of S.A.A.A.E.

- Behr, A.L. (1974) : "Some aspects of remedial education with special reference to the slow learning child," paper read to the second annual conference of the S.A. Pedagogical Society, 26/27 June, 1974, University of Zululand.
- Bengu, S.M.E. (1972) : N.A.T.U. News Sheet, May, 1972.
- Bengu, S.M.E. (1975) : The Role of Teachers' Organisations in the Process of National Development, Address given at the 57th Annual Conference of the Natal African Teachers' Union held at Edendale Lay Ecumenical Centre, Pietermaritzburg, 28 - 30 June, 1975.
- Bengu, S.M.E. (September, 1975) : "The National Cultural Liberation Movement" in Reality, Vol. 7, No. 4.
- Bereday, G.Z.F., Lauwerys, J.A. & Blaug, M. (editors) (1967) : "Educational Planning" in The World Year Book of Education, London : Evans Brothers Ltd.
- Bernard, H.W. (1965) : Psychology of Learning and Teaching, New York : McGraw-Hill Co.
- Berry, J.W. (1969) : "On Cross-Cultural Comparability" in International Journal of Psychology, Vol. 4, No. 2.
- Best, A.C.G. & Young, B.S. (September, 1972) : "Homeland Consolidation: The Case of KwaZulu" in S.A. Geographer, Vol. IV, No. 1.
- Bigge, M.L. & Hunt, M.P. (1968) : Psychological Foundations of Education, New York : Harper & Row.
- Boyer, P.A. (1936) : "The administration of learning groups in elementary schools" in N.S.S.E.: Thirty-fifth Yearbook of Education.
- Bozzoli, G.R. (1972) : "The real cost of education", presidential address delivered to the S.A. Association for the Advancement of Science conference held in Johannesburg on July 4, 1972
- British Information Services (December, 1971) : Survey of Current Affairs, Vol 1, No. 12, London.
- Brogden, H.E. (June, 1954) : "A Rationale for minimizing questionnaire keys" in Psychometrica, Vol. 19, No. 2

- Brown, B.F. (1972) : New Directions for the Comprehensive High School, New York: Parker Publishing Co.
- Brubacher, J.S. (1965) : Eclectic Philosophy of Education : A Book of Readings, Englewood Cliffs : Prentice-Hall.
- Burgess, T. (1972) : A Guide to English Schools, Harmondsworth: Penguin Books Ltd.
- Burt, C. (November, 1943) : "The Education of the Young Adolescent: The Psychological Implications of the Norwood Report" in The British Journal of Educational Psychology, Vol. XIII, Part 3.
- Buthelezi, M. (1974) : "The Relevance of Black Theology" in South African Outlook, Vol. 104, No. 1243.
- Buthelezi, M.G. (1971) : Shaka's Day Address, Dlangenzwa High School, 25th September, 1971.
- Buthelezi, M.G. (1975) : Opening Address to the 57th Annual Conference of the Natal African Teachers' Union held at the Edendale Lay Ecumenical Centre, Pietermaritzburg, from the 27th to the 30th June, 1975.
- Buthelezi, M.G. (1975) : "Business Times Interview" in Sunday Times, 21st September, 1975.
- Butler, F.A. (1961) : The Improvement of Teaching in Secondary Schools, University of Chicago Press.
- Butler, J.D. (1968) : Four Philosophies and their Practice in Education and Religion, New York : Harper & Row.
- Callahan, R.E. (1962) : Education and the Cult of Efficiency, University of Chicago Press.
- Cattell, R.B. (1963) : "Theory of fluid and crystallized intelligence: a critical experiment" in Journal of Educational Psychology, Vol. 54.
- Cattell, R.B. (1967) : "The theory of fluid and crystallized intelligence checked at the 5-6 year-old level" in British Journal of Educational Psychology, Vol. 37.

- Child, D. (1973) : Psychology and the Teacher, London: Holt, Rinehart & Winston.
- Cilliers, J.L. (1975) : Education and the Child, Durban: Butterworths.
- Conway, E.S. (1970) : Going Comprehensive: a Study of the Administration of Comprehensive Schools, London: Harrap & Co. Ltd.
- Corbett, A. (1971) : Innovation in Education: England, Paris: Organisation for Economic Co-operation and Development.
- Cornell, E.L. (1936) : "Effects of ability grouping determinable from published studies" in N.S.S.E.: Thirty-fifth Yearbook of Education.
- Cupido, A.J.J. (1969) : The Implementation of a System of Differentiated Education in High Schools for Coloured Children, unpublished M.Ed. thesis, University of S.A.
- Curtis, S.J. & Boulwood, M.E.A. (1966) : A Short History of Educational Ideas, London : University Tutorial Press Ltd.
- Daily News (31.3.75) : "The Government's final KwaZulu plan".
- Davies, J.E. (1958) : Recent Trends Concerning Examinations, Promotion and Differentiation in Secondary Education in European Countries, Canada and the U.S.A., and the Significance of these trends for Secondary Education in the Transvaal, doctoral thesis, University of Pretoria.
- De Clercq, J.L.W. (1973) : KwaZulu en Konsolidasie, University of Zululand Press.
- Dept. of Bantu Education (No date) : Guide for Principals of Schools, Pretoria: Government Printer.
- Dept. of Education and Science (1972) : The Educational System of England and Wales, London.
- Dewey, J. (1959) : Democracy and Education, New York: Macmillan Co.
- Dhlomo, O.D. (1975) : "A Historian's Glimpse into our Education : Past, Present and Future," paper read at a special N.A.T.U. convention held at the Edendale Lay Ecumenical Centre, Pietermaritzburg, 18th October, 1975.

- Dobie, B.A. (1969) : An Analysis of the Role of Examinations in a Differentiated System of Education, with particular Reference to Natal, M. Ed. thesis, University of Natal.
- Dreyer, H.J. (1965) : Psigologiese-pedaqogiese Beskouinge oor die Teorie en Praktijk van Meetskundeonderrig, unpublished doctoral thesis, University of S.A.
- Dreyer, H.J. (1969) : Intellektuele ontwikkeling en die implikasie daarvan vir Bantoe-onderwys, Inaugural Address, Series 1, No. 13, University of Zululand.
- Dreyer, H.J. (1973) : 'n Onderzoek na die vorming van getalkonsepte by die kind: 'n tussen-kulturele studie, unpublished doctoral thesis, University of S.A.
- Duggan, S. (1948) : A Student's Textbook in the History of Education, New York: Appleton-Century-Crofts, Inc.
- Duminy, P.A. (1966) : The Educability of the South African Bantu, Fort Hare University Press.
- Duminy, P.A. (1968) : African Pupils and Teaching Them, Pretoria : Van Schaik.
- Duminy, P.A. (1969) : General Teaching Method, Cape Town: Longmans.
- Duminy, P.A. (1972) : "The Educational Principle of Individualisation" in Bantu Education Journal, May, 1972.
- Dunn, R. & Dunn, K. (1972) : Practical Approaches to Individualizing Instruction : Contracts and other Effective Teaching Strategies, New York: Parker Publishing Co.
- Durkheim, E. (1956) : Education and Sociology, Glencoe: Free Press.
- Ellis, R.S. (1936) : The Psychology of Individual Differences, New York: Appleton-Century Co., Inc.
- Encyclopaedia Britannica (1974) Vol. 15.

Encyclopaedia of the Social Sciences (1950), Vol. 11.

- Engelbrecht, F. (1936) : "Pupil classification as affected by organization and by administrative practice" in N.S.S.E.: Thirty-fifth Year-book of Education.
- English, H.B. & English A.S. (1967) : A Comprehensive Dictionary of Psychological and Psychoanalytic Terms, Ohio: Longmans.
- Erasmus, O.C. (1973) : "The Progression of Education in Educational Situations and during the Course of Education" in Monograph 1973 - 6, S.A.A.A.E.
- Erasmus, P.F. (1973) : Die Bydrae van die Wetenskap tot die Ontwikkeling van Onderontwikkelde Gebiede, H.S.R.C. Report No. 4, Pretoria.
- Fischer, J. (1962) : "The Role of Education in National Goals" in Hanna, P.R. (editor): Education: An Instrument of National Goals, New York: McGraw-Hill Book Co.
- Freeman, F.S. (1934) : Individual Differences, London : G.G. Harrap & Co.
- Frandsen, A.N. (1961) : Educational Psychology, New York: McGraw-Hill Book Co.
- Froehlich, C.P. (1958) : Guidance Services in Schools, New York: Harper & Row.
- Glanz, E.C. (1967) : Foundations and Principles of Guidance, Boston: Allyn & Bacon, Inc.
- Good, C.V. (1959) : Dictionary of Education, New York: McGraw-Hill Book Co.
- Gordon, L.V. (1951) : "Validities of the Forced-Choice and Questionnaire Methods of Personality Measurement" in Journal of Applied Psychology, Vol. 335, No. 6.
- Griffiths, A. (1971) : Secondary School Reorganization in England and Wales, London: Routledge & K. Paul.
- Gross, R.E. (ed.) (1965) : British Secondary Education, London: Oxford University Press.

- Guilford, J.P. (1968) : "The Structure of Intelligence" in Whitla, D.K. (ed.): Handbook of Measurement and Assessment in the Behavioural Sciences, Reading, Mass. : Addison-Wesley.
- Gunter, C.F.G. (1970) : n Christelik Georienteerde Opvoedingsfilosofie, Stellenbosch/Grahamstown : Universiteitsuitgewers en Boekhandelaars.
- Gunter, C.F.G. (1974) : Aspects of Educational Theory, Stellenbosch : University Publishers & Booksellers.
- Havinghurst, R.J. & Moorefield, J.E. (1967) : "The Disadvantaged in Industrial Cities" in Witty, P.A. (ed.): The Educationally Retarded and Disadvantaged, University of Chicago Press.
- Hayward, F. (1972) : "The role of the curriculum in differentiation" in Differentiation, Publication Series No. 6 of S.A.A.A.E.
- Hayward, F. (1973) : "The Nature of Educational Theory" in Journal of Education, Vol. 5, No. 1.
- Hebb, A.W. (1970) : The Organization of Behaviour, New York: Wiley.
- Heim, A.W. (1970) : The Appraisal of Intelligence, Slough: N.F.E.R.
- Hodgkin, R.A. (1965) : Education and Change, London: University of London Press Ltd.
- Human Sciences Research Council (1972) : Report of the Committee for Differentiated Education and Guidance in connection with a National System of Education at Primary and Secondary School Level with Reference to School Guidance as an Integrated Service of the System of Education for the Republic of South Africa and South-West Africa - Part I, Reprint, Report No. 0 - 1, Pretoria.

- Human Sciences Research Council (July, 1972) : "Differentiated Education and School Guidance: Summary of Certain Aspects of Part 1 of the Report of the Committee for Differentiated Education and Guidance in connection with Differentiated Education at Primary and Secondary School Level with School Guidance as an Integrated Service" in Newsletter, Nos 35/36, Pretoria.
- Human Sciences Research Council (1975) : Catalogue of Tests, Pretoria.
- Hutchins, R.M. (1970) : The Learning Society, Harmondsworth : Penguin Books Ltd.
- Ilanga (23.7.75) : "Isinqumo seNkatha ngenkululeko: ngeke icelwe."
- Jackson, B. (1966) : Streaming: an Education System in Miniature, London: Routledge & K. Paul.
- Jeffreys, M.V.C. (1971) : Education : Its Nature and Purpose, London : Allen & Unwin Ltd.
- Jones, A.J. (1963) : Principles of Guidance, New York: McGraw-Hill Book Co,
- Jowitt, H. (1932) : The Principles of Education for African Teachers in Training, London: Longmans, Green & Co. Ltd.
- Kandel, I.L. (1951) : The New Era in Education, London, Harrap & Co. Ltd.
- Kazamias, A.M. & Massialas, B.G. (1965) : Tradition and Change in Education, Englewood Cliffs, N.J. : Prentice-Hall, Inc.
- Keen, E. (1970) : Three Faces of Being : Toward an Existential Clinical Psychology, New York : Appleton - Century - Crofts.
- Kelly, W.A. (1965) : Educational Psychology, Milwaukee : Bruce Publishing Co.
- Kiell, N. (1964) : The Universal Experience of Adolescence, London : University of London Press Ltd.
- Kirk, S.A. (1962) : Educating Exceptional Children, Boston: H. Mifflin Co.

- KwaZulu Government (1973) : Education Manifesto of KwaZulu, Dept. of Education and Culture, Ulundi.
- KwaZulu Legislative Assembly (1975) : The Constitution of The National Cultural Liberation Movement or Inkatha, Nongoma.
- Lambley, P. (1971) : A Theory of Existential Psychology, unpublished doctoral thesis, University of Cape Town.
- Lindgren, H.C. (1967) : Educational Psychology in the Classroom, New York: Wiley & Sons, Inc.
- Loots, F.J. (1959) : The Junior Secondary Course of the Cape Province and the Dull-normal Child, unpublished doctoral thesis, Rhodes University.
- Lovell, K. (1971) : Educational Psychology and Children, London: University of London Press Ltd.
- Lovell, K. & Lawson. K.S. (1970) : Understanding Research in Education, London: University of London Press Ltd.
- Lynch, J.R. (1952) : Differentiated education in the Transvaal Secondary school 1900 - 1950: a critical analysis of the attempts made to provide differentiated secondary education in the Transvaal during the period under review, with a suggested solution of the problem, unpublished doctoral thesis, Potchefstroom University.
- Mackay, D.D. (1972) : "Teaching English as the Mother Tongue" in Howson, G. (ed.): Children at School: Primary Education in Britain Today, London: Heinemann.
- Malie, E. (1973) : The Relationship between Teaching and Objectives of Education in the Secondary/High Schools in Lesotho, unpublished doctoral thesis, University of South Africa.

- Mans, P.W. (1970) : A comparative and critical study of developments in differentiation and examinations in European secondary education in Natal and Rhodesia with special reference to existing practice in selected groups of schools in Pietermaritzburg and Bulawayo, unpublished M.Ed. dissertation, University of Natal.
- Mathewson, K.H. (1962) : Guidance Policy and Practice, New York: Harper & Row.
- Mouly, G.J. (1963) : The Science of Educational Research, New York: American Book Co.
- Mursell, J.L. (1954) : Successful Teaching, New York: McGraw-Hill Book Co.
- Myers, R.A. & Jordaan, J.P. (1970) : "Individual Differences and the World of Work" in Davitz, J.R. & Ball, S. (editors) : Psychology of the Educational Process, New York : McGraw-Hill Co.
- Natal Education Dept. : Annual Reports of the Director of Education for the years 1958, 1962 and 1963, Pietermaritzburg.
- Natal Education Dept. (1960) : Differentiation in Secondary Classes: Report of the 1960 Committee, Pietermaritzburg.
- Natal Education Dept. (1963) : Report of the Committee of Enquiry on Education in Natal, Pietermaritzburg.
- Natal Education Dept. (1965) : Circular Minutes No. 195/1965 of 18.8.65 and 215/1965 of 8.9.65.
- Natal Education Dept. (1972) : Levinsohn, S. : "The New System of Education and its Implication" in Bulletin 5, Pietermaritzburg.
- Natal Mercury (9.5.75) : "African Education", Editorial.
- Natal Provincial Administration (1973) : "Education" in Witness Supplement of 14.5.73, Pietermaritzburg.
- Ndaba, E.P. (1975) : The desirability of articulating a sound philosophical basis of education in KwaZulu, a paper read at a symposium on "The Educational Priorities of KwaZulu" held at the University of Zululand on the 5th April, 1975.

- Ndaba, E.P. (1975) : "Educational Planning: A Pedagogic-Didactic Appraisal" in Paidonomia, Vol. 3, No. 1.
- Ndaba, E.P. (1975) : "The Value of Psychological Tests for the Teacher" in Bantu Education Journal, May, 1975.
- Ndlovu, J.E. (1974) : The Education of Teachers, a presidential address delivered at the Natal Inspectors' Association annual meeting held on the 7th January, 1974, in Pietermaritzburg.
- Nel, B.F. et al. (1965) : Grondslae van die Psigologie, Universiteitsuitgewers, Stellenbosch.
- Nel, B.F. (1974) : Fundamental Orientation in Psychological Pedagogics, Stellenbosch/Grahamstown: University Publishers & Booksellers (Pty) Ltd.
- Nel, C.F.B. (1970) : Some Aspects of Adulthood as seen in Philosophical-Pedagogical Perspective with Reference to the Zulu's New Image of Man, Inaugural Address, Publications of the University of Zululand, Series I, No. 14.
- Nel, C.F.B. (1975) : Some thoughts on education and teaching at the tertiary level and an introduction to ephebogics, a paper read to a symposium of the lecturing staff of the University of Zululand held on the 13th February, 1975.
- Nunn, T.P. : Education: Its Data and First Principles, London: E. Arnold Ltd.
- Nisbet, J.D. & Entwistle, N.J.: (1970) Educational Research Methods, London: University of London Press Ltd.
- Nxumalo, J.A.W. (1973) : Address at the Official Opening of the Menzi High School, 13th October, 1973.
- O'Connor, D.J. (1958) : An Introduction to the Philosophy of Education, London: Routledge & K. Paul.

- Ottaway, A.K.C. (1957) : Education and Society, London: Routledge.
- Peel, E.A. (1958) : The Psychological Basis of Education: Edinburgh: Oliver & Boyd.
- Perquin, N. (1964) : Pedagogiek, Roermond-Maaseik: Romen & Zonen.
- Prozesky, M.N. (1967) : The Comprehensive high school concept with particular reference to a selected group of private and government-aided boys' schools in Natal, and suggestions for its developing implementation, M.Ed. dissertation, University of Natal.
- Redden, J.D. & Ryan, F.A. (1956) : A Catholic Philosophy of Education, Milwaukee: Bruce Publishing Co.
- Reisner, E.H. (1936) : "Social Change and its effects on school organization in the United States" in N.S.S.E.: Thirty-fifth Yearbook of Education.
- Richmond, W.K. (1966) : Educational Planning: Old and New Perspectives, London: Michael Joseph.
- Ross, J.S. (1966) : Groundwork of Educational Theory, London: Harrap & Co.
- Shiels, F.H. (1963) : A Critical Analysis of Methods of Selecting and Streaming Secondary School Pupils and Some Suggestions towards solving the Problem in Natal Schools, doctoral thesis, University of Natal.
- Solomon, A. (1967) : A Comparative Study of the Systems of Technical Education and Training of Craft Apprentices, Technicians and Engineers for the Electrical Engineering Industries in Certain European Countries, the United Kingdom and the Republic of South Africa, doctoral thesis, University of S.A.
- Sonnekus, M.C.H. (1974) : The Learning Child, Johannesburg: McGraw-Hill Book Co.
- Stenhouse, L. (1967) : Culture and Education, London: T. Nelson & Sons Ltd.

- Steyl, I. (1966) : Differensiasie en die Hoër Handelskool in Suid-Afrika, met spesiale verwysing na Beroepsge-differensieerde Kursusse, unpublished doctoral thesis, University of Natal.
- Stratemeyer, F.G. et al (1957) : Developing a Curriculum for Modern Living, New York: Teachers' College, Columbia University.
- Strauss, H.J. (1969) : Christelike Wetenskap en Christelike Onderwys, Bloemfontein: SACUM Bpk.
- Swift, D.F. (1969) : The Sociology of Education, London: Routledge.
- Taljaard, J.A.L. (1974) : "Fenomenologiese Pedagogiek" in Fokus, Vol. 2, No. 4.
- Tempels, P. (1969) : Bantu Philosophy, Paris: Présence Africaine.
- Thembela, A.J. (1972) : An investigation of some of the factors which influence the quality of teaching in African schools, paper read to the University of Zululand African Staff Association on October 11, 1972.
- Thembela, A.J. (1973) : African Education at the Dawn of of a New Era, Address to the 55th Annual Conference of the N.A.T.U.
- Thembela, A.J. (1975) : Our Teachers' Organisation, paper read at a special N.A.T.U. convention held at the Edendale Lay Ecumenical Centre, Pietermaritzburg, 18th October, 1975.
- Thomas, R.M. & Thomas, S.M. (1965) : Individual Differences in the Classroom, New York: David McKay Co., Inc.
- Transkei Government : Report on Standard of Education in the Transkei. Chairman: G.L. Kakana. Umtata: Dept. of Education.
- Transvaal Education Dept. (1939) : Provincial Education Commission: The Nicol Report, Pretoria: Government Printer.

- Transvaal Education Dept. (1955) : Report of Oversea Mission in connection with Differentiated Secondary Education. Chairman: Dr. A.H. du P. van Wyk. Pretoria: Government Printer.
- Transvaal Education Dept. (1973) : Education Bulletin, Vol. XVII, No. 1.
- Transvaal Education Dept. (1974) : Education Bulletin, Vol. XVIII, No. 1.
- Travers, R.M.W. (1964) : An Introduction to Educational Research, New York: Macmillan.
- Traxler, A.E. & North, R.D. (1966) : Techniques of Guidance, New York: Harper & Row.
- Turney, A.H. (1936) : "The Psychological basis of grouping" in N.S.S.E.: Thirty-fifth Yearbook of Education.
- Tyler, L.E. (1965) : The Psychology of Human Differences, New York: Appleton - Century - Crofts.
- U.N.E.S.C.O. (1962) : "World trends in secondary education", report reprinted from World Survey of Education - Secondary Education, Zurich: U.N.E.S.C.O.
- UNESCO (1963) : Elements of Educational Planning, Paris.
- UNESCO (1965) : Problems and Strategies of Educational Planning, Brussels.
- Union of South Africa : Report of the Commission on Technical and Vocational Education, Chairman: Dr. F.J. de Villiers. Pretoria: Government Printer.
- Van der Merwe, B. de V. (1970): The Crisis of Authority Inaugural Address, Fort Hare University Press.
- Van der Stoep, F. & Van der Stoep, O.A. (1973) : Didactic Orientation, Johannesburg: McGraw-Hill Book Co.
- Van Zyl, P. (1973) : Opvoedkunde, Johannesburg: Boekhandel De Jong (Edms.) Bpk.
- Vernon, P.E. (1960) : Intelligence and Attainment Tests, London: University of London Press.

- Vernon, P.E. (1969) : Intelligence and Cultural Environment: London: Methuen.
- Viljoen, J.A. & Pienaar, J.J. (1971) : Fundamental Pedagogics, Durban: Butterworths.
- Warters, J. (1964) : Techniques of Counseling, New York: McGraw-Hill Co.
- Wheeler, O.A. (November, 1939) : "Modern Psychology and the Spens Report" in The British Journal of Educational Psychology, Vol. IX, Part I.
- White, D.R. (1971) : The Extent to which the Education offered to the lower half of Form III children in Rhodesia is adapted to their abilities, needs and interests, doctoral thesis, University of S.A.
- Yates, A. (ed.) (1966) : Grouping in Education, London: Wiley & Sons.
- Yates, A. (1971) : The Organization of Schooling: A Study of Educational Grouping Practices, London: Routledge & K. Paul.
- Zulu, A.H. (1972) : "The Dilemma of the Black South African", T.B. Davie Memorial Lecture, University of Cape Town.

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APPENDIX A

C O N F I D E N T I A L

QUESTIONNAIRE FOR PRINCIPALS

Please note that:

1. The information supplied will be kept strictly confidential.
2. You are not required to write your name anywhere on this questionnaire. The identity of schools is irrelevant.
3. This is a fact-finding investigation designed to assess present conditions in our secondary/high schools with a view to making suggestions for their improvement, where necessary, in the interest of effective educational differentiation. Knowing our strengths and weaknesses is a prerequisite for any contemplated reform or innovation.

DIRECTIONS FOR ANSWERING

1. In most cases, for each question possible answers are supplied, and you are only required to select one which is most appropriate, and make a cross in the small square like this .
2. If you don't find an appropriate answer, write down your answer in the blank space between that question and the next one.
3. Statistical information should be filled in as required.

The completed questionnaire should be returned as soon as possible, but not later than 10th April, 1975, to:

Educational Researcher,  
P.O. Box 50,  
KWA-DLANGEZWA.  
3886

A. GENERAL INFORMATION

1. What type of school is yours?

- a.  Junior Secondary       Senior Secondary since the year...
- b.  Boarding School       Day       Predominantly either
- c.  Boys' School       Girls' School       Mixed School
- d.  Rural School       Urban School
- e.  Territorial School       Community School

2. How old is your school?

It is .....years old.

3. What is the pupil enrolment?

Day scholars: ...../Boarders:.....  
Boys: ...../Girls: .....  
Total enrolment:.....

4. What other paid senior positions are available in your school?

- Deputy Principal       Vice-Principal       Senior Assistance:  
number.....

5. What is the strength of your clerical staff?

Mention number: .....

6. What is the position regarding maintenance staff (i.e. labourers), excluding kitchen staff in the case of boarding schools?

Mention number:.....

7. The Principal: which one typically describes your position in the school?

- Runs the school, has only administrative work to do.
- Apart from supervisory and administrative duties, teaches ..... periods per week.

8. What is the teaching staff position like?

- a. Sex: Men: ...../Women: ..... Total: .....
- b. Qualifications: Graduates: ..... Non-graduates: .....
- c. Subject offerings and specialization:

<u>Subjects</u>	<u>Specialists</u>
Domestic Science : yes/no:.....	yes/no:.....
English	.....
Afrikaans	.....
Geography	.....
History	.....
Agriculture	.....
Commercial Subjects	.....
Mathematics	.....
Science Subjects	.....
Arithmetic	.....

9. What are the classroom facilities like?

- a. Classroom accommodation:  satisfactory  inadequate  
 serious
- b. Laboratories:  one  two  three  none  
 not applicable
- c. Lab. facilities:  good  inadequate  poor  none  
 not applicable
- d. Domestic science facilities:  good  inadeq.  poor  
 none  not applicable
- e. Woodwork facilities:  good  inadequate  poor  
 none  not applicable
- f. Library facilities:  good  inadequate  poor  
 none.

10. What sporting activities are available in your school?

- at least one activity for boys and one for girls.
- activities for boys only.
- more than one activity for both boys and girls.

B. THE TEACHING-LEARNING SITUATION

- 1. Educational differentiation is designed to meet individual differences in ability, aptitudes and interest among pupils.

There are two main methods employed to meet these differences, namely, external and internal differentiation. The former signifies the type of school used in this connection and the latter involves the internal organisation employed to achieve effective differentiation. Thus we may have one school designed to offer a variety of courses (academic, commercial, agricultural, domestic science, technical, etc.) for all pupils in a given area, and this type of school is called the comprehensive school. On the other hand, a school may offer two "streams" under one roof (e.g. academic and commercial, academic and domestic science, etc.) and such a school is referred to as a bilateral school, or it may offer three or more streams and be referred to as a multilateral school. Furthermore, a school may offer only one stream e.g. vocational, agricultural, technical, domestic science, or "ordinary" school (which offers the usual academic curriculum - science, mathematics/arithmetic, languages, content subjects).

In the light of the above explanation, how would you describe your school?

- a.  Ordinary school
- b.  Bilateral school
- c.  Multilateral school
- d.  Comprehensive school
- e.  Agricultural     Domestic science     Commercial  
 Technical     Vocational

2. Principals are usually faced with big numbers of applicants who require admission to Form I or Form IV classes.

a. How do you select pupils for the Form I group?

- Selection is based on  (i) standard VI results  
 (ii) primary school reports  
 (iii) psychological tests (std. VI)  
 (iv) combination of (i) and (ii)  
 (v) Combination of (i), (ii) and (iii)

b. How do you select pupils for the Form IV group?

- Selection is based on  (i) Junior Certificate results
- (ii) junior secondary school reports
- (iii) psychological tests (Form III)
- (iv) combination of (i) and (ii)
- (v) combination of (i), (ii) and (iii)

3. Having been selected, pupils are then grouped into parallel classes, especially in the case of big enrolments, namely, Form Ia, Ib, Ic, etc.; Form IVa, IVb, IVc, etc. Such grouping or classification is based on certain criteria. How is this done in your school?

- It is done according to  alphabetical order of names
- sex of pupils
- ability and attainment (i.e. bright, average and weak)
- arbitrary (i.e. grouping is not based on any criterion)
- No grouping is done (i.e. no parallel classes)

4. In the higher primary schools there used to be a system of cumulative record cards which followed the pupils to the post-primary schools. Which statement below typically describes the use that was made of these cards in your school?

- The cards were not forwarded to my school.
- They were very rarely consulted - had a limited value and use in our school.
- They were only occasionally consulted - e.g. in problem cases.
- They were most valuable throughout the year - we made use of them for various purposes.
- We would use them more regularly if.....  
(complete).

5. At secondary school level subject specialization plays a vital role. People who have been trained in certain fields specialize in those fields without being burdened with other subjects. What is the position in your school?

Specialization is  fully fledged  
 limited  
 not possible

6. The textbook is the student's best friend.

Are the contents (subject-matter) of the prescribed textbooks graded in such a way that the bright, the average and the weak pupils can benefit from them?

all books  quite a number of books  very few books  
 none

7. In a mixed-ability class, and even in the so-called homogeneous (same-ability) class, there are usually weak pupils in certain subjects. Is there provision made to deal with such cases?

Heavy teaching loads make this impossible.  
 Yes, there is ample provision.  
 Only occasionally able to make provision.  
 It is left entirely to the teacher's conscience.

8. Mention of teaching methods should also be made in this connection. Which method or methods from the following would you say is (are) the most predominant in your school?

- a.  Lecture method - teacher just explains, gives homework, and pupils have to accept the truth of everything: big classes do not allow use of other methods.
- b.  Discussion method - pupils take part in the progress of the lesson, teacher explains, pupils ask questions: teacher tries to draw information from them.
- c.  Textbook method - teacher explains work from textbook, refers pupils back to textbook for further examples and applications.

- d.  Inductive and deductive method - in which teacher tries to lead pupils gradually to make their own conclusion by either method.
- e.  None of the above: Our method is.....  
(complete)

9. Guidance (i.e. educational, vocational and personal counselling) plays a crucial role in a properly organised system of differentiated education.

a. What is the function of the Departmental School Counsellor in your school?

- He only gives psychological tests to some classes.
- Apart from these tests, he frequently visits the school to give guidance to pupils.
- It is not quite clear to us what he is exactly doing in the school.

b. Is there a teacher-counsellor on your staff?

- Yes       No

c. Are the results of the psychological tests of any benefit to your pupils?

- Definitely
- To some extent
- Not at all

d. Do you feel that there is a need for guidance services in your school?

- A very urgent need
- Yes, from time to time
- Very rarely
- No need at all

e. In what fields do you think pupils need most guidance?

- Educational field - e.g. choice of subjects, school problems, social relationships, etc.
- Vocational field - choice of future careers, information about different careers, etc.
- A combination of these two fields.

There is no particular field

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THANK YOU VERY MUCH FOR YOUR CO-OPERATION AND PATIENCE.

PLEASE RE-CHECK YOUR ANSWERS.

THEN POST QUESTIONNAIRE.

LEST YOU FORGET!

SIYA BONGA.

DANKIE.

+++

APPENDIX B

C O N F I D E N T I A L

QUESTIONNAIRE FOR THE CHIEF EDUCATION PLANNER

Please note: The information supplied will be kept strictly confidential. It is required for academic purposes only and for the benefit of our education. Only statistical information for 1974 in respect of secondary/high schools is requested. When completed, the questionnaire should be returned as soon as possible, but not later than 31st March, 1975, to:

Educational Researcher, P.O. Box 50,  
KWA-DLANGEZWA 3886

Your co-operation in this extremely important matter will be highly appreciated.

1. Types of Schools

Table 1: Types of schools

School	State	Community	Boarding	Day	Boys' Schs
Number					

School	Girls' Schs	Rural	Urban	Private
Number				

Table 2: Phases of schooling

Phase	Junior Secondary	Senior Secondary	Total
Number			

2. Pupils and Teachers

Table 3: Total number of pupils

Pupils	Boys	Girls	Total
Number			

Table 4: Breakdown of pupil enrolment

Forms	Boys	Girls	Total
I			
II			
III			
IV			
V			
Total:			

Table 5: Male and female teachers

Teachers	Male	Female	Total
Number			

Qualif.	Std 10+ JSTC PTC, etc.	Degree Courses + STD, etc.	B.A.	B.Sc.	B.Com.	Hons.
Principals						

Qualif.	B.Ed.	M.A.	M.Ed.	M.Sc.	Doc.
Principals					

3. Unsubsidised Posts

In 1974 there were ..... privately paid teachers.

4. In 1974 there were ..... Departmental School Counsellors  
in KwaZulu.

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KEY: JSTC = Junior Secondary Teachers' Certificate

PTC = Primary Teachers' Certificate

STD = Secondary Teachers' Diploma

Doc. = Doctorate

Ts = Teachers

Prof. = Professional

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APPENDIX C

C O N F I D E N T I A L

QUESTIONNAIRE FOR CHIEF INSPECTORS

Please note that:

1. The information supplied is confidential and will be treated as such throughout. It is required for academic purposes only and will be used in the interest of educational reform in KwaZulu.
2. Information is required in respect of secondary/high schools only.
3. In most cases, for each question possible answers are supplied, and you are required to select one which is most appropriate and make a cross in the small square like this  .
4. If you don't find an appropriate answer, write down your answer in the blank space between that question and the next one.
5. When completed, the questionnaire should be returned as soon as possible, but not later than 30th April, 1975, to:

Educational Researcher,  
P.O. Box 50,  
KWA-DIANGEZWA.  
3886

Your co-operation in this extremely important matter will be highly appreciated.

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A. GENERAL INFORMATION

1. Yours is a new senior post in the KwaZulu educational set up created at the beginning of this year, for which we congratulate you. Could you explain briefly what your portfolio entails in respect of function and area of operation as indicated below?

1.1. Function: .....  
.....  
.....  
.....  
.....

1.2. Area of operation: .....  
.....  
.....

1.2.1. Number of old post-primary schools in existence since or before 1972:

Secondary & high schools : .....

2. How would you describe the following factors in your area on the average?

(a) Classroom facilities (accommodation, laboratories, libraries, technological aids, etc.).

good  satisfactory  inadequate  poor

(b) Availability of graduate teachers:

adequate  inadequate  serious  critical

(c) Availability of science graduates:

adequate  inadequate  serious  critical

(d) Availability of specialist teachers in various subjects:

adequate  inadequate  serious  critical

B. THE PEDAGOGICAL SITUATION

1. Differentiated education is designed to meet individual differences in ability, aptitude and interest among pupils. Any given school population will have bright, average and dull pupils apart from the mentally retarded group which needs



## SUMMARY

### 1. INTRODUCTION

Preparing the young adolescent to take his rightful place as a useful and contented member of adult society is the paramount task of school education. Continual research has to be undertaken in both developed and developing nations in order to keep pace with the changing demands made on education in this scientific-technological age.

Today in all parts of Africa education plays a crucial role in national planning and development. The present study was a humble effort at providing scientific data for contemplated changes in the direction of differentiated education in KwaZulu.

### 2. STATEMENT OF THE PROBLEM

In recent times the burning problem has been that of providing differentiated courses of study to cater for the great diversity among the secondary school population in contrast to the traditional academically oriented courses designed to lead to scholarly pursuits. In South Africa various commissions were appointed in the last 30 years to study differentiated education abroad and make recommendations for its implementation here. These provincial endeavours culminated in the introduction of a national system of differentiated education for Whites in 1972. In the circumstances, the present writer felt that KwaZulu should not be left behind in this regard.

### 3. METHODS AND PROCEDURE OF RESEARCH

Methods employed in the investigation are the interview and the questionnaire. Questionnaires were mailed to the principals of secondary schools, the chief education planner, and the chief inspectors in order to get first hand information about the present educational situation in KwaZulu.

#### 4. CONCLUSIONS

The following are the most important conclusions flowing from this study:

4.1. The articulation of the dormant philosophy of life of the KwaZulu community as a basis of education is a burning necessity.

4.2. Differentiated education does not only imply the conveying of knowledge and facts to the young but also the inculcation of acceptable attitudes, ideals, values, etc., placing a great responsibility on teachers (and parents) in KwaZulu.

4.3. In a fully fledged differentiated system educational planning plays a crucial role.

4.4. Guidance services are absolutely essential for the proper implementation of differentiated education.

4.5. KwaZulu can take what is appropriate from trends and developments elsewhere and adapt them to suit her needs and circumstances.

4.6. KwaZulu experiences an acute shortage of properly qualified teachers, classroom accommodation, as well as laboratory and library facilities.

#### 5. RECOMMENDATIONS

The following recommendations are suggested:

5.1. There must be a radical change in educational planning whereby the programmes of education are pedagogically related to national problems.

5.2. A commission of inquiry must be appointed to investigate the whole structure of education in KwaZulu and then report on what should authentically be called KwaZulu education.

5.3. KwaZulu pupils must commence their schooling at the age of 6 years as there is no pedagogical justification for a later start.

5.4. A well organized talent survey must be conducted to ascertain the present status of pupil talent in KwaZulu with a view to making provision for the various categories of pupils.

5.5. Existing schools must be reorganized along comprehensive lines and new ones must be built with this view in mind.

5.6. Serving and prospective teachers must receive proper training in guidance and school counsellors must do an intensive specialist course at B.Ed. level.

5.7. Teacher training facilities must be expanded substantially.

5.8. The teachers must adopt and adhere to a code of ethics in order to improve their public image and enhance their status.

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## OPSOMMING

### 1. INLEIDING

Die voorbereiding van die jong adolessent om sy regmatige plek as bruikbare en gelukkige lid van die volwasse samelewing in te neem, bly die skool se hoofsaak. Voortdurende navorsing moet in sowel ontwikkelde as ontwikkelende gemeenskappe onderneem word om tred te hou met die veranderende onderwysbehoefes in hierdie wetenskaplik-tegnologiese eeu.

In alle dele van Afrika speel onderwys vandag 'n beslissende rol in nasionale beplanning en -ontwikkeling. Hierdie studie is 'n beskeie poging om wetenskaplike gegewens daar te stel ter ooreweging van veranderinge ten opsigte van gedifferensieerde onderwys in KwaZulu.

### 2. PROBLEEMSTELLING

'n Didaktiese kernprobleem van die huidige tydsgewrig is die voorsiening van gedifferensieerde studiekursusse in ooreenstemming met die groot verskeidenheid in die sekondêre skoolpopulasie, in teenstelling met die tradisionele akademies-georiënteerde kursusse wat bloot terwille van "geleerdheid" ontwerp was. In die afgelope dertig jaar is verskeie kommissies in Suid-Afrika aangewys om gedifferensieerde onderwys oorsee te bestudeer en om aanbevelings te maak vir die plaaslike implementering daarvan. Die verskillende provinsiale pogings het in 1972 gekulmineer in die invoering van 'n nasionale stelsel van gedifferensieerde onderwys vir Blankes. Van die bevindinge van hierdie kommissies en die ervaring van provinsiale onderwysdepartemente in hierdie verband kan met vrug gebruik gemaak word by die implementering van 'n behoorlik gedifferensieerde onderwysstelsel vir KwaZulu.

### 3. NAVORSINGSMETODES EN -PROSEDURES

Die metodes waarvan in hierdie ondersoek gebruik gemaak is, sluit onder andere die onderhoudtegniek en die questionnaire

(vraelys) in. Vraelyste is aan hoofde van sekondêre skole, die hoofonderwysbeplanner en hoofinspekteurs van skole gestuur om sodoende eerstehandse kennis van die huidige onderwysituasie in KwaZulu te verkry.

#### 4. GEVOLGTREKKINGS

Die belangrikste gevolgtrekkings wat uit hierdie studie voortspruit is:

4.1. Die artikulasie van die kollektiewe lewensbeskouing van die Zulugemeenskap as filosofiese basis vir die onderwys blyk 'n dringende noodsaaklikheid te wees.

4.2. Gedifferensieerde onderwys impliseer nie alleen die meer effektiewe oordra van feitekennis en vaardighede aan die jeug nie, maar ook die inskerping van aanvaarbare gedragspatrone, 'n waardige lewenshouding, mooi ideale, intrinsieke waardes, morele standaarde - met ander woorde gedifferensieerde onderwys veronderstel behoorlike opvoeding. Dit plaas 'n groot verantwoordelikheid op die onderwysbeplanners en opvoeders van KwaZulu.

4.3. In 'n volwaardige gedifferensieerde onderwysstelsel speel onderwysbeplanning 'n beslissende rol.

4.4. Voorligtingsdienste is uiters essensieel vir die behoorlike implimentering van gedifferensieerde onderwys.

4.5. KwaZulu kan uit tendense en ontwikkelings elders, dit neem wat toepaslik is en aanpas by sy plaaslike behoeftes en omstandighede.

4.6. KwaZulu ervaar tans 'n akute tekort aan behoorlik gekwalifiseerde onderwysers, aan klaskamerakkommodasie, sowel as aan laboratorium- en biblioteekfasiliteite - almal essensiële komponente van 'n effektiewe onderwysstelsel.

## 5. AANBEVELINGS

Die volgende aanbevelings word voorgestel:

5.1. Daar moet radikale veranderinge in die onderwysbeplanning teweeggebring word sodat onderwysprogramme sowel in die lig van die nasionale probleme as in ooreenstemming met pedagogiese beginsels ontwerp kan word.

5.2. 'n Kommissie van ondersoek moet aangewys word wat die hele onderwysstruktuur in KwaZulu moet ondersoek en verslag uitbring oor dit wat outentiek as KwaZulu-onderwys bestempel kan word.

5.3. KwaZulu-kindere moet hul skoolloopbaan op die ouderdom van 6 jaar begin aangesien daar geen pedagogiese regverdiging vir 'n later begin bestaan nie.

5.4. 'n Goedgeorganiseerde talentopname moet van stapel gestuur word om die huidige status van leerling-talent in KwaZulu vas te stel, met die oog daarop om voorsiening te maak vir die verskeidenheid van leerling-potensiaal.

5.5. Bestaande skole moet gereorganiseer word volgens die komprehensiewe gedagte, en nuwe skole moet gebou word om in hierdie skema te pas.

5.6. Diensdoende en voornemende onderwysers moet behoorlike opleiding in voorligting ontvang en skoolvoorligters moet 'n intensiewe spesialisasiekursus op B.Ed.-vlak volg.

5.7. Onderwysersopleidingsfasiliteite moet aansienlik uitgebrei en kursusse in die lig van bostaande bevindinge georganiseer word.

5.8. Onderwysers moet 'n etiese kode opstel en dit handhaaf, sodat die beeld van die professie daardeur verbeter en die status van die onderwyser sodoende verhoog kan word.